



Wowza Streaming Engine™

Server-Side API

Wowza Streaming Engine: Server-Side API



Version 4.7

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Note

A more recent version of this document may be available online. See the [Wowza Streaming Engine User Guides webpage](https://www.wowza.com/docs/user-guides-wowza-streaming-engine-users-guides) (<https://www.wowza.com/docs/user-guides-wowza-streaming-engine-users-guides>) for the latest updates.

Package

com.wowza.io

com.wowza.io Class HTTPByteReader

java.lang.Object

└-com.wowza.io.HTTPByteReader

Direct Known Subclasses:

[HTTPByteReaderS3](#)

```
public class HTTPByteReader
extends Object
```

Nested Class Summary

class	HTTPByteReader.SendResult HTTPByteReader.SendResult
-------	--

Field Summary

public static final	BUFFERINCSIZE Value: 1024
protected	connectionTimeout
public static final	CRLF Value:
protected	dateFormat
protected	debugInfo
protected	debugPrefix
public static final	HEADINDEX_CONTENTLENGTH Value: 1
public static final	HEADINDEX_LASTMODIFIED Value: 2
public static final	HEADINDEX_SIZE Value: 3
public static final	HEADINDEX_STATUS Value: 0
protected	host

public static final	MAXHEADERSIZE Value: 4096
protected	maxRetries
protected	maxUsesBeforeReconnect
protected	msgBuf
protected	parseDateFormats
protected	port
protected	proxyHost
protected	proxyPort
protected	readTimeout
protected	receiveBufferSize
public static final	RECEIVEBUFFERSIZE Value: 65000
protected	reqPath
protected	requestFullURL
protected	sendBufferSize
public static final	SENDBUFFERSIZE Value: 65000
protected	socket
public static final	TIMEOUT Value: 6000
protected	userAgent
protected	uses

Constructor Summary

public	HTTPByteReader (String host, int port)
--------	--

Method Summary

void	close()
void	connect()
HTTPByteReaderResult	delete (String path)
HTTPByteReaderResult	deleteDirect (String path)
void	dumpDebug()
String	getConextPath()
int	getConnectionTimeout()
void	getDeleteCommand (String path)
void	getGetCommand (String path, long pos, int flen)
void	getHeadCommand (String path)
int	getMaxRetries()
int	getMaxUsesBeforeReconnect()
void	getPostCommand (String path, PacketFragmentList fragmentList)
int	getReadTimeout()
int	getReceiveBufferSize()
String	getRequestPath (String path, String host, int port)
int	getSendBufferSize()
String	getUserAgent()
long[]	head (String path)
boolean	isOpen()
boolean	isRequestFullURL()
void	parseHeader (HTTPByteReader.SendResult result, byte[] buffer, int offset, int len, boolean isHead)
HTTPByteReaderResult	read (String path, long pos, int flen)
HTTPByteReaderResult	readDirect (String path, long pos, int flen)

void	reconnect()
HTTPByteReader.SendResult	sendRequest (byte[] request, boolean isHead)
HTTPByteReader.SendResult	sendRequest (byte[] request, int len, boolean isHead)
HTTPByteReader.SendResult	sendRequest (byte[] request, PacketFragmentList fragmentList, int len, boolean isHead)
void	setConnectionTimeout (int connectionTimeout)
void	setMaxRetries (int maxRetries)
void	setMaxUsesBeforeReconnect (int maxUsesBeforeReconnect)
void	setProxyAddress (String host, int port)
void	setReadTimeout (int readTimeout)
void	setReceiveBufferSize (int receiveBufferSize)
void	setRequestFullURL (boolean requestFullURL)
void	setSendBufferSize (int sendBufferSize)
void	setUserAgent (String userAgent)
HTTPByteReaderResult	write (String path, byte[] buffer, int offset, int len)
HTTPByteReaderResult	write (String path, PacketFragmentList fragmentList)
HTTPByteReaderResult	write (String path, String str)
HTTPByteReaderResult	writeDirect (String path, PacketFragmentList fragmentList)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

MAXHEADERSIZE

public static final int **MAXHEADERSIZE**

Constant value: **4096**

BUFFERINCSIZE

```
public static final int BUFFERINCSIZE
```

Constant value: **1024**

TIMEOUT

```
public static final int TIMEOUT
```

Constant value: **6000**

SENDBUFFERSIZE

```
public static final int SENDBUFFERSIZE
```

Constant value: **65000**

RECEIVEBUFFERSIZE

```
public static final int RECEIVEBUFFERSIZE
```

Constant value: **65000**

CRLF

```
public static final java.lang.String CRLF
```

Constant value:

HEADINDEX_STATUS

```
public static final int HEADINDEX_STATUS
```

Constant value: **0**

HEADINDEX_CONTENTLENGTH

```
public static final int HEADINDEX_CONTENTLENGTH
```

Constant value: **1**

HEADINDEX_LASTMODIFIED

```
public static final int HEADINDEX_LASTMODIFIED
```

Constant value: **2**

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HEADINDEX_SIZE

```
public static final int HEADINDEX_SIZE
```

Constant value: 3

host

```
protected java.lang.String host
```

port

```
protected int port
```

reqPath

```
protected java.lang.String reqPath
```

proxyHost

```
protected java.lang.String proxyHost
```

proxyPort

```
protected int proxyPort
```

dateFormat

```
protected org.apache.commons.lang.time.FastDateFormat dateFormat
```

socket

```
protected java.net.Socket socket
```

msgBuf

```
protected java.lang.StringBuffer msgBuf
```

maxRetries

```
protected int maxRetries
```

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maxUsesBeforeReconnect

protected int **maxUsesBeforeReconnect**

uses

protected int **uses**

readTimeout

protected int **readTimeout**

connectionTimeout

protected int **connectionTimeout**

debugInfo

protected java.util.List **debugInfo**

debugPrefix

protected java.lang.String **debugPrefix**

requestFullURL

protected boolean **requestFullURL**

parseDateFormats

protected java.lang.String **parseDateFormats**

sendBufferSize

protected int **sendBufferSize**

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receiveBufferSizeprotected int **receiveBufferSize**

userAgentprotected java.lang.String **userAgent**

Constructors

HTTPByteReaderpublic **HTTPByteReader**(String host,
int port)

Methods

setProxyAddresspublic void **setProxyAddress**(String host,
int port)

closepublic void **close**()

connectpublic void **connect**()

reconnectprotected void **reconnect**()

isOpenpublic boolean **isOpen**()

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parseHeader

```
protected void parseHeader(HTTPByteReader.SendResult result,  
    byte[] buffer,  
    int offset,  
    int len,  
    boolean isHead)
```

read

```
public HTTPByteReaderResult read(String path,  
    long pos,  
    int flen)
```

delete

```
public HTTPByteReaderResult delete(String path)
```

getDeleteCommand

```
protected void getDeleteCommand(String path)
```

deleteDirect

```
public HTTPByteReaderResult deleteDirect(String path)
```

write

```
public HTTPByteReaderResult write(String path,  
    String str)
```

write

```
public HTTPByteReaderResult write(String path,  
    byte[] buffer,  
    int offset,  
    int len)
```

write

```
public HTTPByteReaderResult write(String path,  
    PacketFragmentList fragmentList)
```

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getPostCommand

```
protected void getPostCommand(String path,  
    PacketFragmentList fragmentList)
```

writeDirect

```
public HTTPByteReaderResult writeDirect(String path,  
    PacketFragmentList fragmentList)
```

getRequestPath

```
protected String getRequestPath(String path,  
    String host,  
    int port)
```

getConextPath

```
protected String getConextPath()
```

getHeadCommand

```
protected void getHeadCommand(String path)
```

head

```
public long[] head(String path)
```

getGetCommand

```
protected void getGetCommand(String path,  
    long pos,  
    int flen)
```

readDirect

```
public HTTPByteReaderResult readDirect(String path,  
    long pos,  
    int flen)
```

dumpDebug

```
protected void dumpDebug()
```

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sendRequest

```
public HTTPByteReader.SendResult sendRequest(byte[] request,  
        boolean isHead)
```

sendRequest

```
public HTTPByteReader.SendResult sendRequest(byte[] request,  
        int len,  
        boolean isHead)
```

sendRequest

```
public HTTPByteReader.SendResult sendRequest(byte[] request,  
        PacketFragmentList fragmentList,  
        int len,  
        boolean isHead)
```

getMaxUsesBeforeReconnect

```
public int getMaxUsesBeforeReconnect()
```

setMaxUsesBeforeReconnect

```
public void setMaxUsesBeforeReconnect(int maxUsesBeforeReconnect)
```

getMaxRetries

```
public int getMaxRetries()
```

setMaxRetries

```
public void setMaxRetries(int maxRetries)
```

getReadTimeout

```
public int getReadTimeout()
```

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setReadTimeout

```
public void setReadTimeout(int readTimeout)
```

isRequestFullURL

```
public boolean isRequestFullURL()
```

setRequestFullURL

```
public void setRequestFullURL(boolean requestFullURL)
```

getConnectionTimeout

```
public int getConnectionTimeout()
```

setConnectionTimeout

```
public void setConnectionTimeout(int connectionTimeout)
```

getSendBufferSize

```
public int getSendBufferSize()
```

setSendBufferSize

```
public void setSendBufferSize(int sendBufferSize)
```

getReceiveBufferSize

```
public int getReceiveBufferSize()
```

setReceiveBufferSize

```
public void setReceiveBufferSize(int receiveBufferSize)
```

getUserAgent

```
public String getUserAgent()
```

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setUserAgent

```
public void setUserAgent(String userAgent)
```

com.wowza.io Class HTTPByteReader.SendResult

java.lang.Object

└-com.wowza.io.HTTPByteReader.SendResult

protected class **HTTPByteReader.SendResult**
extends Object

Field Summary

public	buffer
public	contentLength
public	contentRangeFound
public	contentRangeStart
public	contentRangeStop
public	contentRead
public	gotHeader
public	gotMessage
public	headerLength
public	keepAlive
public	lastModified
public	status

Constructor Summary

public	HTTPByteReader.SendResult()
--------	---

Method Summary

long	size()
------	------------------------

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Fields

contentLength

```
public long contentLength
```

headerLength

```
public long headerLength
```

contentRead

```
public long contentRead
```

lastModified

```
public java.util.Date lastModified
```

status

```
public int status
```

gotHeader

```
public boolean gotHeader
```

gotMessage

```
public boolean gotMessage
```

buffer

```
public byte buffer
```

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keepAlive

```
public boolean keepAlive
```

contentRangeFound

```
public boolean contentRangeFound
```

contentRangeStart

```
public long contentRangeStart
```

contentRangeStop

```
public long contentRangeStop
```

Constructors

HTTPByteReader.SendResult

```
public HTTPByteReader.SendResult()
```

Methods

size

```
public long size()
```

com.wowza.io Class HTTPByteReaderResult

java.lang.Object

└-com.wowza.io.HTTPByteReaderResult

```
public class HTTPByteReaderResult
extends Object
```

Field Summary

public	buffer
public	contentLength
public	headerLength
public	retries
public	status

Constructor Summary

public	HTTPByteReaderResult()
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

buffer

```
public byte buffer
```

headerLength

```
public long headerLength
```

contentLength

```
public long contentLength
```

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status

```
public int status
```

retries

```
public int retries
```

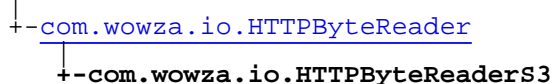
Constructors

HTTPByteReaderResult

```
public HTTPByteReaderResult()
```


com.wowza.io Class HTTPByteReaderS3

java.lang.Object



public class **HTTPByteReaderS3**
extends [HTTPByteReader](#)

Fields inherited from class [com.wowza.io.HTTPByteReader](#)

[BUFFERINCSIZE](#), [connectionTimeout](#), [CRLF](#), [dateFormat](#), [debugInfo](#), [debugPrefix](#),
[HEADINDEX_CONTENTLENGTH](#), [HEADINDEX_LASTMODIFIED](#), [HEADINDEX_SIZE](#), [HEADINDEX_STATUS](#), [host](#),
[MAXHEADERSIZE](#), [maxRetries](#), [maxUsesBeforeReconnect](#), [msgBuf](#), [parseDateFormats](#), [port](#), [proxyHost](#),
[proxyPort](#), [readTimeout](#), [receiveBufferSize](#), [RECEIVEBUFFERSIZE](#), [reqPath](#), [requestFullURL](#),
[sendBufferSize](#), [SENDERBUFFERSIZE](#), [socket](#), [TIMEOUT](#), [userAgent](#), [uses](#)

Constructor Summary

public	HTTPByteReaderS3 (String host, int port)
public	HTTPByteReaderS3 (String host, int port, IApplicationInstance appInstance)
public	HTTPByteReaderS3 (String host, int port, IVHost vhost)

Method Summary

IApplicationInstance	getAppInstance ()
String	getAWSAccessKeyId ()
String	getAWSSecretAccessKey ()
void	getGetCommand (String path, long pos, int flen)
void	getHeadCommand (String path)
IVHost	getVHost ()
String	httpDate ()
void	initAuth ()
void	setAppInstance (IApplicationInstance appInstance)

void	setAWSAccessKeyId (String awsAccessKeyId)
void	setAWSSecretAccessKey (String awsSecretAccessKey)
void	setVHost (IVHost vhost)
String	signRequest (String awsSecretAccessKey, String canonicalString)

Methods inherited from class [com.wowza.io.HTTPByteReader](#)

[close](#), [connect](#), [delete](#), [deleteDirect](#), [dumpDebug](#), [getConextPath](#), [getConnectionTimeout](#), [getDeleteCommand](#), [getGetCommand](#), [getHeadCommand](#), [getMaxRetries](#), [getMaxUsesBeforeReconnect](#), [getPostCommand](#), [getReadTimeout](#), [getReceiveBufferSize](#), [getRequestPath](#), [getSendBufferSize](#), [getUserAgent](#), [head](#), [isOpen](#), [isRequestFullURL](#), [parseHeader](#), [read](#), [readDirect](#), [reconnect](#), [sendRequest](#), [sendRequest](#), [sendRequest](#), [setConnectionTimeout](#), [setMaxRetries](#), [setMaxUsesBeforeReconnect](#), [setProxyAddress](#), [setReadTimeout](#), [setReceiveBufferSize](#), [setRequestFullURL](#), [setSendBufferSize](#), [setUserAgent](#), [write](#), [write](#), [write](#), [writeDirect](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

HTTPByteReaderS3

```
public HTTPByteReaderS3(String host,
                        int port)
```

HTTPByteReaderS3

```
public HTTPByteReaderS3(String host,
                        int port,
                        IApplicationInstance appInstance)
```

HTTPByteReaderS3

```
public HTTPByteReaderS3(String host,
                        int port,
                        IVHost vhost)
```

Methods

initAuth

```
public void initAuth()
```

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getGetCommand

```
protected void getGetCommand(String path,  
    long pos,  
    int flen)
```

getHeadCommand

```
protected void getHeadCommand(String path)
```

httpDate

```
protected String httpDate()
```

signRequest

```
public String signRequest(String awsSecretAccessKey,  
    String canonicalString)
```

getVHost

```
public IVHost getVHost()
```

setVHost

```
public void setVHost(IVHost vhost)
```

getAppInstance

```
public IApplicationInstance getAppInstance()
```

setAppInstance

```
public void setAppInstance(IApplicationInstance appInstance)
```

getAWSSecretAccessKey

```
public String getAWSSecretAccessKey()
```

setAWSSecretAccessKey

```
public void setAWSSecretAccessKey(String awsSecretAccessKey)
```

getAWSAccessKeyId

```
public String getAWSAccessKeyId()
```

setAWSAccessKeyId

```
public void setAWSAccessKeyId(String awsAccessKeyId)
```

com.wowza.io Class HTTPByteWriter

java.lang.Object

└-com.wowza.io.HTTPByteWriter

public class **HTTPByteWriter**
extends Object

Nested Class Summary

class	HTTPByteWriter.SendResult HTTPByteWriter.SendResult
-------	--

Field Summary

protected	addrIdx
public static final	BUFFERINCSIZE Value: 1024
protected	CLASS
protected	CLASSNAME
protected	connectionTimeout
public static final	CONNECTIONTIMEOUT Value: 1000
public static final	CRLF Value:
protected	dateFormat
protected	debugFragments
protected	debugInfo
protected	debugIpAddress
protected	debugOn
protected	debugPrefix

public static final	HEADINDEX_CONTENTLENGTH Value: 1
public static final	HEADINDEX_LASTMODIFIED Value: 2
public static final	HEADINDEX_SIZE Value: 3
public static final	HEADINDEX_STATUS Value: 0
protected	host
protected	isSSL
public static final	MAXHEADERSIZE Value: 4096
protected	maxRetries
public static final	MAXRETRIES Value: 25
protected	maxUsesBeforeReconnect
protected	msgBuf
protected	nonblocked
protected	parseDateFormats
protected	port
protected	proxyHost
protected	proxyPort
protected	readWriteTimeout
public static final	READWRITETIMEOUT Value: 3000
protected	receiveBufferSize
public static final	RECEIVEBUFFERSIZE Value: 65000

protected	reqPath
protected	requestFullURL
protected	retryTimeout
public static final	RETRYWAITTIME Value: 500
protected	sendBufferSize
public static final	SENDBUFFERSIZE Value: 65000
protected	socket
protected	socketChannel
protected	userAgent
protected	uses

Constructor Summary

public	HTTPByteWriter (String host, int port, Boolean nonblocked)
--------	--

Method Summary

void	close ()
void	connect ()
HTTPByteReaderResult	delete (String path)
HTTPByteReaderResult	deleteDirect (String path)
void	dumpDebug ()
int	getConnectionTimeout ()
String	getContextPath ()
Boolean	getDebugOn ()
void	getDeleteCommand (String path)
boolean	getIsSSL ()

int	getMaxRetries()
int	getMaxUsesBeforeReconnect()
void	getPostMessage (String method, String path, PacketFragmentList FragmentList)
int	getReadWriteTimeout()
int	getReceiveBufferSize()
String	getRequestPath (String path, String host, int port)
long	getRetryTimeout()
int	getSendBufferSize()
String	getUserAgent()
boolean	init()
void	initHandShake()
boolean	innerConnect()
boolean	isOpen()
boolean	isRequestFullURL()
void	parseHeader (HTTPByteWriter.SendResult result, byte[] buffer, int offset, int len, boolean isHead)
void	reconnect()
HTTPByteWriter.SendResult	sendRequest (byte[] request, boolean isHead)
HTTPByteWriter.SendResult	sendRequest (byte[] request, PacketFragmentList fragmentList, int len, boolean isHead)
HTTPByteWriter.SendResult	sendRequestBlocked (byte[] request, PacketFragmentList fragmentList, int len, boolean isHead)
HTTPByteWriter.SendResult	sendRequestNonBlocked (byte[] request, PacketFragmentList fragmentList, int len, boolean isHead)
void	setConnectionTimeout (int connectionTimeout)
void	setDebugOn (Boolean debugOn)

void	setIsSSL (boolean ssl)
void	setMaxRetries (int maxRetries)
void	setMaxUsesBeforeReconnect (int maxUsesBeforeReconnect)
void	setProxyAddress (String host, int port)
void	setReadWriteTimeout (int readWriteTimeout)
void	setReceiveBufferSize (int receiveBufferSize)
void	setRequestFullURL (boolean requestFullURL)
void	setRetryTimeout (long timeout)
void	setSendBufferSize (int sendBufferSize)
void	setUserAgent (String userAgent)
int	socketRead (java.nio.ByteBuffer readBuffer)
int	socketWrite (java.nio.ByteBuffer reqBuffer)
HTTPByteReaderResult	write (String method, String path, byte[] buffer, int offset, int len)
HTTPByteReaderResult	write (String method, String path, PacketFragmentList fragmentList)
HTTPByteReaderResult	write (String method, String path, String str)
HTTPByteReaderResult	writeDirect (String method, String path, PacketFragmentList fragmentList)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

CLASSNAME

protected java.lang.String **CLASSNAME**

CLASS

protected java.lang.Class **CLASS**

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MAXHEADERSIZE

```
public static final int MAXHEADERSIZE
```

Constant value: **4096**

BUFFERINCSIZE

```
public static final int BUFFERINCSIZE
```

Constant value: **1024**

READWRITETIMEOUT

```
public static final int READWRITETIMEOUT
```

Constant value: **3000**

CONNECTIONTIMEOUT

```
public static final int CONNECTIONTIMEOUT
```

Constant value: **1000**

SENDBUFFERSIZE

```
public static final int SENDBUFFERSIZE
```

Constant value: **65000**

RECEIVEBUFFERSIZE

```
public static final int RECEIVEBUFFERSIZE
```

Constant value: **65000**

MAXRETRIES

```
public static final int MAXRETRIES
```

Constant value: **25**

RETRYWAITTIME

```
public static final long RETRYWAITTIME
```

Constant value: **500**

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CRLF

```
public static final java.lang.String CRLF
```

Constant value:

HEADINDEX_STATUS

```
public static final int HEADINDEX_STATUS
```

Constant value: **0**

HEADINDEX_CONTENTLENGTH

```
public static final int HEADINDEX_CONTENTLENGTH
```

Constant value: **1**

HEADINDEX_LASTMODIFIED

```
public static final int HEADINDEX_LASTMODIFIED
```

Constant value: **2**

HEADINDEX_SIZE

```
public static final int HEADINDEX_SIZE
```

Constant value: **3**

host

```
protected java.lang.String host
```

port

```
protected int port
```

reqPath

```
protected java.lang.String reqPath
```

proxyHost

```
protected java.lang.String proxyHost
```

proxyPort

protected int **proxyPort**

dateFormat

protected org.apache.commons.lang.time.FastDateFormat **dateFormat**

socket

protected java.net.Socket **socket**

socketChannel

protected java.nio.channels.SocketChannel **socketChannel**

msgBuf

protected java.lang.StringBuffer **msgBuf**

maxRetries

protected int **maxRetries**

maxUsesBeforeReconnect

protected int **maxUsesBeforeReconnect**

retryTimeout

protected long **retryTimeout**

uses

protected int **uses**

readWriteTimeout

protected int **readWriteTimeout**

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connectionTimeout

protected int **connectionTimeout**

debugInfo

protected java.util.List **debugInfo**

debugPrefix

protected java.lang.String **debugPrefix**

requestFullURL

protected boolean **requestFullURL**

parseDateFormats

protected java.lang.String **parseDateFormats**

sendBufferSize

protected int **sendBufferSize**

receiveBufferSize

protected int **receiveBufferSize**

userAgent

protected java.lang.String **userAgent**

nonblocked

protected java.lang.Boolean **nonblocked**

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debugOn

protected java.lang.Boolean **debugOn**

debugFragments

protected java.lang.Boolean **debugFragments**

debugIpAddress

protected java.lang.Boolean **debugIpAddress**

addrIdx

protected int **addrIdx**

isSSL

protected boolean **isSSL**

Constructors

HTTPByteWriter

```
public HTTPByteWriter(String host,  
                      int port,  
                      Boolean nonblocked)
```

Methods

getConnectionTimeout

```
public int getConnectionTimeout()
```

setConnectionTimeout

```
public void setConnectionTimeout(int connectionTimeout)
```

getRetryTimeout

```
public long getRetryTimeout()
```

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setRetryTimeout

```
public void setRetryTimeout(long timeout)
```

getSendBufferSize

```
public int getSendBufferSize()
```

setSendBufferSize

```
public void setSendBufferSize(int sendBufferSize)
```

getReceiveBufferSize

```
public int getReceiveBufferSize()
```

setReceiveBufferSize

```
public void setReceiveBufferSize(int receiveBufferSize)
```

getUserAgent

```
public String getUserAgent()
```

setUserAgent

```
public void setUserAgent(String userAgent)
```

getDebugOn

```
public Boolean getDebugOn()
```

setDebugOn

```
public void setDebugOn(Boolean debugOn)
```

(continued from last page)

setIsSSL

```
public void setIsSSL(boolean ssl)
```

getIsSSL

```
public boolean getIsSSL()
```

setProxyAddress

```
public void setProxyAddress(String host,  
                             int port)
```

close

```
public void close()
```

connect

```
public void connect()
```

reconnect

```
protected void reconnect()
```

isOpen

```
public boolean isOpen()
```

parseHeader

```
protected void parseHeader(HTTPByteWriter.SendResult result,  
                             byte[] buffer,  
                             int offset,  
                             int len,  
                             boolean isHead)
```

delete

```
public HTTPByteReaderResult delete(String path)
```

getDeleteCommand

```
protected void getDeleteCommand(String path)
```

deleteDirect

```
public HTTPByteReaderResult deleteDirect(String path)
```

write

```
public HTTPByteReaderResult write(String method,  
    String path,  
    String str)
```

write

```
public HTTPByteReaderResult write(String method,  
    String path,  
    byte[] buffer,  
    int offset,  
    int len)
```

write

```
public HTTPByteReaderResult write(String method,  
    String path,  
    PacketFragmentList fragmentList)
```

getPostMessage

```
protected void getPostMessage(String method,  
    String path,  
    PacketFragmentList fragmentList)
```

writeDirect

```
public HTTPByteReaderResult writeDirect(String method,  
    String path,  
    PacketFragmentList fragmentList)
```

getRequestPath

```
protected String getRequestPath(String path,  
    String host,  
    int port)
```

(continued from last page)

getContextPath

```
protected String getContextPath()
```

dumpDebug

```
protected void dumpDebug()
```

sendRequest

```
public HTTPByteWriter.SendResult sendRequest(byte[] request,  
        boolean isHead)
```

sendRequest

```
public HTTPByteWriter.SendResult sendRequest(byte[] request,  
        PacketFragmentList fragmentList,  
        int len,  
        boolean isHead)
```

sendRequestBlocked

```
public HTTPByteWriter.SendResult sendRequestBlocked(byte[] request,  
        PacketFragmentList fragmentList,  
        int len,  
        boolean isHead)
```

sendRequestNonBlocked

```
public HTTPByteWriter.SendResult sendRequestNonBlocked(byte[] request,  
        PacketFragmentList fragmentList,  
        int len,  
        boolean isHead)
```

getMaxUsesBeforeReconnect

```
public int getMaxUsesBeforeReconnect()
```

setMaxUsesBeforeReconnect

```
public void setMaxUsesBeforeReconnect(int maxUsesBeforeReconnect)
```

getMaxRetries

```
public int getMaxRetries()
```

setMaxRetries

```
public void setMaxRetries(int maxRetries)
```

getReadWriteTimeout

```
public int getReadWriteTimeout()
```

setReadWriteTimeout

```
public void setReadWriteTimeout(int readWriteTimeout)
```

isRequestFullURL

```
public boolean isRequestFullURL()
```

setRequestFullURL

```
public void setRequestFullURL(boolean requestFullURL)
```

init

```
protected boolean init()
```

innerConnect

```
protected boolean innerConnect()
```

initHandShake

```
protected void initHandShake()  
    throws java.io.IOException
```

(continued from last page)

socketWrite

```
protected int socketWrite(java.nio.ByteBuffer reqBuffer)
    throws java.io.IOException
```

socketRead

```
protected int socketRead(java.nio.ByteBuffer readBuffer)
    throws java.io.IOException,
        InterruptedException
```

com.wowza.io Class HTTPByteWriter.SendResult

java.lang.Object

└-com.wowza.io.HTTPByteWriter.SendResult

protected class HTTPByteWriter.SendResult
extends Object

Field Summary

public	buffer
public	contentLength
public	contentRangeFound
public	contentRangeStart
public	contentRangeStop
public	contentRead
public	gotHeader
public	gotMessage
public	headerLength
public	keepAlive
public	lastModified
public	status

Constructor Summary

public	HTTPByteWriter.SendResult()
--------	---

Method Summary

long	size()
String	toString()

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Fields

contentLength

```
public long contentLength
```

headerLength

```
public long headerLength
```

contentRead

```
public long contentRead
```

lastModified

```
public java.util.Date lastModified
```

status

```
public int status
```

gotHeader

```
public boolean gotHeader
```

gotMessage

```
public boolean gotMessage
```

buffer

```
public byte buffer
```

(continued from last page)

keepAlive

```
public boolean keepAlive
```

contentRangeFound

```
public boolean contentRangeFound
```

contentRangeStart

```
public long contentRangeStart
```

contentRangeStop

```
public long contentRangeStop
```

Constructors**HTTPByteWriter.SendResult**

```
public HTTPByteWriter.SendResult()
```

Methods**size**

```
public long size()
```

toString

```
public String toString()
```

com.wowza.io Interface IRandomAccessReader

public interface **IRandomAccessReader**
extends

Field Summary

public static final	FORWARD Value: 1
public static final	REVERSE Value: -1

Method Summary

void	close() Close the media asset
boolean	exists() Does the media asset exist
String	getBasePath() Get the basePath for the random access reader
int	getDirecton() Get the current direction hint for the random access reader.
long	getFilePointer() Get the current byte location in the media asset
String	getMediaExtension() Get the media extension
String	getMediaName() Get the media name
String	getPath() Get the unique path to the media asset item
void	init(IApplicationInstance appInstance, IMediaStream stream, String basePath, String mediaName, String mediaExtension) Intialize RandomAccessReader
boolean	isOpen() Is the media asset open
long	lastModified() Return the lastModified date (same format as File.lastModified)
long	length() Get the media asset length in bytes

void	open() Open the media asset
int	read (byte[] buf, int off, int size) Read bytes from the media asset
void	seek (long pos) Seek to a position in the media asset
void	setDirecton (int directon) Set the current direction hint

Fields

FORWARD

```
public static final int FORWARD
```

Constant value: **1**

REVERSE

```
public static final int REVERSE
```

Constant value: **-1**

Methods

init

```
public void init(IApplicationInstance appInstance,
                IMediaStream stream,
                String basePath,
                String mediaName,
                String mediaExtension)
```

Intialize RandomAccessReader

Parameters:

appInstance - application instance
stream - parent stream if one exists
basePath - basePath for IApplicationInstance
mediaName - media name
mediaExtension - media extension from mediaReaders

open

```
public void open()
throws java.io.IOException
```

Open the media asset

Throws:

IOException

close

```
public void close()  
    throws java.io.IOException
```

Close the media asset

Throws:

IOException

isOpen

```
public boolean isOpen()
```

Is the media asset open

Returns:

true if media asset is open

getFilePointer

```
public long getFilePointer()
```

Get the current byte location in the media asset

Returns:

current byte location in the media asset

seek

```
public void seek(long pos)
```

Seek to a position in the media asset

Parameters:

pos - position to seek to

read

```
public int read(byte[] buf,  
               int off,  
               int size)
```

Read bytes from the media asset

Parameters:

buf - buffer to fill

off - offset in buffer

size - size of block to read

Returns:

number of bytes read, -1 if failure

getDirecton

```
public int getDirecton()
```

(continued from last page)

Get the current direction hint for the random access reader. The underlying system will call `setDirection` to hint at the current direction the media assets is being read.

Returns:

current direction hint for the random access reader

setDirecton

```
public void setDirecton(int directon)
```

Set the current direction hint

Parameters:

`directon` - current direction hint for the random access reader

getBasePath

```
public String getBasePath()
```

Get the `basePath` for the random access reader

Returns:

`basePath` for the random access reader

getMediaName

```
public String getMediaName()
```

Get the media name

Returns:

media name

getMediaExtension

```
public String getMediaExtension()
```

Get the media extension

Returns:

media extension

exists

```
public boolean exists()
```

Does the media asset exist

Returns:

true if media assets exists

lastModified

```
public long lastModified()
```

Return the `lastModified` date (same format as `File.lastModified`)

Returns:

`lastModified` date (same format as `File.lastModified`)

length

```
public long length()
```

Get the media asset length in bytes

Returns:

media asset length in bytes

getPath

```
public String getPath()
```

Get the unique path to the media asset item

Returns:

unique path to the media asset item

com.wowza.io Interface IRandomAccessReadOptimizer

All Subinterfaces:

[IRandomAccessReadOptimizer2](#)

public interface **IRandomAccessReadOptimizer**
extends

Method Summary

void	addRequest (long foffset, int fsize, byte[] buffer, int offset)
void	flushReads ()
int	getBufferSize ()
String	getContextStr ()
IRandomAccessReader	getReader ()
void	setBufferSize (int bufferSize)
void	setContextStr (String contextStr)
void	setDebugLog (boolean debugLog)
void	setReader (IRandomAccessReader reader)

Methods

addRequest

```
public void addRequest(long foffset,
    int fsize,
    byte[] buffer,
    int offset)
```

flushReads

```
public void flushReads()
```

(continued from last page)

getContextStr

```
public String getContextStr()
```

setContextStr

```
public void setContextStr(String contextStr)
```

getBufferSize

```
public int getBufferSize()
```

setBufferSize

```
public void setBufferSize(int bufferSize)
```

setDebugLog

```
public void setDebugLog(boolean debugLog)
```

getReader

```
public IRandomAccessReader getReader()
```

setReader

```
public void setReader(IRandomAccessReader reader)
```

com.wowza.io Interface IRandomAccessReadOptimizer2

All Superinterfaces:

[IRandomAccessReadOptimizer](#)

public interface **IRandomAccessReadOptimizer2**
extends [IRandomAccessReadOptimizer](#)

Method Summary

boolean	flushReads2()
---------	-------------------------------

Methods inherited from interface [com.wowza.io.IRandomAccessReadOptimizer](#)

[addRequest](#), [flushReads](#), [getBufferSize](#), [getContextStr](#), [getReader](#), [setBufferSize](#),
[setContextStr](#), [setDebugLog](#), [setReader](#)

Methods

flushReads2

public boolean **flushReads2**()

com.wowza.io Interface IRandomAccessWriter

public interface **IRandomAccessWriter**
extends

Method Summary

int	write (IFasterByteArrayOutputStream out, int offset, int size, int amfIndex, int chunksize)
-----	---

Methods

write

```
public int write(IFasterByteArrayOutputStream out,  
    int offset,  
    int size,  
    int amfIndex,  
    int chunksize)
```


com.wowza.io Interface IRandomAccessWriter2

public interface **IRandomAccessWriter2**
extends

Field Summary

public static final	FORWARD Value: 1
public static final	REVERSE Value: -1

Method Summary

void	close() Close the media asset
boolean	exists() Does the media asset exist
String	getBasePath() Get the basePath for the random access reader
int	getDirecton() Get the current direction hint for the random access reader.
long	getFilePointer() Get the current byte location in the media asset
String	getMediaExtension() Get the media extension
String	getMediaName() Get the media name
String	getPath() Get the unique path to the media asset item
void	init(IApplicationInstance appInstance, IMediaStream stream, String basePath, String mediaName, String mediaExtension) Intialize RandomAccessReader
boolean	isOpen() Is the media asset open
long	lastModified() Return the lastModified date (same format as File.lastModified)
long	length() Get the media asset length in bytes

void	open() Open the media asset
void	seek(long pos) Seek to a position in the media asset
void	setDirecton(int directon) Set the current direction hint
void	write(byte[] buf, int off, int len) Writes len bytes from the specified byte array starting at offset off to this file.

Fields

FORWARD

```
public static final int FORWARD
```

Constant value: **1**

REVERSE

```
public static final int REVERSE
```

Constant value: **-1**

Methods

init

```
public void init(IApplicationInstance appInstance,
                 IMediaStream stream,
                 String basePath,
                 String mediaName,
                 String mediaExtension)
```

Intialize RandomAccessReader

Parameters:

appInstance - application instance
 stream - parent stream if one exists
 basePath - basePath for IApplicationInstance
 mediaName - media name
 mediaExtension - media extension from mediaReaders

open

```
public void open()
throws java.io.IOException
```

Open the media asset

Throws:

IOException

close

```
public void close()  
    throws java.io.IOException
```

Close the media asset

Throws:

IOException

isOpen

```
public boolean isOpen()
```

Is the media asset open

Returns:

true if media asset is open

getFilePointer

```
public long getFilePointer()
```

Get the current byte location in the media asset

Returns:

current byte location in the media asset

seek

```
public void seek(long pos)
```

Seek to a position in the media asset

Parameters:

pos - position to seek to

write

```
public void write(byte[] buf,  
    int off,  
    int len)
```

Writes len bytes from the specified byte array starting at offset off to this file.

Parameters:

buf - the data.
off - the start offset in the data.
len - the number of bytes to write.

Throws:

IOException - if an I/O error occurs.

getDirecton

```
public int getDirecton()
```

(continued from last page)

Get the current direction hint for the random access reader. The underlying system will call `setDirection` to hint at the current direction the media assets is being read.

Returns:

current direction hint for the random access reader

setDirecton

```
public void setDirecton(int directon)
```

Set the current direction hint

Parameters:

`directon` - current direction hint for the random access reader

getBasePath

```
public String getBasePath()
```

Get the `basePath` for the random access reader

Returns:

`basePath` for the random access reader

getMediaName

```
public String getMediaName()
```

Get the media name

Returns:

media name

getMediaExtension

```
public String getMediaExtension()
```

Get the media extension

Returns:

media extension

exists

```
public boolean exists()
```

Does the media asset exist

Returns:

true if media assets exists

lastModified

```
public long lastModified()
```

Return the `lastModified` date (same format as `File.lastModified`)

Returns:

`lastModified` date (same format as `File.lastModified`)

length

```
public long length()
```

Get the media asset length in bytes

Returns:

media asset length in bytes

getPath

```
public String getPath()
```

Get the unique path to the media asset item

Returns:

unique path to the media asset item

com.wowza.io Interface ITextReader

All Subinterfaces:

[IDvrTextReader](#)

public interface **ITextReader**
extends

Method Summary

void	close() Close the media asset
boolean	exists() Does the media asset exist
String	getBasePath() Get the basePath for the random access reader
String	getMediaName() Get the media name
String	getPath() Get the unique path to the media asset item
void	init(IApplicationInstance appInstance, IMediaStream stream, String basePath, String mediaName)
boolean	isOpen() Is the media asset open
long	lastModified() Return the lastModified date (same format as File.lastModified)
long	length() Get the media asset length in bytes
void	open() Open the media asset
int	read(char[] buf, int off, int size)
boolean	ready()

Methods

(continued from last page)

init

```
public void init(IApplicationInstance appInstance,  
                IMediaStream stream,  
                String basePath,  
                String mediaName)
```

open

```
public void open()  
    throws java.io.IOException
```

Open the media asset

Throws:

IOException

ready

```
public boolean ready()  
    throws java.io.IOException
```

close

```
public void close()  
    throws java.io.IOException
```

Close the media asset

Throws:

IOException

isOpen

```
public boolean isOpen()
```

Is the media asset open

Returns:

true if media asset is open

read

```
public int read(char[] buf,  
               int off,  
               int size)  
    throws java.io.IOException
```

getBasePath

```
public String getBasePath()
```

Get the basePath for the random access reader

(continued from last page)

Returns:

basePath for the random access reader

getMediaName

```
public String getMediaName()
```

Get the media name

Returns:

media name

exists

```
public boolean exists()
```

Does the media asset exist

Returns:

true if media assets exists

lastModified

```
public long lastModified()
```

Return the lastModified date (same format as File.lastModified)

Returns:

lastModified date (same format as File.lastModified)

length

```
public long length()
```

Get the media asset length in bytes

Returns:

media asset length in bytes

getPath

```
public String getPath()
```

Get the unique path to the media asset item

Returns:

unique path to the media asset item

com.wowza.io Interface ITextWriter

All Subinterfaces:

[IDvrTextWriter](#)

public interface **ITextWriter**
extends

Method Summary

void	close() Close the media asset
boolean	exists() Does the media asset exist
String	getBasePath() Get the basePath for the random access reader
String	getMediaName() Get the media name
String	getPath() Get the unique path to the media asset item
void	init(IApplicationInstance appInstance, IMediaStream stream, String basePath, String mediaName)
boolean	isAppend()
boolean	isOpen() Is the media asset open
long	lastModified() Return the lastModified date (same format as File.lastModified)
long	length() Get the media asset length in bytes
void	open() Open the media asset
void	setAppend(boolean append)
void	write(char[] cbuf)
void	write(char[] cbuf, int off, int len)
void	write(String str)

void	write (String str, int off, int len)
------	--

Methods

init

```
public void init(IApplicationInstance appInstance,  
                IMediaStream stream,  
                String basePath,  
                String mediaName)
```

isAppend

```
public boolean isAppend()
```

setAppend

```
public void setAppend(boolean append)
```

open

```
public void open()  
    throws java.io.IOException
```

Open the media asset

Throws:

IOException

close

```
public void close()  
    throws java.io.IOException
```

Close the media asset

Throws:

IOException

isOpen

```
public boolean isOpen()
```

Is the media asset open

Returns:

true if media asset is open

(continued from last page)

write

```
public void write(char[] cbuf,  
                 int off,  
                 int len)  
    throws java.io.IOException
```

write

```
public void write(char[] cbuf)  
    throws java.io.IOException
```

write

```
public void write(String str,  
                 int off,  
                 int len)  
    throws java.io.IOException
```

write

```
public void write(String str)  
    throws java.io.IOException
```

getBasePath

```
public String getBasePath()
```

Get the basePath for the random access reader

Returns:

basePath for the random access reader

getMediaName

```
public String getMediaName()
```

Get the media name

Returns:

media name

exists

```
public boolean exists()
```

Does the media asset exist

Returns:

true if media assets exists

(continued from last page)

lastModified

```
public long lastModified()
```

Return the lastModified date (same format as File.lastModified)

Returns:

lastModified date (same format as File.lastModified)

length

```
public long length()
```

Get the media asset length in bytes

Returns:

media asset length in bytes

getPath

```
public String getPath()
```

Get the unique path to the media asset item

Returns:

unique path to the media asset item

Package

com.wowza.util

com.wowza.util Class AMFUtils

java.lang.Object

└-com.wowza.util.AMFUtils

public class **AMFUtils**
extends Object

Utilities for the conversion between Java and AMF

Constructor Summary

public	AMFUtils()
--------	----------------------------

Method Summary

static AMFData[]	convertParams (Object[] params) Converts an array of Java native data values and class to AMF data types.
----------------------------------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

AMFUtils

public **AMFUtils**()

Methods

convertParams

public static [AMFData\[\]](#) **convertParams**(Object[] params)

(continued from last page)

Converts an array of Java native data values and class to AMF data types. It will box primitive data types into wrapper classes. Supported input data types are:

- null
- Double
- Float
- Long
- Integer
- Short
- Byte
- Number
- Date
- Boolean
- String
- StringBuffer
- byte[] - assumed to be raw AMFData
- ByteBuffer - assumed to be raw AMFData
- AMFData
- AMFDataMixedArray
- AMFDataArray
- AMFDataItem
- AMFDataList
- AMFDataObj

Parameters:

params - Array of Java

Returns:

Array of AMFData[] objects

com.wowza.util Class Base64

java.lang.Object

└─com.wowza.util.Base64

public class **Base64**
extends Object

Encodes and decodes to and from Base64 notation.

Homepage: <http://iharder.net/base64>.

Change Log:

- v2.2.1 - Fixed bug using URL_SAFE and ORDERED encodings. Fixed bug when using very small files (~< 40 bytes).
- v2.2 - Added some helper methods for encoding/decoding directly from one file to the next. Also added a main() method to support command line encoding/decoding from one file to the next. Also added these Base64 dialects:
 1. The default is RFC3548 format.
 2. Calling Base64.setFormat(Base64.BASE64_FORMAT.URLSAFE_FORMAT) generates URL and file name friendly format as described in Section 4 of RFC3548. <http://www.faqs.org/rfcs/rfc3548.html>
 3. Calling Base64.setFormat(Base64.BASE64_FORMAT.ORDERED_FORMAT) generates URL and file name friendly format that preserves lexical ordering as described in <http://www.faqs.org/qa/rfc-1940.html>
 Special thanks to Jim Kellerman at <http://www.powerset.com/> for contributing the new Base64 dialects.
- v2.1 - Cleaned up javadoc comments and unused variables and methods. Added some convenience methods for reading and writing to and from files.
- v2.0.2 - Now specifies UTF-8 encoding in places where the code fails on systems with other encodings (like EBCDIC).
- v2.0.1 - Fixed an error when decoding a single byte, that is, when the encoded data was a single byte.
- v2.0 - I got rid of methods that used booleans to set options. Now everything is more consolidated and cleaner. The code now detects when data that's being decoded is gzip-compressed and will decompress it automatically. Generally things are cleaner. You'll probably have to change some method calls that you were making to support the new options format (ints that you "OR" together).
- v1.5.1 - Fixed bug when decompressing and decoding to a byte[] using decode(String s, boolean gzipCompressed). Added the ability to "suspend" encoding in the Output Stream so you can turn on and off the encoding if you need to embed base64 data in an otherwise "normal" stream (like an XML file).
- v1.5 - Output stream passes on flush() command but doesn't do anything itself. This helps when using GZIP streams. Added the ability to GZip-compress objects before encoding them.
- v1.4 - Added helper methods to read/write files.
- v1.3.6 - Fixed OutputStream.flush() so that 'position' is reset.
- v1.3.5 - Added flag to turn on and off line breaks. Fixed bug in input stream where last buffer being read, if not completely full, was not returned.
- v1.3.4 - Fixed when "improperly padded stream" error was thrown at the wrong time.
- v1.3.3 - Fixed I/O streams which were totally messed up.

I am placing this code in the Public Domain. Do with it as you will. This software comes with no guarantees or warranties but with plenty of well-wishing instead! Please visit <http://iharder.net/base64> periodically to check for updates or to contribute improvements.

Nested Class Summary

class	Base64.InputStream Base64.InputStream
class	Base64.OutputStream Base64.OutputStream

Field Summary

<code>public static final</code>	<u>DECODE</u> Specify decoding. Value: 0
<code>public static final</code>	<u>DONT_BREAK_LINES</u> Don't break lines when encoding (violates strict Base64 specification) Value: 8
<code>public static final</code>	<u>ENCODE</u> Specify encoding. Value: 1
<code>public static final</code>	<u>GZIP</u> Specify that data should be gzip-compressed. Value: 2
<code>public static final</code>	<u>NO_OPTIONS</u> No options specified. Value: 0
<code>public static final</code>	<u>ORDERED</u> Encode using the special "ordered" dialect of Base64 described here: http://www.faqs.org/qa/rfc3548.html . Value: 32
<code>public static final</code>	<u>URL_SAFE</u> Encode using Base64-like encoding that is URL- and Filename-safe as described in Section 4 of RFC3548: http://www.faqs.org/rfcs/rfc3548.html . Value: 16

Method Summary

<code>static byte[]</code>	<u>decode</u> (byte[] source, int off, int len, int options) Very low-level access to decoding ASCII characters in the form of a byte array.
<code>static byte[]</code>	<u>decode</u> (String s) Decodes data from Base64 notation, automatically detecting gzip-compressed data and decompressing it.
<code>static byte[]</code>	<u>decode</u> (String s, int options) Decodes data from Base64 notation, automatically detecting gzip-compressed data and decompressing it.
<code>static void</code>	<u>decodeFileToFile</u> (String infile, String outfile) Reads infile and decodes it to outfile.
<code>static byte[]</code>	<u>decodeFromFile</u> (String filename) Convenience method for reading a base64-encoded file and decoding it.
<code>static void</code>	<u>decodeString</u> (String inString) Decodes inString and outputs result to stdout
<code>static boolean</code>	<u>decodeToFile</u> (String dataToDecode, String filename) Convenience method for decoding data to a file.

static Object	decodeToObject (String encodedObject) Attempts to decode Base64 data and deserialize a Java Object within.
static String	encodeAndReplacePlusesAndDashes (String s)
static String	encodeBytes (byte[] source) Encodes a byte array into Base64 notation.
static String	encodeBytes (byte[] source, int options) Encodes a byte array into Base64 notation.
static String	encodeBytes (byte[] source, int off, int len) Encodes a byte array into Base64 notation.
static String	encodeBytes (byte[] source, int off, int len, int options) Encodes a byte array into Base64 notation.
static void	encodeFileToFile (String infile, String outfile) Reads infile and encodes it to outfile.
static String	encodeFromFile (String filename) Convenience method for reading a binary file and base64-encoding it.
static String	encodeObject (java.io.Serializable serializableObject) Serializes an object and returns the Base64-encoded version of that serialized object.
static String	encodeObject (java.io.Serializable serializableObject, int options) Serializes an object and returns the Base64-encoded version of that serialized object.
static void	encodeString (String inString) Encodes inString and outputs result to stdout
static boolean	encodeToFile (byte[] dataToEncode, String filename) Convenience method for encoding data to a file.
static void	main (String[] args) Encodes or decodes two files from the command line; feel free to delete this method (in fact you probably should) if you're embedding this code into a larger program.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

NO_OPTIONS

```
public static final int NO_OPTIONS
```

No options specified. Value is zero.
Constant value: **0**

ENCODE

```
public static final int ENCODE
```

(continued from last page)

Specify encoding.
Constant value: **1**

DECODE

```
public static final int DECODE
```

Specify decoding.
Constant value: **0**

GZIP

```
public static final int GZIP
```

Specify that data should be gzip-compressed.
Constant value: **2**

DONT_BREAK_LINES

```
public static final int DONT_BREAK_LINES
```

Don't break lines when encoding (violates strict Base64 specification)
Constant value: **8**

URL_SAFE

```
public static final int URL_SAFE
```

Encode using Base64-like encoding that is URL- and Filename-safe as described in Section 4 of RFC3548: <http://www.faqs.org/rfcs/rfc3548.html>. It is important to note that data encoded this way is *not* officially valid Base64, or at the very least should not be called Base64 without also specifying that it was encoded using the URL- and Filename-safe dialect.
Constant value: **16**

ORDERED

```
public static final int ORDERED
```

Encode using the special "ordered" dialect of Base64 described here: <http://www.faqs.org/qa/rfcc-1940.html>.
Constant value: **32**

Methods

main

```
public final static void main(String[] args)
```

Encodes or decodes two files from the command line; **feel free to delete this method (in fact you probably should) if you're embedding this code into a larger program.**

encodeObject

```
public static String encodeObject(java.io.Serializable serializableObject)
```

Serializes an object and returns the Base64-encoded version of that serialized object. If the object cannot be serialized or there is another error, the method will return null. The object is not GZip-compressed before being encoded.

Parameters:

serializableObject - The object to encode

Returns:

(continued from last page)

The Base64-encoded object

encodeObject

```
public static String encodeObject(java.io.Serializable serializableObject,  
    int options)
```

Serializes an object and returns the Base64-encoded version of that serialized object. If the object cannot be serialized or there is another error, the method will return null.

Valid options:

```
GZIP: gzip-compresses object before encoding it.  
DONT_BREAK_LINES: don't break lines at 76 characters  
    Note: Technically, this makes your encoding non-compliant.
```

Example: `encodeObject(myObj, Base64.GZIP)` or

Example: `encodeObject(myObj, Base64.GZIP | Base64.DONT_BREAK_LINES)`

Parameters:

`serializableObject` - The object to encode
`options` - Specified options

Returns:

The Base64-encoded object

See Also:

[GZIP](#)

[DONT_BREAK_LINES](#)

encodeBytes

```
public static String encodeBytes(byte[] source)
```

Encodes a byte array into Base64 notation. Does not GZip-compress data.

Parameters:

`source` - The data to convert

encodeBytes

```
public static String encodeBytes(byte[] source,  
    int options)
```

(continued from last page)

Encodes a byte array into Base64 notation.

Valid options:

```
GZIP: gzip-compresses object before encoding it.  
DONT_BREAK_LINES: don't break lines at 76 characters  
Note: Technically, this makes your encoding non-compliant.
```

Example: `encodeBytes(myData, Base64.GZIP)` or

Example: `encodeBytes(myData, Base64.GZIP | Base64.DONT_BREAK_LINES)`

Parameters:

source - The data to convert
options - Specified options

See Also:

[GZIP](#)
[DONT_BREAK_LINES](#)

encodeBytes

```
public static String encodeBytes(byte[] source,  
    int off,  
    int len)
```

Encodes a byte array into Base64 notation. Does not GZip-compress data.

Parameters:

source - The data to convert
off - Offset in array where conversion should begin
len - Length of data to convert

encodeBytes

```
public static String encodeBytes(byte[] source,  
    int off,  
    int len,  
    int options)
```

Encodes a byte array into Base64 notation.

Valid options:

```
GZIP: gzip-compresses object before encoding it.  
DONT_BREAK_LINES: don't break lines at 76 characters  
Note: Technically, this makes your encoding non-compliant.
```

Example: `encodeBytes(myData, Base64.GZIP)` or

Example: `encodeBytes(myData, Base64.GZIP | Base64.DONT_BREAK_LINES)`

(continued from last page)

Parameters:

source - The data to convert
off - Offset in array where conversion should begin
len - Length of data to convert
options - Specified options, alphabet type is pulled from this (standard, url-safe, ordered)

See Also:

[GZIP](#)
[DONT_BREAK_LINES](#)

decode

```
public static byte[] decode(byte[] source,  
    int off,  
    int len,  
    int options)
```

Very low-level access to decoding ASCII characters in the form of a byte array. Does not support automatically gunzipping or any other "fancy" features.

Parameters:

source - The Base64 encoded data
off - The offset of where to begin decoding
len - The length of characters to decode

Returns:

decoded data

decode

```
public static byte[] decode(String s)
```

Decodes data from Base64 notation, automatically detecting gzip-compressed data and decompressing it.

Parameters:

s - the string to decode

Returns:

the decoded data

decode

```
public static byte[] decode(String s,  
    int options)
```

Decodes data from Base64 notation, automatically detecting gzip-compressed data and decompressing it.

Parameters:

s - the string to decode
options - encode options such as URL_SAFE

Returns:

the decoded data

decodeToObject

```
public static Object decodeToObject(String encodedObject)
```

(continued from last page)

Attempts to decode Base64 data and deserialize a Java Object within. Returns null if there was an error.

Parameters:

encodedObject - The Base64 data to decode

Returns:

The decoded and deserialized object

encodeToFile

```
public static boolean encodeToFile(byte[] dataToEncode,  
    String filename)
```

Convenience method for encoding data to a file.

Parameters:

dataToEncode - byte array of data to encode in base64 form
filename - Filename for saving encoded data

Returns:

true if successful, false otherwise

decodeToFile

```
public static boolean decodeToFile(String dataToDecode,  
    String filename)
```

Convenience method for decoding data to a file.

Parameters:

dataToDecode - Base64-encoded data as a string
filename - Filename for saving decoded data

Returns:

true if successful, false otherwise

decodeFromFile

```
public static byte[] decodeFromFile(String filename)
```

Convenience method for reading a base64-encoded file and decoding it.

Parameters:

filename - Filename for reading encoded data

Returns:

decoded byte array or null if unsuccessful

encodeFromFile

```
public static String encodeFromFile(String filename)
```

Convenience method for reading a binary file and base64-encoding it.

Parameters:

filename - Filename for reading binary data

Returns:

base64-encoded string or null if unsuccessful

encodeFileToFile

```
public static void encodeFileToFile(String infile,  
    String outfile)
```

Reads infile and encodes it to outfile.

Parameters:

infile - Input file
outfile - Output file

encodeString

```
public static void encodeString(String inString)
```

Encodes inString and outputs result to stdout

Parameters:

inString - Input string

decodeString

```
public static void decodeString(String inString)
```

Decodes inString and outputs result to stdout

Parameters:

inString - Input string

decodeFileToFile

```
public static void decodeFileToFile(String infile,  
    String outfile)
```

Reads infile and decodes it to outfile.

Parameters:

infile - Input file
outfile - Output file

encodeAndReplacePlusesAndDashes

```
public static String encodeAndReplacePlusesAndDashes(String s)
```


com.wowza.util Class Base64.InputStream

```

java.lang.Object
  |
  +- java.io.InputStream
      |
      +- java.io.FilterInputStream
          |
          +- com.wowza.util.Base64.InputStream
  
```

All Implemented Interfaces:

java.io.Closeable

public static class **Base64.InputStream**
extends java.io.FilterInputStream

A [Base64.InputStream](#) will read data from another java.io.InputStream, given in the constructor, and encode/decode to/from Base64 notation on the fly.

See Also:

[Base64](#)

Fields inherited from class java.io.FilterInputStream

in

Constructor Summary

public	Base64.InputStream (java.io.InputStream in) Constructs a Base64.InputStream in DECODE mode.
public	Base64.InputStream (java.io.InputStream in, int options) Constructs a Base64.InputStream in either ENCODE or DECODE mode.

Method Summary

int	read () Reads enough of the input stream to convert to/from Base64 and returns the next byte.
int	read (byte[] dest, int off, int len) Calls read() repeatedly until the end of stream is reached or len bytes are read.

Methods inherited from class java.io.FilterInputStream

available, close, mark, markSupported, read, read, read, reset, skip

Methods inherited from class java.io.InputStream

available, close, mark, markSupported, read, read, read, reset, skip

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.io.Closeable

```
close
```

Methods inherited from interface `java.lang.AutoCloseable`

```
close
```

Constructors

Base64.InputStream

```
public Base64.InputStream(java.io.InputStream in)
```

Constructs a [Base64.InputStream](#) in DECODE mode.

Parameters:

`in` - the `java.io.InputStream` from which to read data.

Base64.InputStream

```
public Base64.InputStream(java.io.InputStream in,  
                          int options)
```

Constructs a [Base64.InputStream](#) in either ENCODE or DECODE mode.

Valid options:

```
ENCODE or DECODE: Encode or Decode as data is read.  
DONT_BREAK_LINES: don't break lines at 76 characters  
    (only meaningful when encoding)  
Note: Technically, this makes your encoding non-compliant.
```

Example: `new Base64.InputStream(in, Base64.DECODE)`

Parameters:

`in` - the `java.io.InputStream` from which to read data.

`options` - Specified options

See Also:

[Base64.ENCODE](#)

[Base64.DECODE](#)

[Base64.DONT_BREAK_LINES](#)

Methods

read

```
public int read()  
    throws java.io.IOException
```

Reads enough of the input stream to convert to/from Base64 and returns the next byte.

(continued from last page)

Returns:

next byte

read

```
public int read(byte[] dest,  
              int off,  
              int len)  
throws java.io.IOException
```

Calls [read\(\)](#) repeatedly until the end of stream is reached or len bytes are read. Returns number of bytes read into array or -1 if end of stream is encountered.

Parameters:

dest - array to hold values
off - offset for array
len - max number of bytes to read into array

Returns:

bytes read into array or -1 if end of stream is encountered.

com.wowza.util Class Base64.OutputStream

```

java.lang.Object
  |
  +- java.io.OutputStream
      |
      +- java.io.FilterOutputStream
          |
          +- com.wowza.util.Base64.OutputStream
  
```

All Implemented Interfaces:

java.io.Flushable, java.io.Closeable

public static class **Base64.OutputStream**
extends java.io.FilterOutputStream

A [Base64.OutputStream](#) will write data to another java.io.OutputStream, given in the constructor, and encode/decode to/from Base64 notation on the fly.

See Also:

[Base64](#)

Fields inherited from class java.io.FilterOutputStream

out

Constructor Summary

public	Base64.OutputStream (java.io.OutputStream out) Constructs a Base64.OutputStream in ENCODE mode.
public	Base64.OutputStream (java.io.OutputStream out, int options) Constructs a Base64.OutputStream in either ENCODE or DECODE mode.

Method Summary

void	close () Flushes and closes (I think, in the superclass) the stream.
void	flushBase64 () Method added by PHIL.
void	resumeEncoding () Resumes encoding of the stream.
void	suspendEncoding () Suspends encoding of the stream.
void	write (byte[] theBytes, int off, int len) Calls write(int) repeatedly until len bytes are written.
void	write (int theByte) Writes the byte to the output stream after converting to/from Base64 notation.

Methods inherited from class java.io.FilterOutputStream

```
close, flush, write, write, write
```

Methods inherited from class java.io.OutputStream

```
close, flush, write, write, write
```

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Methods inherited from interface java.io.Closeable

```
close
```

Methods inherited from interface java.lang.AutoCloseable

```
close
```

Methods inherited from interface java.io.Flushable

```
flush
```

Constructors

Base64.OutputStream

```
public Base64.OutputStream(java.io.OutputStream out)
```

Constructs a [Base64.OutputStream](#) in ENCODE mode.

Parameters:

out - the java.io.OutputStream to which data will be written.

Base64.OutputStream

```
public Base64.OutputStream(java.io.OutputStream out,
                           int options)
```

Constructs a [Base64.OutputStream](#) in either ENCODE or DECODE mode.

Valid options:

```
ENCODE or DECODE: Encode or Decode as data is read.
DONT_BREAK_LINES: don't break lines at 76 characters
    (only meaningful when encoding)
    Note: Technically, this makes your encoding non-compliant.
```

Example: `new Base64.OutputStream(out, Base64.ENCODE)`

(continued from last page)

Parameters:

out - the java.io.OutputStream to which data will be written.
options - Specified options.

See Also:[Base64.ENCODER](#)[Base64.DECODER](#)[Base64.DONT_BREAK_LINES](#)

Methods

write

```
public void write(int theByte)
    throws java.io.IOException
```

Writes the byte to the output stream after converting to/from Base64 notation. When encoding, bytes are buffered three at a time before the output stream actually gets a write() call. When decoding, bytes are buffered four at a time.

Parameters:

theByte - the byte to write

write

```
public void write(byte[] theBytes,
    int off,
    int len)
    throws java.io.IOException
```

Calls [write\(int\)](#) repeatedly until len bytes are written.

Parameters:

theBytes - array from which to read bytes
off - offset for array
len - max number of bytes to read into array

flushBase64

```
public void flushBase64()
    throws java.io.IOException
```

Method added by PHIL. [Thanks, PHIL. -Rob] This pads the buffer without closing the stream.

close

```
public void close()
    throws java.io.IOException
```

Flushes and closes (I think, in the superclass) the stream.

suspendEncoding

```
public void suspendEncoding()
    throws java.io.IOException
```

Suspends encoding of the stream. May be helpful if you need to embed a piece of base64-encoded data in a stream.

(continued from last page)

resumeEncoding

```
public void resumeEncoding()
```

Resumes encoding of the stream. May be helpful if you need to embed a piece of base64-encoded data in a stream.

com.wowza.util Class BitReader

java.lang.Object

└-com.wowza.util.BitReader

All Implemented Interfaces:

[IBitReader](#)

public class **BitReader**
 extends Object
 implements [IBitReader](#)

Constructor Summary

public	BitReader (byte[] bytes)
public	BitReader (byte[] bytes, int len)
public	BitReader (byte[] bytes, int offset, int len)

Method Summary

int	count ()
int	getBit ()
int	getBytes (byte[] buffer, int offset, int len)
int	getInt (int numberBits)
int	getIntLE (int numberBits)
int	getIntSigned (int numberBits)
long	getLong (int numberBits)
int	peekInt (int numberBits)
int	peekIntLE (int numberBits)
long	peekLong (int numberBits)
int	readExpGolomb ()
int	readExpGolombSigned ()

int	remaining()
void	skip()
void	skip(int numberBits)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.util.IBitReader](#)

[getBytes](#), [getInt](#), [getIntLE](#), [getLong](#), [peekInt](#), [peekIntLE](#), [peekLong](#), [remaining](#), [skip](#)

Constructors

BitReader

```
public BitReader(byte[] bytes)
```

BitReader

```
public BitReader(byte[] bytes,
                 int len)
```

BitReader

```
public BitReader(byte[] bytes,
                 int offset,
                 int len)
```

Methods

remaining

```
public int remaining()
```

count

```
public int count()
```

(continued from last page)

getBit

```
public int getBit()
```

skip

```
public void skip()
```

skip

```
public void skip(int numberBits)
```

peekInt

```
public int peekInt(int numberBits)
```

peekIntLE

```
public int peekIntLE(int numberBits)
```

getInt

```
public int getInt(int numberBits)
```

getIntLE

```
public int getIntLE(int numberBits)
```

peekLong

```
public long peekLong(int numberBits)
```

getLong

```
public long getLong(int numberBits)
```

getIntSigned

```
public int getIntSigned(int numberBits)
```

(continued from last page)

readExpGolombSigned

```
public int readExpGolombSigned()
```

readExpGolomb

```
public int readExpGolomb()
```

getBytes

```
public int getBytes(byte[] buffer,  
                   int offset,  
                   int len)
```

com.wowza.util Class BitReaderFast

java.lang.Object

└─com.wowza.util.BitReaderFast

All Implemented Interfaces:

[IBitReader](#)

public class **BitReaderFast**
 extends Object
 implements [IBitReader](#)

Constructor Summary

public	BitReaderFast (byte[] buffer)
public	BitReaderFast (byte[] buffer, int len)
public	BitReaderFast (byte[] buffer, int offset, int len)

Method Summary

int	getBytes (byte[] buffer, int offset, int len)
int	getInt (int numberBits)
int	getInt (int numberBits, boolean peek)
int	getIntLE (int numberBits)
int	getIntLE (int numberBits, boolean peek)
long	getLong (int numberBits)
long	getLong (int numberBits, boolean peek)
int	peekInt (int numberBits)
int	peekIntLE (int numberBits)
long	peekLong (int numberBits)
int	remaining ()
void	skip (int numberBits)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.util.IBitReader](#)

[getBytes](#), [getInt](#), [getIntLE](#), [getLong](#), [peekInt](#), [peekIntLE](#), [peekLong](#), [remaining](#), [skip](#)

Constructors

BitReaderFast

```
public BitReaderFast(byte[] buffer)
```

BitReaderFast

```
public BitReaderFast(byte[] buffer,  
                    int len)
```

BitReaderFast

```
public BitReaderFast(byte[] buffer,  
                    int offset,  
                    int len)
```

Methods

remaining

```
public int remaining()
```

skip

```
public void skip(int numberBits)
```

getInt

```
public int getInt(int numberBits)
```

peekInt

```
public int peekInt(int numberBits)
```

(continued from last page)

getInt

```
public int getInt(int numberBits,  
                 boolean peek)
```

getIntLE

```
public int getIntLE(int numberBits)
```

peekIntLE

```
public int peekIntLE(int numberBits)
```

getIntLE

```
public int getIntLE(int numberBits,  
                 boolean peek)
```

getLong

```
public long getLong(int numberBits)
```

peekLong

```
public long peekLong(int numberBits)
```

getLong

```
public long getLong(int numberBits,  
                 boolean peek)
```

getBytes

```
public int getBytes(byte[] buffer,  
                 int offset,  
                 int len)
```

com.wowza.util Class BitWriter

java.lang.Object

└-com.wowza.util.BitWriter

public class **BitWriter**
extends Object

Constructor Summary

public	BitWriter (byte[] bytes)
public	BitWriter (byte[] bytes, int len)

Method Summary

void	alignToByte ()
int	count ()
void	putBit (int bit)
void	putInt (int numberBits, int val)
void	putLong (int numberBits, long val)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

BitWriter

public **BitWriter**(byte[] bytes)

BitWriter

public **BitWriter**(byte[] bytes,
int len)

(continued from last page)

Methods

count

```
public int count()
```

putBit

```
public void putBit(int bit)
```

putInt

```
public void putInt(int numberBits,  
int val)
```

putLong

```
public void putLong(int numberBits,  
long val)
```

alignToByte

```
public void alignToByte()
```


com.wowza.util Class BufferUtils

java.lang.Object

└─com.wowza.util.BufferUtils

```
public class BufferUtils
extends Object
```

BufferUtils: utilities for converting between binary data and Java primitive types. Faster than Java runtime equivalents

Field Summary

public static final	alphas
public static final	hexadecimal

Constructor Summary

public	BufferUtils()
--------	-------------------------------

Method Summary

static int	byteArrayToInt (byte[] b) Convert byte array to int
static int	byteArrayToInt (byte[] b, int offset) Convert byte array to int with offset
static int	byteArrayToInt (byte[] b, int offset, int count) Convert byte array to int with offset.
static int	byteArrayToInt (byte[] b, int offset, int count, boolean isReverse) Convert byte array to int with offset.
static long	byteArrayToLong (byte[] b) Convert byte array to long
static long	byteArrayToLong (byte[] b, int offset) Convert byte array to long with offset
static long	byteArrayToLong (byte[] b, int offset, int count) Convert byte array to long with offset.
static long	byteArrayToLong (byte[] b, int offset, int count, boolean isReverse) Convert byte array to long with offset.
static int	byteArrayToShort (byte[] b) Convert byte array to int

static int	byteArrayToShort (byte[] b, int offset) Convert byte array to int with offset
static int	byteArrayToShort (byte[] b, int offset, int count) Convert byte array to int with offset.
static int	byteArrayToShort (byte[] b, int offset, int count, boolean isReverse) Convert byte array to int with offset.
static String	byteArrayToString (byte[] b) Convert a byte array to a String (UTF-8 encoding assumed)
static String	byteArrayToString (byte[] b, int offset, int count) Convert a byte array to a String (UTF-8 encoding assumed)
static String	byteArrayToString (byte[] b, int offset, int count, String charsetName) Convert a byte array to a String
static byte[]	decodeHexString (String hexStr) Decode a string as a byte array
static int	doCRC32 (int crc, byte[] buffer, int offset, int len) Calculate an IEEE CRC32 value for MPEG transport stream from a starting crc value
static String	encodeHexString (byte[] bytes) Encode a byte array as a string
static String	encodeHexString (byte[] bytes, int offset, int len) Encode a byte array as a string
static int	getUnsignedShort (java.nio.ByteBuffer buffer)
static int	indexOf (byte[] source, byte[] pattern) Finds the first occurrence of a byte pattern in a byte buffer.
static int	indexOfDifferent (byte[] buffer1, byte[] buffer2) Compare two byte buffers, and return the index of the first byte that is different.
static byte[]	intToByteArray (int value) Convert a int value to a byte array in network order
static void	intToByteArray (int value, byte[] buffer, int offset, int size) Convert a int value to a byte array in network order
static void	intToByteArray (int value, byte[] buffer, int offset, int size, boolean isReverse) Convert a int value to a byte array in network order
static byte[]	intToByteArray (int value, int size) Convert a int value to a byte array in network order
static byte[]	longToByteArray (long value) Convert a long value to a byte array in network order
static void	longToByteArray (long value, byte[] buffer, int offset, int size) Convert a long value to a byte array in network order
static void	longToByteArray (long value, byte[] buffer, int offset, int size, boolean isReverse) Convert a long value to a byte array in network order

static byte[]	longToByteArray (long value, int size) Convert a long value to a byte array in network order
static boolean	startsWith (byte[] source, byte[] pattern)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

hexadecimal

```
public static final java.lang.String hexadecimal
```

alphas

```
public static final java.lang.String alphas
```

Constructors

BufferUtils

```
public BufferUtils()
```

Methods

encodeHexString

```
public static String encodeHexString(byte[] bytes)
```

Encode a byte array as a string

Parameters:

bytes - byte array

Returns:

string

encodeHexString

```
public static String encodeHexString(byte[] bytes,
    int offset,
    int len)
```

Encode a byte array as a string

Parameters:

(continued from last page)

bytes - byte array
offset - offset
len - length

Returns:
string

decodeHexString

```
public static byte[] decodeHexString(String hexStr)
```

Decode a string as a byte array

Parameters:
hexStr - string

Returns:
byte array

byteArrayToString

```
public static String byteArrayToString(byte[] b)
```

Convert a byte array to a String (UTF-8 encoding assumed)

Parameters:
b - byte array

Returns:
resultant string

byteArrayToString

```
public static String byteArrayToString(byte[] b,  
    int offset,  
    int count)
```

Convert a byte array to a String (UTF-8 encoding assumed)

Parameters:
b - byte array
offset - offset
count - len

Returns:
resultant string

byteArrayToString

```
public static String byteArrayToString(byte[] b,  
    int offset,  
    int count,  
    String charsetName)
```

Convert a byte array to a String

Parameters:
b - byte array
offset - offset

(continued from last page)

count - len
charsetName - character set name

Returns:
resultant string

byteArrayToLong

```
public static long byteArrayToLong(byte[] b)
```

Convert byte array to long

Parameters:
b - byte array (8 bytes)

Returns:
long value

byteArrayToLong

```
public static long byteArrayToLong(byte[] b,  
int offset)
```

Convert byte array to long with offset

Parameters:
b - byte array (8 bytes)
offset - offset

Returns:
long value

byteArrayToLong

```
public static long byteArrayToLong(byte[] b,  
int offset,  
int count)
```

Convert byte array to long with offset. Count is the number of bytes. Can be less than 8. If less than 8 just fills lower bits in value.

Parameters:
b - byte array
offset - offset
count - number of bytes

Returns:
long value

byteArrayToLong

```
public static long byteArrayToLong(byte[] b,  
int offset,  
int count,  
boolean isReverse)
```

Convert byte array to long with offset. Count is the number of bytes. Can be less than 8. If less than 8 just fills lower bits in value. The reverse flag allows data to be in reverse order.

Parameters:

(continued from last page)

b - byte array
offset - offset
count - number of bytes
isReverse - is data in reverse order

Returns:

long value

byteArrayToInt

```
public static int byteArrayToInt(byte[] b)
```

Convert byte array to int

Parameters:

b - byte array (4 bytes)

Returns:

int value

byteArrayToInt

```
public static int byteArrayToInt(byte[] b,  
int offset)
```

Convert byte array to int with offset

Parameters:

b - byte array (4 bytes)
offset - offset

Returns:

int value

byteArrayToInt

```
public static int byteArrayToInt(byte[] b,  
int offset,  
int count)
```

Convert byte array to int with offset. Count is the number of bytes. Can be less than 4. If less than 4 just fills lower bits in value.

Parameters:

b - byte array
offset - offset
count - number of bytes

Returns:

int value

byteArrayToInt

```
public static int byteArrayToInt(byte[] b,  
int offset,  
int count,  
boolean isReverse)
```

Convert byte array to int with offset. Count is the number of bytes. Can be less than 4. If less than 4 just fills lower bits in value. The reverse flag allows data to be in reverse order.

(continued from last page)

Parameters:

b - byte array
offset - offset
count - number of bytes
isReverse - is data in reverse order

Returns:

int value

byteArrayToShort

```
public static int byteArrayToShort(byte[] b)
```

Convert byte array to int

Parameters:

b - byte array (2 bytes)

Returns:

int value

byteArrayToShort

```
public static int byteArrayToShort(byte[] b,  
int offset)
```

Convert byte array to int with offset

Parameters:

b - byte array (2 bytes)
offset - offset

Returns:

int value

byteArrayToShort

```
public static int byteArrayToShort(byte[] b,  
int offset,  
int count)
```

Convert byte array to int with offset. Count is the number of bytes. Can be less than 2. If less than 2 just fills lower bits in value.

Parameters:

b - byte array
offset - offset
count - number of bytes

Returns:

int value

byteArrayToShort

```
public static int byteArrayToShort(byte[] b,  
int offset,  
int count,  
boolean isReverse)
```

Convert byte array to int with offset. Count is the number of bytes. Can be less than 2. If less than 2 just fills lower bits in value. The reverse flag allows data to be in reverse order.

(continued from last page)

Parameters:

b - byte array
offset - offset
count - number of bytes
isReverse - is data in reverse order

Returns:

int value

intToByteArray

```
public static byte[] intToByteArray(int value)
```

Convert a int value to a byte array in network order

Parameters:

value - value

Returns:

4-byte array with value

intToByteArray

```
public static byte[] intToByteArray(int value,  
int size)
```

Convert a int value to a byte array in network order

Parameters:

value - value
size - size of resultant byte array

Returns:

size-byte array with value

intToByteArray

```
public static void intToByteArray(int value,  
byte[] buffer,  
int offset,  
int size)
```

Convert a int value to a byte array in network order

Parameters:

value - value
buffer - destination byte array
offset - starting offset in byte array
size - number of bytes to write

intToByteArray

```
public static void intToByteArray(int value,  
byte[] buffer,  
int offset,  
int size,  
boolean isReverse)
```

Convert a int value to a byte array in network order

(continued from last page)

Parameters:

value - value
buffer - destination byte array
offset - starting offset in byte array
size - number of bytes to write
isReverse - is data in reverse order

longToByteArray

```
public static byte[] longToByteArray(long value)
```

Convert a long value to a byte array in network order

Parameters:

value - value

Returns:

8-byte array with value

longToByteArray

```
public static byte[] longToByteArray(long value,  
int size)
```

Convert a long value to a byte array in network order

Parameters:

value - value
size - size of resultant byte array

Returns:

size-byte array with value

longToByteArray

```
public static void longToByteArray(long value,  
byte[] buffer,  
int offset,  
int size)
```

Convert a long value to a byte array in network order

Parameters:

value - value
buffer - destination byte array
offset - starting offset in byte array
size - number of bytes to write

longToByteArray

```
public static void longToByteArray(long value,  
byte[] buffer,  
int offset,  
int size,  
boolean isReverse)
```

Convert a long value to a byte array in network order

Parameters:

(continued from last page)

value - value
buffer - destination byte array
offset - starting offset in byte array
size - number of bytes to write
isReverse - is data in reverse order

getUnsignedShort

```
public static int getUnsignedShort(java.nio.ByteBuffer buffer)
```

doCRC32

```
public static int doCRC32(int crc,  
    byte[] buffer,  
    int offset,  
    int len)
```

Calculate an IEEE CRC32 value for MPEG transport stream from a starting crc value

Parameters:

crc - starting crc value
buffer - buffer
offset - offset
len - len

Returns:

crc value

indexOf

```
public static int indexOf(byte[] source,  
    byte[] pattern)
```

Finds the first occurrence of a byte pattern in a byte buffer.

Note: If we want to improve the performance, we could implement the Knuth-Morris-Pratt algorithm. But I don't need the speed nor do I have time today!

Parameters:

source - The source byte buffer
pattern - the pattern we're looking for.

Returns:

the index of source where the pattern is found, else -1

indexOfDifferent

```
public static int indexOfDifferent(byte[] buffer1,  
    byte[] buffer2)
```

Compare two byte buffers, and return the index of the first byte that is different.

Parameters:

buffer1 - byte array1
buffer2 - byte array2

Returns:

index where buffers differ, or -1.

startsWith

```
public static boolean startsWith(byte[] source,  
    byte[] pattern)
```

com.wowza.util Class DebugUtils

java.lang.Object

└─ **com.wowza.util.DebugUtils**

public final class **DebugUtils**
extends Object

DebugUtils: Debugging utilities.

Constructor Summary

public	DebugUtils()
--------	------------------------------

Method Summary

static java.io.File	byteArrayToFile (byte[] data, String filePath) Dump a buffer of bytes to a file.
static boolean	doesStackContainMethod (String methodName) Examine current stack trace to determine if the specified method name in the the trace.
static String	formatBytes (byte[] data) Format byte array for printing.
static String	formatBytes (byte[] data, boolean showIndex) Format byte array for printing.
static String	formatBytes (byte[] data, int offset, int len) Format byte array for printing.
static String	formatBytes (byte[] data, int offset, int len, boolean showIndex) Format byte array for printing.
static String	formatBytesInSingleRow (byte[] data, int offset, int len) Format byte array for printing.
static String	formatBytesShort (byte[] data) Format byte array for printing.
static String	formatBytesShort (byte[] data, int offset, int len) Format byte array for printing.
static String	formatBytesStruct (byte[] data)
static String	formatBytesStruct (byte[] data, int offset, int len) Format byte array for printing.
static String	formatMilliseconds (long ms) Give a time in seconds, return a String representing the time in hh:mm:ss.mmm.

static String	formatSeconds (long t) Give a time in seconds, return a String representing the time in hh:mm:ss.
static String	formatUtcTime (long utcTime)
static String	stackTraceToSingleLineString (Throwable e, int maxLines) Given an exception, return single line String representation.
static String	stackTraceToString (Throwable e) Given an exception, return String representation.
static String	stackTraceToString (Throwable e, int maxLines, String separator) Given an exception, return single line String representation.
static String	toHex (byte value) Format a byte value to a 0xff format
static String	toHex (int value) Format a byte value to a 0xffffffff format
static String	toLong (long value) Format a long value to a 0xffffffffffffffff format

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

DebugUtils

```
public DebugUtils()
```

Methods

formatBytesShort

```
public static String formatBytesShort(byte[] data)
```

Format byte array for printing. Simple format as rows of hex values (16 values per row)

Parameters:

data - byte array

Returns:

formatted string

formatBytesShort

```
public static String formatBytesShort(byte[] data,
    int offset,
    int len)
```

(continued from last page)

Format byte array for printing. Simple format as rows of hex values (16 values per row)

Parameters:

data - byte array
offset - offset in array
len - data len

Returns:

formatted string

formatBytes

```
public static String formatBytes(byte[] data)
```

Format byte array for printing. Format as rows of hex values (16 values per row) along with text representation of data.

Parameters:

data - byte array

Returns:

formatted string

formatBytes

```
public static String formatBytes(byte[] data,  
    boolean showIndex)
```

Format byte array for printing. Format as rows of hex values (16 values per row) along with text representation of data.

Parameters:

data - byte array

Returns:

formatted string

formatBytes

```
public static String formatBytes(byte[] data,  
    int offset,  
    int len)
```

Format byte array for printing. Format as rows of hex values (16 values per row) along with text representation of data.

Parameters:

data - byte array
offset - start index in array
len - length to format

Returns:

formatted string

formatBytes

```
public static String formatBytes(byte[] data,  
    int offset,  
    int len,  
    boolean showIndex)
```

Format byte array for printing. Format as rows of hex values (16 values per row) along with text representation of data.

(continued from last page)

Parameters:

data - byte array
offset - start index in array
len - length to format

Returns:

formatted string

formatBytesInSingleRow

```
public static String formatBytesInSingleRow(byte[] data,  
      int offset,  
      int len)
```

Format byte array for printing. Format as rows of hex values all in one row along with text representation of data.

Parameters:

data - byte array
offset - start index in array
len - length to format

Returns:

formatted string

formatBytesStruct

```
public static String formatBytesStruct(byte[] data)
```

formatBytesStruct

```
public static String formatBytesStruct(byte[] data,  
      int offset,  
      int len)
```

Format byte array for printing. Format as Java primitive byte values (8 per row).

Parameters:

data - byte array

Returns:

formatted string

toHex

```
public static String toHex(byte value)
```

Format a byte value to a 0xff format

Parameters:

value - byte value

Returns:

return string

toHex

```
public static String toHex(int value)
```

(continued from last page)

Format a byte value to a 0xffffffff format

Parameters:

value - int value

Returns:

return string

toLong

```
public static String toLong(long value)
```

Format a long value to a 0xffffffffffffffff format

Parameters:

value - long value

Returns:

return string

byteArrayToFile

```
public static java.io.File byteArrayToFile(byte[] data,  
String filePath)
```

Dump a buffer of bytes to a file. Useful for debugging.

Parameters:

data - a buffer of bytes

filePath - The path and filename

formatSeconds

```
public static String formatSeconds(long t)
```

Give a time in seconds, return a String representing the time in hh:mm:ss.

123 s --> 00:02:03

Parameters:

t

Returns:

time representation

formatMilliseconds

```
public static String formatMilliseconds(long ms)
```

Give a time in seconds, return a String representing the time in hh:mm:ss.mmm.

123456 ms --> 00:02:03.456

Parameters:

ms

Returns:

time representation

formatUtcTime

```
public static String formatUtcTime(long utcTime)
```

stackTraceToString

```
public static String stackTraceToString(Throwable e)
```

Given an exception, return String representation. Note: this is the entire raw stack trace including tabs and line endings

Parameters:

e - throwable

Returns:

stack trace representation

stackTraceToSingleLineString

```
public static String stackTraceToSingleLineString(Throwable e,  
int maxLines)
```

Given an exception, return single line String representation. Note: line endings are replaced with "|" character. Tabs are removed.

Parameters:

e - throwable

maxLines - If greater than zero, returns only first maxLines of trace

Returns:

stack trace info

stackTraceToString

```
public static String stackTraceToString(Throwable e,  
int maxLines,  
String seperator)
```

Given an exception, return single line String representation. Note: line endings are replaced with "|" character. Tabs are removed.

Parameters:

e - throwable

maxLines - If greater than zero, returns only first maxLines of trace

seperator - character to replace line endings with

Returns:

stack trace info

doesStackContainMethod

```
public static boolean doesStackContainMethod(String methodName)
```

Examine current stack trace to determine if the specified method name in the the trace.

Could be enhanced quite a bit by also checking for Class and method. But simple for now.

Parameters:

(continued from last page)

methodName

Returns:

true if in trace, else false

com.wowza.util Class ElapsedTimer

```
java.lang.Object
  |
  +--com.wowza.util.ElapsedTimer
```

```
public class ElapsedTimer
extends Object
```

ElapsedTimer: Utility class for keep track of the duration an object has been in existence.

Constructor Summary

public	ElapsedTimer() Construct a new ElapsedTimer and start the clock
--------	--

Method Summary

java.util.Date	getDate() Get the date the object was created
String	getDateString() Get the date object was created as formatted String
long	getTime() Get elapsed time object in existence (milliseconds)
double	getTimeSeconds() Get elapsed time object in seconds
String	getTimeString() Get elapsed time object in existence as formatted String (Ex: 3 days 2 minutes 5 seconds)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ElapsedTimer

```
public ElapsedTimer()
```

Construct a new ElapsedTimer and start the clock

Methods

(continued from last page)

getDate

```
public java.util.Date getDate()
```

Get the date the object was created

Returns:

date object created

getDateString

```
public String getDateString()
```

Get the date object was created as formatted String

Returns:

date object created as formatted String

getTime

```
public long getTime()
```

Get elapsed time object in existence (milliseconds)

Returns:

elapsed time (milliseconds)

getTimeSeconds

```
public double getTimeSeconds()
```

Get elapsed time object in seconds

Returns:

elapsed time in seconds

getTimeString

```
public String getTimeString()
```

Get elapsed time object in existence as formatted String (Ex: 3 days 2 minutes 5 seconds)

Returns:

elapsed time as formatted String

com.wowza.util Class FileUtils

java.lang.Object

└─com.wowza.util.FileUtils

public class **FileUtils**
extends Object

FileUtils: File utilities

Field Summary

protected static	fileEditors
------------------	-----------------------------

Constructor Summary

public	FileUtils()
--------	-----------------------------

Method Summary

static void	closeQuietly (java.io.InputStream stream)
-------------	---

static void	closeQuietly (java.io.OutputStream stream)
-------------	--

static void	closeQuietly (java.io.Reader reader)
-------------	--

static void	copyFile (java.io.File fromFile, java.io.File toFile) Simple file copy routine
-------------	---

static void	copyFile2 (java.io.File fromFile, java.io.File toFile)
-------------	--

static boolean	deleteDirectory (java.io.File path)
----------------	---

static void	deleteFolder (java.io.File folder)
-------------	--

static byte[]	fileToByteArray (java.io.File file)
---------------	---

static Object	getFileEditor (String filePath)
---------------	---

static String	streamNameToValidFilename (String name) Encode a stream name (deal with path elements) to a valid filename.
---------------	--

static String	toValidFilename (String name) Encode a name to a valid filename.
---------------	---

static void	traverseDirectory (java.io.File dir, IFileProcess fileNotify) Traverse a directory recursively calling fileNotify for each file and folder encountered
-------------	---

```
static java.io.File versionFile(java.io.File newFile)  
    Rename a file using the file format [original-name]_[#.ext].
```

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

fileEditors

```
protected static java.util.Map fileEditors
```

Constructors

FileUtils

```
public FileUtils()
```

Methods

fileToByteArray

```
public static byte[] fileToByteArray(java.io.File file)
```

streamNameToValidFilename

```
public static String streamNameToValidFilename(String name)
```

Encode a stream name (deal with path elements) to a valid filename.

Parameters:

name - stream name

Returns:

encoded filename

toValidFilename

```
public static String toValidFilename(String name)
```

Encode a name to a valid filename.

Parameters:

name

Returns:

encoded filename

copyFile

```
public static void copyFile(java.io.File fromFile,  
                             java.io.File toFile)
```

Simple file copy routine

Parameters:

fromFile - from file
toFile - to file

copyFile2

```
public static void copyFile2(java.io.File fromFile,  
                               java.io.File toFile)  
    throws java.io.IOException
```

closeQuietly

```
public static void closeQuietly(java.io.InputStream stream)
```

closeQuietly

```
public static void closeQuietly(java.io.OutputStream stream)
```

closeQuietly

```
public static void closeQuietly(java.io.Reader reader)
```

deleteDirectory

```
public static boolean deleteDirectory(java.io.File path)
```

versionFile

```
public static java.io.File versionFile(java.io.File newFile)
```

Rename a file using the file format [original-name]_#[.ext].

Parameters:

newFile - input file

Returns:

renamed file

(continued from last page)

traverseDirectory

```
public static void traverseDirectory(java.io.File dir,  
    IFileProcess fileNotify)
```

Traverse a directory recursively calling fileNotify for each file and folder encountered

Parameters:

dir - starting directory
fileNotify - file notify object

deleteFolder

```
public static void deleteFolder(java.io.File folder)
```

getFileEditor

```
public static Object getFileEditor(String filePath)
```


com.wowza.util Class FLVUtils

java.lang.Object

└-com.wowza.util.FLVUtils

public final class **FLVUtils**
extends Object

FLVUtils: utility for reading and writing .flv files.

Field Summary	
public static final	CLASS
public static final	CLASSNAME Value: FLVUtils
public static final	FLV_CHUNKHEADER_BUFFER_SIZE Size of temporary buffer needed for flv reading (byte[]) Value: 13
public static final	FLV_CHUNKHEADER_FIRSTBYTE Header values: first byte of packet data Value: 3
public static final	FLV_CHUNKHEADER_HEADERSIZE Size of packet header (byte[]) Value: 11
public static final	FLV_CHUNKHEADER_ISIZE Header values: packet size Value: 1
public static final	FLV_CHUNKHEADER_ITIMECODE Header values: timecode (milliseconds) Value: 2
public static final	FLV_CHUNKHEADER_ITYPE Header values: packet type Value: 0
public static final	FLV_CHUNKHEADER_SECONDBYTE Header values: second byte of packet data Value: 4
public static final	FLV_CHUNKHEADER_VALUESIZE Size of header values array (long[]) Value: 5

public static final	FLV_DFRAME D video frame type (partial frame based on key frame) Value: 3
public static final	FLV_KFRAME Key video frame type Value: 1
public static final	FLV_PFRAME P video frame type (partial frame based on previous frame) Value: 2
public static final	FLV_TCINDEXAUDIO Value: 0
public static final	FLV_TCINDEXDATA Value: 2
public static final	FLV_TCINDEXVIDEO Value: 1
public static final	FLV_UFRAME Unknown video frame type Value: 0
public static final	METADATAFILTER_NONE Value: 0
public static final	METADATAFILTER_REMOVE_OBJS Value: 1

Constructor Summary

public	FLVUtils()
--------	----------------------------

Method Summary

static long	adjustFirstPacketTCs (java.util.List audioTCs, java.util.List videoTCs, java.util.List dataTCs) Align list of timecode for each data type.
static int	audioCodecStringToId (String codecString) Parse a string to get the codec ID defined by IVHost.CODEC_AUDIO_*
static String	audioCodecToMetaDataString (int codec) Get a printable string representation of the audio codecs defined as IVHost.CODEC_AUDIO_* as the string used in the onMetaData event
static String	audioCodecToString (int codec) Get a printable string representation of the audio codecs defined as IVHost.CODEC_AUDIO_*
static String	frameTypeToString (int frameType)

static int	getAudioCodec (AMFPacket packet) Get the codec id for this audio packet.
static int	getAudioCodec (int value) Return the codec portion of the first byte of an audio packet.
static int	getAudioMP3Layer (AMFPacket packet) Audio marked as MP3 is really MPEG1 Layer 1-3.
static int	getFrameType (byte value) Given the first byte of a video packet, determine the frame type (FLV_*FRAME)
static int	getFrameType (int value) Given the first byte of a video packet, determine the frame type (FLV_*FRAME)
static int	getFrameType (int[] values) Given the headers values (including first byte of the packet), determine the type of video frame (FLV_*FRAME)
static byte	getHeaderFlags (java.io.File file)
static long	getLastTC (java.io.File file) Get the duration of an .flv file.
static OnMetadataBasic	getOnMetadataData (AMFPacket metaDataPacket)
static int	getVideoCodec (AMFPacket packet) Get the codec id for this video packet.
static int	getVideoCodec (int value) Return the codec portion of the first byte of an video packet.
static int	getVideoFrameType (AMFPacket packet)
static int	getVideoTimecodeOffset (AMFPacket packet) Get the timecode offset in milliseconds between the PTS and DTS for this frame.
static int	getVideoTimecodeOffset (byte[] buffer) Get the timecode offset in milliseconds between the PTS and DTS for this frame.
static java.util.List	interleavePackets (java.util.List audioPackets, java.util.List videoPackets, java.util.List dataPackets, java.util.List audioTCs, java.util.List videoTCs, java.util.List dataTCs, java.util.List dataTypes, long[] currentTCs) This is a utility function primarily used for IMediaWriters.
static java.util.List	interleavePackets (java.util.List audioPackets, java.util.List videoPackets, java.util.List dataPackets, java.util.List audioTCs, java.util.List videoTCs, java.util.List dataTCs, long[] currentTCs) This is a utility function primarily used for IMediaWriters.
static boolean	isAudioCodecConfig (AMFPacket packet) Returns true if the packet is a audio codec config packet
static boolean	isAudioCodecConfig (java.nio.ByteBuffer buffer) Returns true if the packet is a audio codec config packet
static boolean	isOnMetadata (byte[] dataDataBytes)

static boolean	isOnMetadataPacket (AMFPacket packet) Returns true if packet is onMetaData or [setDataFrame, onMetaData] data packet.
static boolean	isVideoCodecConfig (AMFPacket packet) Returns true if the packet is a video codec config packet
static boolean	isVideoCodecConfig (java.nio.ByteBuffer buffer) Returns true if the packet is a video codec config packet
static boolean	isVideoCodecConfig (int firstByte, int secondByte) Returns true if the packet is a video codec config packet
static boolean	isVideoKeyFrame (AMFPacket packet) Returns true if the packet is a video key frame
static boolean	isVideoKeyFrame (byte[] buffer) Returns true if the packet is a video key frame
static boolean	isVideoKeyFrame (java.nio.ByteBuffer buffer) Returns true if the packet is a video key frame
static boolean	isVideoKeyFrame (int[] chunkHeaderValues) Returns true if the packet is a video key frame
static byte[]	modifyOnMetadataEvent (byte[] buffer, long flags, java.util.List itemsToRemove, java.util.Map itemsToAdd) Modifies onMetadata event to remove or add items
static AMFPacket	readChunk (java.io.DataInput is) Read a packets worth of .flv data from an InputStream and return as an AMFPacket
static AMFPacket	readChunk (java.io.InputStream is) Read a packets worth of .flv data from an InputStream and return as an AMFPacket
static void	readChunkHeader (java.io.RandomAccessFile is, byte[] buffer, int[] values) Read packet header.
static boolean	readHeader (java.io.DataInput is) Read file header.
static boolean	readHeader (java.io.InputStream is) Read file header.
static void	readPrevChunkHeader (java.io.RandomAccessFile is, byte[] buffer, int[] values) Back up one packet from current position in the file and read the packet header.
static String	streamCodecToString (int codec) Get a printable string representation of the stream codecs defined as IVHost.CODEC_STREAM_*
static AMFPacket	updateOnCuePointTimecode (AMFPacket packet, long timecode)
static java.nio.ByteBuffer	updateOnCuePointTimecode (java.nio.ByteBuffer data, int dataType, long timecode)
static int	videoCodecStringToCodecVersion (String codecString) Parse a string to get the codec version defined by IVHost.CODEC_VIDEO_VERSION_*

static int	videoCodecStringToId (String codecString) Parse a string to get the codec ID defined by IVHost.CODEC_VIDEO_*
static String	videoCodecToMetaDataString (int codec) Get a printable string representation of the video codecs defined as IVHost.CODEC_VIDEO_* as the string used in the onMetaData event
static String	videoCodecToMetaDataString (int codec, int codecVersion) Get a printable string representation of the video codecs defined as IVHost.CODEC_VIDEO_* as the string used in the onMetaData event
static String	videoCodecToString (int codec) Get a printable string representation of the video codecs defined as IVHost.CODEC_VIDEO_*
static String	videoCodecToString (int codec, int codecVersion)
static com.wowza.wms.mediawriter.MediaWriterStatus	writeChunk (java.io.DataOutput ds, java.nio.ByteBuffer data, int size, long timecode, byte type)
static com.wowza.wms.mediawriter.MediaWriterStatus	writeChunk (java.io.OutputStream ds, java.nio.ByteBuffer data, int size, long timecode, byte type) Write a packets worth of data.
static void	writeDuration (java.io.File file, double duration) Write the duration to an existing .flv file.
static void	writeHeader (java.io.OutputStream ds, double duration, int audiocodecid, int videocodecid, String createdBy, java.util.Map extraMetadata) Write file header including onMetaData packet.
static void	writeHeader (java.io.OutputStream ds, double duration, java.util.Map extraMetadata) Write file header including onMetaData packet.
static void	writeHeaderFlags (java.io.File file, byte newFlags)
static void	writePackets (java.io.OutputStream ds, java.util.List audioPackets, java.util.List videoPackets, java.util.List dataPackets, java.util.List audioTCs, java.util.List videoTCs, java.util.List dataTCs, java.util.List dataTypes, long[] currentTCs) Write a bunch of packets to .flv file all at once.
static void	writePackets (java.io.OutputStream ds, java.util.List audioPackets, java.util.List videoPackets, java.util.List dataPackets, java.util.List audioTCs, java.util.List videoTCs, java.util.List dataTCs, java.util.List dataTypes, long[] currentTCs, IFLVWriterAdjustTimecode dataPacketTimecodeAdjuster) Write a bunch of packets to .flv file all at once.
static void	writePackets (java.io.OutputStream ds, java.util.List audioPackets, java.util.List videoPackets, java.util.List dataPackets, java.util.List audioTCs, java.util.List videoTCs, java.util.List dataTCs, long[] currentTCs) Write a bunch of packets to .flv file all at once.
static void	writePackets (java.io.OutputStream ds, java.util.List packetList, long tcOffset) Write audio/video/data packets to an .flv file.

static void	writeShortHeader (java.io.DataOutput ds)
static void	writeShortHeader (java.io.OutputStream ds) Write just the FLV file header (without the metadata packet)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

CLASS

public static final java.lang.Class **CLASS**

CLASSNAME

public static final java.lang.String **CLASSNAME**

Constant value: **FLVUtils**

FLV_CHUNKHEADER_ITYPE

public static final int **FLV_CHUNKHEADER_ITYPE**

Header values: packet type
Constant value: **0**

FLV_CHUNKHEADER_ISIZE

public static final int **FLV_CHUNKHEADER_ISIZE**

Header values: packet size
Constant value: **1**

FLV_CHUNKHEADER_ITIMECODE

public static final int **FLV_CHUNKHEADER_ITIMECODE**

Header values: timecode (milliseconds)
Constant value: **2**

FLV_CHUNKHEADER_FIRSTBYTE

public static final int **FLV_CHUNKHEADER_FIRSTBYTE**

Header values: first byte of packet data
Constant value: **3**

(continued from last page)

FLV_CHUNKHEADER_SECONDBYTE

```
public static final int FLV_CHUNKHEADER_SECONDBYTE
```

Header values: second byte of packet data
Constant value: **4**

FLV_CHUNKHEADER_HEADERSIZE

```
public static final int FLV_CHUNKHEADER_HEADERSIZE
```

Size of packet header (byte[])
Constant value: **11**

FLV_CHUNKHEADER_BUFFERSIZE

```
public static final int FLV_CHUNKHEADER_BUFFERSIZE
```

Size of temporary buffer needed for flv reading (byte[])
Constant value: **13**

FLV_CHUNKHEADER_VALUESIZE

```
public static final int FLV_CHUNKHEADER_VALUESIZE
```

Size of header values array (long[])
Constant value: **5**

FLV_UFRAME

```
public static final int FLV_UFRAME
```

Unknown video frame type
Constant value: **0**

FLV_KFRAME

```
public static final int FLV_KFRAME
```

Key video frame type
Constant value: **1**

FLV_DFRAME

```
public static final int FLV_DFRAME
```

D video frame type (partial frame based on key frame)
Constant value: **3**

FLV_PFRAME

```
public static final int FLV_PFRAME
```

P video frame type (partial frame based on previous frame)
Constant value: **2**

FLV_TCINDEXAUDIO

```
public static final int FLV_TCINDEXAUDIO
```

(continued from last page)

Constant value: **0**

FLV_TCINDEXVIDEO

```
public static final int FLV_TCINDEXVIDEO
```

Constant value: **1**

FLV_TCINDEXDATA

```
public static final int FLV_TCINDEXDATA
```

Constant value: **2**

METADATAFILTER_NONE

```
public static final long METADATAFILTER_NONE
```

Constant value: **0**

METADATAFILTER_REMOVE_OBJS

```
public static final long METADATAFILTER_REMOVE_OBJS
```

Constant value: **1**

Constructors

FLVUtils

```
public FLVUtils()
```

Methods

streamCodecToString

```
public static String streamCodecToString(int codec)
```

Get a printable string representation of the stream codecs defined as IVHost.CODEC_STREAM_*

Parameters:

codec - codec id defined IVHost.CODEC_STREAM_*

Returns:

codec name

audioCodecStringToId

```
public static int audioCodecStringToId(String codecString)
```

Parse a string to get the codec ID defined by IVHost.CODEC_AUDIO_*

(continued from last page)

Parameters:

codecString - codec string

Returns:

codec ID

videoCodecToMetaDataString

```
public static String videoCodecToMetaDataString(int codec)
```

Get a printable string representation of the video codecs defined as IVHost.CODEC_VIDEO_* as the string used in the onMetaData event

Parameters:

codec - codec id defined IVHost.CODEC_VIDEO_*

Returns:

codec name

videoCodecToMetaDataString

```
public static String videoCodecToMetaDataString(int codec,  
int codecVersion)
```

Get a printable string representation of the video codecs defined as IVHost.CODEC_VIDEO_* as the string used in the onMetaData event

Parameters:

codec - codec id defined IVHost.CODEC_VIDEO_*

codecVersion - codec version

Returns:

metadata string

audioCodecToMetaDataString

```
public static String audioCodecToMetaDataString(int codec)
```

Get a printable string representation of the audio codecs defined as IVHost.CODEC_AUDIO_* as the string used in the onMetaData event

Parameters:

codec - codec id defined IVHost.CODEC_AUDIO_*

Returns:

codec name

audioCodecToString

```
public static String audioCodecToString(int codec)
```

Get a printable string representation of the audio codecs defined as IVHost.CODEC_AUDIO_*

Parameters:

codec - codec id defined IVHost.CODEC_AUDIO_*

Returns:

codec name

videoCodecStringToCodecVersion

```
public static int videoCodecStringToCodecVersion(String codecString)
```

Parse a string to get the codec version defined by IVHost.CODEC_VIDEO_VERSION_*

Parameters:

codecString

Returns:

codec version string

videoCodecStringToId

```
public static int videoCodecStringToId(String codecString)
```

Parse a string to get the codec ID defined by IVHost.CODEC_VIDEO_*

Parameters:

codecString - codec string

Returns:

codec ID

videoCodecToString

```
public static String videoCodecToString(int codec)
```

Get a printable string representation of the video codecs defined as IVHost.CODEC_VIDEO_*

Parameters:

codec - codec id defined IVHost.CODEC_VIDEO_*

Returns:

codec name

videoCodecToString

```
public static String videoCodecToString(int codec,  
int codecVersion)
```

frameTypeToString

```
public static String frameTypeToString(int frameType)
```

getFrameType

```
public static int getFrameType(int[] values)
```

Given the headers values (including first byte of the packet), determine the type of video frame (FLV_*FRAME)

Parameters:

values - header values

(continued from last page)

Returns:
type of video frame (FLV_*FRAME)

getFrameType

```
public static int getFrameType(int value)
```

Given the first byte of a video packet, determine the frame type (FLV_*FRAME)

Parameters:
value - first byte of packet

Returns:
type of video frame (FLV_*FRAME)

getAudioCodec

```
public static int getAudioCodec(int value)
```

Return the codec portion of the first byte of an audio packet. Return should be one of IVHost.CODEC_AUDIO_*

Parameters:
value - first byte of audio packet

Returns:
codec id

getVideoCodec

```
public static int getVideoCodec(int value)
```

Return the codec portion of the first byte of a video packet. Return should be one of IVHost.CODEC_VIDEO_*

Parameters:
value - first byte of audio packet

Returns:
codec id

getFrameType

```
public static int getFrameType(byte value)
```

Given the first byte of a video packet, determine the frame type (FLV_*FRAME)

Parameters:
value - first byte of packet

Returns:
type of video frame (FLV_*FRAME)

readChunk

```
public static AMFPacket readChunk(java.io.InputStream is)
```

Read a packets worth of .flv data from an InputStream and return as an AMFPacket

Parameters:

(continued from last page)

is - InputStream

Returns:

AMFPacket of data or null if unsuccessful or end of file

readChunk

```
public static AMFPacket readChunk(java.io.DataInput is)
```

Read a packets worth of .flv data from an InputStream and return as an AMFPacket

Parameters:

is - InputStream

Returns:

AMFPacket of data or null if unsuccessful or end of file

readPrevChunkHeader

```
public static void readPrevChunkHeader(java.io.RandomAccessFile is,  
    byte[] buffer,  
    int[] values)
```

Back up one packet from current position in the file and read the packet header. This includes reading the first byte of the packet data. The file pointer will be positioned at the first byte of the packet data. values[FLV_CHUNKHEADER_ITYPE] will be set to 0x7f if failure or start of file.

Parameters:

is - RandomAccessFile

buffer - temporary buffer byte[FLV_CHUNKHEADER_BUFFERSIZE]

values - header values long[FLV_CHUNKHEADER_VALUESIZE]

readChunkHeader

```
public static void readChunkHeader(java.io.RandomAccessFile is,  
    byte[] buffer,  
    int[] values)
```

Read packet header. This includes reading the first byte of the packet data. The file pointer will be positioned at the first byte of the packet data. values[FLV_CHUNKHEADER_ITYPE] will be set to 0x7f if failure or end of file.

Parameters:

is - RandomAccessFile

buffer - temporary buffer byte[FLV_CHUNKHEADER_BUFFERSIZE]

values - header values long[FLV_CHUNKHEADER_VALUESIZE]

readHeader

```
public static boolean readHeader(java.io.InputStream is)
```

Read file header. Return true if successful. Basically this just skips first 13 bytes in file.

readHeader

```
public static boolean readHeader(java.io.DataInput is)
```

Read file header. Return true if successful. Basically this just skips first 13 bytes in file.

(continued from last page)

writeShortHeader

```
public static void writeShortHeader(java.io.OutputStream ds)
```

Write just the FLV file header (without the metadata packet)

Parameters:

ds - OutputStream

writeShortHeader

```
public static void writeShortHeader(java.io.DataOutput ds)
```

writeHeader

```
public static void writeHeader(java.io.OutputStream ds,  
    double duration,  
    java.util.Map extraMetadata)
```

Write file header including onMetaData packet.

Parameters:

ds - OutputStream

duration - duration of .flv file in seconds

extraMetadata - Map of name/value pairs of metadata that will be appended to the onMetaData block

writeHeader

```
public static void writeHeader(java.io.OutputStream ds,  
    double duration,  
    int audiocodecid,  
    int videocodecid,  
    String createdBy,  
    java.util.Map extraMetadata)
```

Write file header including onMetaData packet.

With this method you can provide a Map of metadata to write to the file. This map can include a mixture of simple types like: int, long, String, boolean. These types will be wrapped in AMFData classes before they are written to the file. This map can also contain AMFData items. For example if you wanted to insert and array of **cuePoints** the code would look like:

```
Map extraMetadata = new HashMap();  
  
AMFDataArray amfArray = new AMFDataArray();  
for(int i=0;i
```

Parameters:

ds - OutputStream

duration - duration of .flv file in seconds

audiocodecid - audio codec ID see IVHost.CODEC_AUDIO_* (-1 for now audio)

videocodecid - video codec ID see IVHost.CODEC_VIDEO_* (-1 for now video)

(continued from last page)

createdBy - created by string (null for empty)

extraMetadata - Map of name/value pairs of metadata that will be appended to the onMetaData block

writeChunk

```
public static com.wowza.wms.mediawriter.MediaWriterStatus
writeChunk(java.io.OutputStream ds,
           java.nio.ByteBuffer data,
           int size,
           long timecode,
           byte type)
```

Write a packets worth of data.

Parameters:

ds - OutputStream
data - packet data
size - size of the packet
timecode - timecode (milliseconds)
type - type of packet IVHost.CONTENTTYPE_*

writeChunk

```
public static com.wowza.wms.mediawriter.MediaWriterStatus
writeChunk(java.io.DataOutput ds,
           java.nio.ByteBuffer data,
           int size,
           long timecode,
           byte type)
```

interleavePackets

```
public static java.util.List interleavePackets(java.util.List audioPackets,
                                              java.util.List videoPackets,
                                              java.util.List dataPackets,
                                              java.util.List audioTCs,
                                              java.util.List videoTCs,
                                              java.util.List dataTCs,
                                              long[] currentTCs)
```

This is a utility function primarily used for IMediaWriters. It is a way of taking the discrete audio/video/data packets and timecodes and interleaving them into a single list of AMFPacket objects. The currentTCs array is an array of longs containing the last timecode for each of the packet types FLV_TCINDEX* (long[3]). This array will be used to calculate the absolute timecode for a given packet. For example if the relative timecode for an audio packet is 26 and the currentTCs value for the audio channel is 1003 then the absolute timecode for that packet will be 1029. The currentTCs array will be updated after this call to reflect the absolute timecode of the last packet processed of each type.

Parameters:

audioPackets - list of audio packets (ByteBuffer)
videoPackets - list of video packets (ByteBuffer)
dataPackets - list of data packets (ByteBuffer)
audioTCs - list of relative audio timecodes (Long)
videoTCs - list of relative video timecodes (Long)
dataTCs - list of relative data timecodes (Long)
currentTCs - array of longs containing last TCs written for each packet type FLV_TCINDEX* (long[3]). Last timecode written for each packet type will be returned in this same array.

Returns:

List of AMFPacket objects sorted by timecodes

interleavePackets

```
public static java.util.List interleavePackets(java.util.List audioPackets,
        java.util.List videoPackets,
        java.util.List dataPackets,
        java.util.List audioTCs,
        java.util.List videoTCs,
        java.util.List dataTCs,
        java.util.List dataTypes,
        long[] currentTCs)
```

This is a utility function primarily used for IMediaWriters. It is a way of taking the discrete audio/video/data packets and timecodes and interleaving them into a single list of AMFPacket objects. The currentTCs array is an array of longs containing the last timecode for each of the packet types FLV_TCINDEX* (long[3]). This array will be used to calculate the absolute timecode for a given packet. For example if the relative timecode for an audio packet is 26 and the currentTCs value for the audio channel is 1003 then the absolute timecode for that packet will be 1029. The currentTCs array will be updated after this call to reflect the absolute timecode of the last packet processed of each type.

Parameters:

audioPackets - list of audio packets (ByteBuffer)
 videoPackets - list of video packets (ByteBuffer)
 dataPackets - list of data packets (ByteBuffer)
 audioTCs - list of relative audio timecodes (Long)
 videoTCs - list of relative video timecodes (Long)
 dataTCs - list of relative data timecodes (Long)
 dataTypes - list of integer packets types (IVHost.CONTENTTYPE_DATA0, IVHost.CONTENTTYPE_DATA3) - if null assumed to be IVHost.CONTENTTYPE_DATA0
 currentTCs - array of longs containing last TCs written for each packet type FLV_TCINDEX* (long[3]). Last timecode written for each packet type will be returned in this same array.

Returns:

List of AMFPacket objects sorted by timecodes

writePackets

```
public static void writePackets(java.io.OutputStream ds,
        java.util.List packetList,
        long tcOffset)
```

Write audio/video/data packets to an .flv file. They will be written in the packetList order.

Parameters:

ds - OutputStream
 packetList - List of AMFPacket objects
 tcOffset - timecode offset

writePackets

```
public static void writePackets(java.io.OutputStream ds,
        java.util.List audioPackets,
        java.util.List videoPackets,
        java.util.List dataPackets,
        java.util.List audioTCs,
        java.util.List videoTCs,
        java.util.List dataTCs,
        long[] currentTCs)
```

Write a bunch of packets to .flv file all at once. The packets will be sorted by timecode as written

Parameters:

ds - OutputStream
 audioPackets - list of audio packets (ByteBuffer)

(continued from last page)

videoPackets - list of video packets (ByteBuffer)
 dataPackets - list of data packets (ByteBuffer)
 audioTCs - list of relative audio timecodes (Long)
 videoTCs - list of relative video timecodes (Long)
 dataTCs - list of relative data timecodes (Long)
 currentTCs - array of longs containing last TCs written for each packet type FLV_TCINDEX* (long[3]). Last timecode written for each packet type will be returned in this same array.

writePackets

```
public static void writePackets(java.io.OutputStream ds,
    java.util.List audioPackets,
    java.util.List videoPackets,
    java.util.List dataPackets,
    java.util.List audioTCs,
    java.util.List videoTCs,
    java.util.List dataTCs,
    java.util.List dataTypes,
    long[] currentTCs)
```

Write a bunch of packets to .flv file all at once. The packets will be sorted by timecode as written

Parameters:

ds - OutputStream
 audioPackets - list of audio packets (ByteBuffer)
 videoPackets - list of video packets (ByteBuffer)
 dataPackets - list of data packets (ByteBuffer)
 audioTCs - list of relative audio timecodes (Long)
 videoTCs - list of relative video timecodes (Long)
 dataTCs - list of relative data timecodes (Long)
 dataTypes - list of integer packets types (IVHost.CONTENTTYPE_DATA0, IVHost.CONTENTTYPE_DATA3) - if null assumed to be IVHost.CONTENTTYPE_DATA0
 currentTCs - array of longs containing last TCs written for each packet type FLV_TCINDEX* (long[3]). Last timecode written for each packet type will be returned in this same array.

writePackets

```
public static void writePackets(java.io.OutputStream ds,
    java.util.List audioPackets,
    java.util.List videoPackets,
    java.util.List dataPackets,
    java.util.List audioTCs,
    java.util.List videoTCs,
    java.util.List dataTCs,
    java.util.List dataTypes,
    long[] currentTCs,
    IFLVWriterAdjustTimecode dataPacketTimecodeAdjuster)
```

Write a bunch of packets to .flv file all at once. The packets will be sorted by timecode as written

Parameters:

ds - OutputStream
 audioPackets - list of audio packets (ByteBuffer)
 videoPackets - list of video packets (ByteBuffer)
 dataPackets - list of data packets (ByteBuffer)
 audioTCs - list of relative audio timecodes (Long)
 videoTCs - list of relative video timecodes (Long)
 dataTCs - list of relative data timecodes (Long)
 dataTypes - list of integer packets types (IVHost.CONTENTTYPE_DATA0, IVHost.CONTENTTYPE_DATA3) - if null assumed to be IVHost.CONTENTTYPE_DATA0
 currentTCs - array of longs containing last TCs written for each packet type FLV_TCINDEX* (long[3]). Last timecode written for each packet type will be returned
 dataPacketTimecodeAdjuster - class that implements the IFLVWriterAdjustTimecode interface for adjusting timecodes in this same array.

adjustFirstPacketTCs

```
public static long adjustFirstPacketTCs(java.util.List audioTCs,  
    java.util.List videoTCs,  
    java.util.List dataTCs)
```

Align list of timecode for each data type. Assume first entry in each list is absolute timecode. When done lowest entry in three lists will be zero and other lists will be offset accordingly.

Parameters:

audioTCs - list of audio timecodes
videoTCs - list of video timecodes
dataTCs - list of data timecodes

Returns:

lowest of three absolute timecodes

writeDuration

```
public static void writeDuration(java.io.File file,  
    double duration)
```

Write the duration to an existing .flv file. This routine will hunt through the .flv file for the onMetaData packet and the duration metadata. It will rewrite the value if found. If not found it will do nothing.

Parameters:

file - .flv file
duration - new duration value (seconds)

getLastTC

```
public static long getLastTC(java.io.File file)
```

Get the duration of an .flv file. This routine will find the onMetaData packet and the duration metadata and return the value. If not found it will read the last packet in the file and return the timecode of that packet.

Parameters:

file

Returns:

duration (milliseconds)

isVideoKeyFrame

```
public static boolean isVideoKeyFrame(AMFPacket packet)
```

Returns true if the packet is a video key frame

Parameters:

packet - packet

Returns:

true if is video key frame

isVideoCodecConfig

```
public static boolean isVideoCodecConfig(int firstByte,  
    int secondByte)
```

(continued from last page)

Returns true if the packet is a video codec config packet

Parameters:

firstByte - first byte of packet
secondByte - second byte of packet

Returns:

true if video codec

isVideoCodecConfig

```
public static boolean isVideoCodecConfig(AMFPacket packet)
```

Returns true if the packet is a video codec config packet

Parameters:

packet

Returns:

true if the packet is a video codec config packet

isVideoCodecConfig

```
public static boolean isVideoCodecConfig(java.nio.ByteBuffer buffer)
```

Returns true if the packet is a video codec config packet

Parameters:

buffer - packet data

Returns:

true if the packet is a video codec config packet

isAudioCodecConfig

```
public static boolean isAudioCodecConfig(AMFPacket packet)
```

Returns true if the packet is a audio codec config packet

Parameters:

packet

Returns:

true if the packet is a audio codec config packet

isAudioCodecConfig

```
public static boolean isAudioCodecConfig(java.nio.ByteBuffer buffer)
```

Returns true if the packet is a audio codec config packet

Parameters:

buffer - packet data

Returns:

true if the packet is a audio codec config packet

(continued from last page)

getAudioMP3Layer

```
public static int getAudioMP3Layer(AMFPacket packet)
```

Audio marked as MP3 is really MPEG1 Layer 1-3. Only MPEG1 Layer 3 is truly MP3. This function will return the layer number for this packet.

Parameters:

packet - amf packet

Returns:

layer number

getAudioCodec

```
public static int getAudioCodec(AMFPacket packet)
```

Get the codec id for this audio packet. Returns IVHost.CODEC_AUDIO_UNKNOWN is unknown or not audio packet

Parameters:

packet - packet

Returns:

codec id IVHost.CODEC_AUDIO_*

getVideoCodec

```
public static int getVideoCodec(AMFPacket packet)
```

Get the codec id for this video packet. Returns IVHost.CODEC_VIDEO_UNKNOWN is unknown or not video packet

Parameters:

packet - packet

Returns:

codec id IVHost.CODEC_VIDEO_*

getVideoFrameType

```
public static int getVideoFrameType(AMFPacket packet)
```

getVideoTimecodeOffset

```
public static int getVideoTimecodeOffset(AMFPacket packet)
```

Get the timecode offset in milliseconds between the PTS and DTS for this frame.

Parameters:

packet - AMFPacket

Returns:

timecode offset in milliseconds (can be negative)

getVideoTimecodeOffset

```
public static int getVideoTimecodeOffset(byte[] buffer)
```

(continued from last page)

Get the timecode offset in milliseconds between the PTS and DTS for this frame.

Parameters:

buffer - video packet buffer

Returns:

timecode offset in milliseconds (can be negative)

isVideoKeyFrame

```
public static boolean isVideoKeyFrame(java.nio.ByteBuffer buffer)
```

Returns true if the packet is a video key frame

Parameters:

buffer - packet data (only need first two bytes of data)

Returns:

true if is video key frame

isVideoKeyFrame

```
public static boolean isVideoKeyFrame(byte[] buffer)
```

Returns true if the packet is a video key frame

Parameters:

buffer - packet data (only need first two bytes of data)

Returns:

true if is video key frame

isVideoKeyFrame

```
public static boolean isVideoKeyFrame(int[] chunkHeaderValues)
```

Returns true if the packet is a video key frame

Parameters:

chunkHeaderValues - chunk header values returned by `FLVUtils.readChunkHeader`

Returns:

true if is video key frame

updateOnCuePointTimecode

```
public static AMFPacket updateOnCuePointTimecode(AMFPacket packet,  
long timecode)
```

updateOnCuePointTimecode

```
public static java.nio.ByteBuffer updateOnCuePointTimecode(java.nio.ByteBuffer data,  
int dataType,  
long timecode)
```

isOnMetadata

```
public static boolean isOnMetadata(byte[] dataDataBytes)
```

isOnMetadataPacket

```
public static boolean isOnMetadataPacket(AMFPacket packet)
```

Returns true if packet is onMetaData or [[@setDataFrame](#), [onMetaData](#)] data packet.

Parameters:

packet - packet

Returns:

true if onMetaData packet

getOnMetadataData

```
public static OnMetadataBasic getOnMetadataData(AMFPacket metaDataPacket)
```

getHeaderFlags

```
public static byte getHeaderFlags(java.io.File file)
```

writeHeaderFlags

```
public static void writeHeaderFlags(java.io.File file,  
byte newFlags)
```

modifyOnMetadataEvent

```
public static byte[] modifyOnMetadataEvent(byte[] buffer,  
long flags,  
java.util.List itemsToRemove,  
java.util.Map itemsToAdd)
```

Modifies onMetadata event to remove or add items

Parameters:

buffer - byte buffer with onMetadata event serialized
flags - flags to control what gets removed (see METADATAFILTER_*)
itemsToRemove - list of names of fields to remove
itemsToAdd - map of items to add

Returns:

serialized onMetadata event

com.wowza.util Class HTTPUtils

java.lang.Object

↳ **com.wowza.util.HTTPUtils**

```
public class HTTPUtils
extends Object
```

HTTPUtils: utility class for making http requests.

Field Summary

public static final	COOKIEDATEFORMAT
---------------------	----------------------------------

Constructor Summary

public	HTTPUtils()
--------	-----------------------------

Method Summary

static String	assembleQueryStr (java.util.Map queryMap, boolean enableEncoding) Assemble a map of name value pairs into a single query string.
---------------	---

static java.util.Map	expandHTTPHeadersStr (String httpUserHTTPHeadersStr)
----------------------	--

static String	formatDeleteCookie (String name, String path, String domain) Formats a cookie header value that is in the past to delete a cookie
---------------	--

static String	formatSetCookie (String name, String value, int timeoffset, String path, String domain, boolean isSecure) Format a HTTP header Set-Cookie value
---------------	--

static byte[]	HTTPRequestToByteArray (String inUrl, String method, String data, java.util.Map headers) Make a HTTP request and return the result as a byte array
---------------	---

static byte[]	HTTPRequestToByteArray (String inUrl, String method, String data, java.util.Map inHeaders, java.util.Map outHeaders, long dataLimit) Make a HTTP request and return the result as a byte array
---------------	---

static boolean	HTTPRequestToFile (java.io.File file, String inUrl, String method, String data, java.util.List headers) Make a HTTP request and have the result saved to a file.
----------------	---

static java.util.List	splitCookie (String str) Breaks Cookies header value into a list of name/value pairs.
-----------------------	--

static String[]	splitPragmas (String str) Split HTTP Pragma values at commas that separate values.
-----------------	---

static java.util.Map	splitQueryStr (String queryStr) Split a query string into a map and URL decode the values
static String	statusCodeToStr (int statusCode) Convert an HTTP status code to a string

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

COOKIEDATEFORMAT

```
public static final org.apache.commons.lang.time.FastDateFormat COOKIEDATEFORMAT
```

Constructors

HTTPUtils

```
public HTTPUtils()
```

Methods

HTTPRequestToFile

```
public static boolean HTTPRequestToFile(java.io.File file,
    String inUrl,
    String method,
    String data,
    java.util.List headers)
```

Make a HTTP request and have the result saved to a file.

Parameters:

file - destination
inUrl - url (will work with http and https)
method - method (POST, GET)
data - post data
headers - map of headers (Content-type...)

Returns:

true if successful

HTTPRequestToByteArray

```
public static byte[] HTTPRequestToByteArray(String inUrl,
    String method,
    String data,
    java.util.Map headers)
```

Make a HTTP request and return the result as a byte array

(continued from last page)

Parameters:

inUrl - url (will work with http and https)
method - method (POST, GET)
data - post data
headers - map of headers (Content-type...)

Returns:

byte array of result or null if not successful

HTTPRequestToByteArray

```
public static byte[] HTTPRequestToByteArray(String inUrl,  
      String method,  
      String data,  
      java.util.Map inHeaders,  
      java.util.Map outHeaders,  
      long dataLimit)
```

Make a HTTP request and return the result as a byte array

Parameters:

inUrl - url (will work with http and https)
method - method (POST, GET)
data - data
inHeaders - map of headers (Content-type...)
outHeaders - response headers
dataLimit - maximum number of bytes to read, zero for no limit

Returns:

byte array of result or null if not successful

assembleQueryStr

```
public static String assembleQueryStr(java.util.Map queryMap,  
      boolean enableEncoding)
```

Assemble a map of name value pairs into a single query string. URL encode query string values.

Parameters:

queryMap - name value pairs

Returns:

query string

splitQueryStr

```
public static java.util.Map splitQueryStr(String queryStr)
```

Split a query string into a map and URL decode the values

Parameters:

queryStr - query string

Returns:

map of name value pairs

(continued from last page)

splitPragmas

```
public static String[] splitPragmas(String str)
```

Split HTTP Pragma values at commas that separate values. It deals with internal commas in strings. Example:

```
no-cache, client-id=1485578017, features="seekable, stridable", timeout=6
```

Result:

```
no-cache  
client-id=1485578017  
features="seekable, stridable"  
timeout=6
```

Parameters:

str - Pragma value

Returns:

array of strings broken at commas

splitCookie

```
public static java.util.List splitCookie(String str)
```

Breaks Cookies header value into a list of name/value pairs. The Cookie string: "name1=value1;name2;name1=value3" is returned as: List(item({"name1", "value1"}), item("name2", null), item("name1", "value3"))

Parameters:

str - input string

Returns:

List of name value pairs

formatDeleteCookie

```
public static String formatDeleteCookie(String name,  
    String path,  
    String domain)
```

Formats a cookie header value that is in the past to delete a cookie

Parameters:

name - variable name

path - path

(continued from last page)

domain - domain

Returns:

formatted cookie string

formatSetCookie

```
public static String formatSetCookie(String name,  
    String value,  
    int timeoffset,  
    String path,  
    String domain,  
    boolean isSecure)
```

Format a HTTP header Set-Cookie value

Parameters:

name - variable name
value - variable value - null if no value
timeoffset - expiration time in seconds
path - cookie path
domain - cookie domain
isSecure - is cookie secure

Returns:

formatted cookie string

statusCodeToStr

```
public static String statusCodeToStr(int statusCode)
```

Convert an HTTP status code to a string

Parameters:

statusCode - HTTP status code

Returns:

string

expandHTTPHeadersStr

```
public static java.util.Map expandHTTPHeadersStr(String httpUserHTTPHeadersStr)
```

com.wowza.util Interface IBandwidthThrottler

public interface **IBandwidthThrottler**
extends

Method Summary

long	<u>getByteAllocation</u> (long request) Requests bytes from the bandwidth throttler interface.
------	---

Methods

getByteAllocation

public long **getByteAllocation**(long request)

Requests bytes from the bandwidth throttler interface. Return value is the number of bytes allocated

Parameters:

request - request number of bytes

Returns:

allocated number of bytes

com.wowza.util Interface IBitReader

All Known Implementing Classes:
[BitReaderFast](#), [BitReader](#)

public interface **IBitReader**
extends

Method Summary

int	getBytes (byte[] buffer, int offset, int len)
int	getInt (int numberBits)
int	getIntLE (int numberBits)
long	getLong (int numberBits)
int	peekInt (int numberBits)
int	peekIntLE (int numberBits)
long	peekLong (int numberBits)
int	remaining ()
void	skip (int numberBits)

Methods

remaining

public int **remaining**()

skip

public void **skip**(int numberBits)

getInt

public int **getInt**(int numberBits)

peekInt

```
public int peekInt(int numberBits)
```

getIntLE

```
public int getIntLE(int numberBits)
```

peekIntLE

```
public int peekIntLE(int numberBits)
```

getLong

```
public long getLong(int numberBits)
```

peekLong

```
public long peekLong(int numberBits)
```

getBytes

```
public int getBytes(byte[] buffer,  
                    int offset,  
                    int len)
```

com.wowza.util Interface IFileProcess

public interface **IFileProcess**
extends

Used by FileUtils.traverseDirectory

Method Summary

void	onFile (java.io.File file) Triggered for each file encountered in FileUtils.traverseDirectory
------	--

Methods

onFile

public void **onFile**(java.io.File file)

Triggered for each file encountered in FileUtils.traverseDirectory

Parameters:

file - file descriptor

com.wowza.util Class IOPerformanceCounter

java.lang.Object

└-com.wowza.util.IOPerformanceCounter

public class **IOPerformanceCounter**
extends Object

IOPerformanceCounter: data object that tracks the server performance of a particular component (client, vHost, server, stream). It tracks bytes and messages sent to and from the object being measured.

Constructor Summary

public	IOPerformanceCounter() Create an empty performance counter.
--------	--

Method Summary

void	add(IOPerformanceCounter value) Add (value) to this counter.
void	addDifference(IOPerformanceCounter current, IOPerformanceCounter last) Add the result of (current-last) to this counter.
void	clear() Clear or reset this counter back to zero.
IOPerformanceCounter	clone() Create a deep clone (copy) if this object.
void	doSet(IOPerformanceCounter value) Set this object to value.
void	dummy()
long	getFileInBytes() Get file in bytes
double	getFileInBytesRate() Get estimate of file byte-in byte rate.
long	getFileOutBytes() Get file byte-out bytes (not implemented)
double	getFileOutBytesRate() Get estimate of file byte-out message byte rate (not implemented).
long	getMessagesInBytes() Get byte-in bytes
double	getMessagesInBytesRate() Get estimate of byte-in message byte rate.

long	getMessagesInCount () Get byte-in message count
long	getMessagesInCountRate () Get estimate of byte-in message count rate.
long	getMessagesLossBytes () Get byte-loss bytes
double	getMessagesLossBytesRate () Get estimate of byte-loss message byte rate.
long	getMessagesLossCount () Get byte-loss message count
long	getMessagesLossCountRate () Get estimate of byte-loss message count rate.
long	getMessagesOutBytes () Get byte-out bytes
double	getMessagesOutBytesRate () Get estimate of byte-out message byte rate.
long	getMessagesOutCount () Get byte-out message count
long	getMessagesOutCountRate () Get estimate of byte-out message count rate.
long	incrementBytesIn (long bytes) Increment bytes-in by bytes and increment message count by 0.
long	incrementBytesLoss (long bytes) Increment bytes-loss by bytes and increment message count by 0.
long	incrementBytesOut (long bytes) Increment bytes-out by bytes and increment message count by 0.
long	incrementFileIn (long bytes) Increment file-bytes-in by bytes.
long	incrementFileOut (long bytes) Increment file bytes-out by bytes.
long	incrementMessagesIn () Increment byte-in message count by 1.
long	incrementMessagesIn (long bytes) Increment bytes-in by bytes and increment message count by 1.
long	incrementMessagesIn (long bytes, long count) Increment bytes-in by bytes and message count by count.
long	incrementMessagesLoss () Increment byte-loss message count by 1.
long	incrementMessagesLoss (long bytes) Increment bytes-loss by bytes and increment message count by 1.

long	incrementMessagesLoss (long bytes, long count) Increment bytes-loss by bytes and message count by count.
long	incrementMessagesOut () Increment byte-out message count by 1.
long	incrementMessagesOut (long bytes) Increment bytes-out by bytes and increment message count by 1.
long	incrementMessagesOut (long bytes, long count) Increment bytes-out by bytes and message count by count.
boolean	isDebugLog ()
void	setDebugLog (boolean debugLog)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

IOPerformanceCounter

```
public IOPerformanceCounter()
```

Create an empty performance counter.

Methods

clone

```
public IOPerformanceCounter clone()
```

Create a deep clone (copy) if this object.

addDifference

```
public void addDifference(IOPerformanceCounter current,
    IOPerformanceCounter last)
```

Add the result of (current-last) to this counter. Used internally to efficiently track object performance on a timer.

Parameters:

current - current counter
last - last counter

clear

```
public void clear()
```

Clear or reset this counter back to zero.

(continued from last page)

add

```
public void add(IOPerformanceCounter value)
```

Add (value) to this counter.

Parameters:

value - value to add

doSet

```
public void doSet(IOPerformanceCounter value)
```

Set this object to value.

Parameters:

value - value to set

incrementMessagesIn

```
public long incrementMessagesIn(long bytes)
```

Increment bytes-in by bytes and increment message count by 1.

Parameters:

bytes - number of bytes

Returns:

bytes-in bytes

incrementFileIn

```
public long incrementFileIn(long bytes)
```

Increment file-bytes-in by bytes.

Parameters:

bytes - number of bytes

Returns:

bytes-in bytes

incrementMessagesIn

```
public long incrementMessagesIn(long bytes,  
    long count)
```

Increment bytes-in by bytes and message count by count.

Parameters:

bytes - number of bytes
count - number of messages

Returns:

bytes-in bytes

(continued from last page)

incrementBytesIn

```
public long incrementBytesIn(long bytes)
```

Increment bytes-in by bytes and increment message count by 0.

Parameters:

bytes

Returns:

bytes-in bytes

incrementMessagesIn

```
public long incrementMessagesIn()
```

Increment byte-in message count by 1.

Returns:

bytes-in message count

incrementMessagesOut

```
public long incrementMessagesOut(long bytes)
```

Increment bytes-out by bytes and increment message count by 1.

Parameters:

bytes - number of bytes

Returns:

bytes-out bytes

incrementFileOut

```
public long incrementFileOut(long bytes)
```

Increment file bytes-out by bytes.

Parameters:

bytes - number of bytes

Returns:

bytes-out bytes

incrementMessagesLoss

```
public long incrementMessagesLoss(long bytes)
```

Increment bytes-loss by bytes and increment message count by 1.

Parameters:

bytes - number of bytes

Returns:

bytes-loss bytes

(continued from last page)

incrementMessagesOut

```
public long incrementMessagesOut(long bytes,  
    long count)
```

Increment bytes-out by bytes and message count by count.

Parameters:

bytes - number of bytes
count - number of messages

Returns:

bytes-out bytes

incrementMessagesLoss

```
public long incrementMessagesLoss(long bytes,  
    long count)
```

Increment bytes-loss by bytes and message count by count.

Parameters:

bytes - number of bytes
count - number of messages

Returns:

bytes-loss bytes

incrementBytesOut

```
public long incrementBytesOut(long bytes)
```

Increment bytes-out by bytes and increment message count by 0.

Parameters:

bytes

Returns:

bytes-out bytes

incrementBytesLoss

```
public long incrementBytesLoss(long bytes)
```

Increment bytes-loss by bytes and increment message count by 0.

Parameters:

bytes

Returns:

bytes-loss bytes

incrementMessagesOut

```
public long incrementMessagesOut()
```

Increment byte-out message count by 1.

Returns:

(continued from last page)

bytes-out message count

incrementMessagesLoss

```
public long incrementMessagesLoss()
```

Increment byte-loss message count by 1.

Returns:

bytes-loss message count

getMessagesInCount

```
public long getMessagesInCount()
```

Get byte-in message count

Returns:

byte-in message count

getMessagesOutCount

```
public long getMessagesOutCount()
```

Get byte-out message count

Returns:

byte-out message count

getMessagesLossCount

```
public long getMessagesLossCount()
```

Get byte-loss message count

Returns:

byte-loss message count

getMessagesInBytes

```
public long getMessagesInBytes()
```

Get byte-in bytes

Returns:

byte-in bytes

getFileInBytes

```
public long getFileInBytes()
```

Get file in bytes

Returns:

file in bytes

(continued from last page)

getMessagesOutBytes

```
public long getMessagesOutBytes()
```

Get byte-out bytes

Returns:

byte-out bytes

getFileOutBytes

```
public long getFileOutBytes()
```

Get file byte-out bytes (not implemented)

Returns:

byte-out bytes

getMessagesLossBytes

```
public long getMessagesLossBytes()
```

Get byte-loss bytes

Returns:

byte-loss bytes

getMessagesInCountRate

```
public long getMessagesInCountRate()
```

Get estimate of byte-in message count rate.

Returns:

estimate of byte-in message count rate (messages per second)

getMessagesOutCountRate

```
public long getMessagesOutCountRate()
```

Get estimate of byte-out message count rate.

Returns:

estimate of byte-out message count rate (messages per second)

getMessagesLossCountRate

```
public long getMessagesLossCountRate()
```

Get estimate of byte-loss message count rate.

Returns:

estimate of byte-loss message count rate (messages per second)

getMessagesInBytesRate

```
public double getMessagesInBytesRate()
```

(continued from last page)

Get estimate of byte-in message byte rate.

Returns:

estimate of byte-in message byte rate (bytes per second)

getFileInBytesRate

```
public double getFileInBytesRate()
```

Get estimate of file byte-in byte rate.

Returns:

estimate of file byte-in byte rate (bytes per second)

getMessagesOutBytesRate

```
public double getMessagesOutBytesRate()
```

Get estimate of byte-out message byte rate.

Returns:

estimate of byte-out message byte rate (bytes per second)

getFileOutBytesRate

```
public double getFileOutBytesRate()
```

Get estimate of file byte-out message byte rate (not implemented).

Returns:

estimate of file byte-out message byte rate (bytes per second)

getMessagesLossBytesRate

```
public double getMessagesLossBytesRate()
```

Get estimate of byte-loss message byte rate.

Returns:

estimate of byte-loss message byte rate (bytes per second)

dummy

```
public void dummy()
```

isDebugLog

```
public boolean isDebugLog()
```

setDebugLog

```
public void setDebugLog(boolean debugLog)
```

com.wowza.util Interface IPacketFragment

All Known Implementing Classes:
[PacketFragment](#)

public interface **IPacketFragment**
extends

Method Summary

IPacketFragment	clone()
byte[]	getBuffer()
int	getLen()
int	getOffset()
void	setBuffer (byte[] buffer)
void	setLen (int len)
void	setOffset (int offset)

Methods

getBuffer

```
public byte[] getBuffer()
```

setBuffer

```
public void setBuffer(byte[] buffer)
```

getOffset

```
public int getOffset()
```

setOffset

```
public void setOffset(int offset)
```


(continued from last page)

getLen

```
public int getLen()
```

setLen

```
public void setLen(int len)
```

clone

```
public IPacketFragment clone()
```

com.wowza.util Class MD5DigestUtils

java.lang.Object

└-com.wowza.util.MD5DigestUtils

public class **MD5DigestUtils**
extends Object

MD5DigestUtils: MD5 hash utilities.

Field Summary

protected static	md5Digest
protected static	md5Lock

Constructor Summary

public	MD5DigestUtils()
--------	----------------------------------

Method Summary

static String	generateAuth (String method, String uri, String username, String password, String realm, String nonce) Generate an HTTP authorization response
static String	generateAuth (String a2Hash, String alHash, String realm, String nonce, String qop, String nonceCount, String cnonce) Generate an HTTP authorization response
static String	generateAuth (String method, String uri, String alHash, String realm, String nonce, String qop, String nonceCount, String cnonce) Generate an HTTP authorization response
static String	generateAuth (String method, String uri, String username, String password, String realm, String nonce, String qop, String nonceCount, String cnonce) Generate an HTTP authorization response
static String	generateAuthHTTP (String method, String uri, String alHash, String nonce, String qop, String nonceCount, String cnonce) Generate an HTTP authorization response
static String	generateAuthHTTP (String method, String uri, String username, String password, String realm, String nonce, String qop, String nonceCount, String cnonce) Generate an HTTP authorization response
static String	generateHash (String value) Generate MD5 hash

static byte[]	generateHashBytes (byte[] value) Generate MD5 hash
static byte[]	generateHashBytes (String value) Generate MD5 hash

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

md5Digest

protected static java.security.MessageDigest **md5Digest**

md5Lock

protected static java.lang.Object **md5Lock**

Constructors

MD5DigestUtils

public **MD5DigestUtils**()

Methods

generateAuth

```
public static String generateAuth(String method,
    String uri,
    String username,
    String password,
    String realm,
    String nonce)
```

Generate an HTTP authorization response

Parameters:

method - method
uri - URI
username - username
password - password
realm - realm
nonce - nonce

Returns:

auth response

generateAuth

```
public static String generateAuth(String method,
    String uri,
    String username,
    String password,
    String realm,
    String nonce,
    String qop,
    String nonceCount,
    String cnonce)
```

Generate an HTTP authorization response

Parameters:

method - method
uri - URI
username - username
password - password
realm - realm
nonce - nonce
qop - qop
nonceCount - nonceCount
cnonce - cnonce

Returns:

auth response

generateAuthHTTP

```
public static String generateAuthHTTP(String method,
    String uri,
    String username,
    String password,
    String realm,
    String nonce,
    String qop,
    String nonceCount,
    String cnonce)
```

Generate an HTTP authorization response

Parameters:

method - method
uri - URI
username - username
password - password
realm - realm
nonce - nonce
qop - qop
nonceCount - nonceCount
cnonce - cnonce

Returns:

response

(continued from last page)

generateAuthHTTP

```
public static String generateAuthHTTP(String method,
    String uri,
    String alHash,
    String nonce,
    String qop,
    String nonceCount,
    String cnonce)
```

Generate an HTTP authorization response

Parameters:

method - method
uri - URI
username - username
password - password
realm - realm
nonce - nonce
qop - qop
nonceCount - nonceCount
cnonce - cnonce

Returns:

response

generateAuth

```
public static String generateAuth(String method,
    String uri,
    String alHash,
    String realm,
    String nonce,
    String qop,
    String nonceCount,
    String cnonce)
```

Generate an HTTP authorization response

Parameters:

method - method
uri - URI
alHash - alHash
realm - realm
nonce - nonce
qop - qop
nonceCount - nonceCount
cnonce - cnonce

Returns:

auth

generateAuth

```
public static String generateAuth(String a2Hash,
    String alHash,
    String realm,
    String nonce,
    String qop,
    String nonceCount,
    String cnonce)
```

(continued from last page)

Generate an HTTP authorization response

Parameters:

a2Hash - a2Hash
a1Hash - a1Hash
realm - realm
nonce - nonce
qop - qop
nonceCount - nonceCount
cnonce - cnonce

Returns:

auth

generateHashBytes

```
public static byte[] generateHashBytes(byte[] value)
```

Generate MD5 hash

Parameters:

value - byte array to hash

Returns:

byte array result

generateHashBytes

```
public static byte[] generateHashBytes(String value)
```

Generate MD5 hash

Parameters:

value - in string converted to byte array (UTF-8)

Returns:

byte array result

generateHash

```
public static String generateHash(String value)
```

Generate MD5 hash

Parameters:

value - in string converted to byte array (UTF-8)

Returns:

hash as binhex string

com.wowza.util Class MediaUtils

java.lang.Object

└-com.wowza.util.MediaUtils

```
public class MediaUtils
extends Object
```

MediaUtils: Media utilities.

Field Summary

public static final	CODECSTR_FORMAT_VIDEO_POSTIOS4 Value: 2
public static final	CODECSTR_FORMAT_VIDEO_PREIOS4 Value: 1
public static final	CODECSTR_FORMAT_VIDEO_UNKNOWN Value: 0

Constructor Summary

public	MediaUtils()
--------	------------------------------

Method Summary

static String	audioCodecTypeToString (int codecType) Audio codec ID to string.
static String	videoCodecTypeToString (int codecType) Video codec ID to string.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

CODECSTR_FORMAT_VIDEO_UNKNOWN

```
public static final int CODECSTR_FORMAT_VIDEO_UNKNOWN
```

Constant value: **0**

CODECSTR_FORMAT_VIDEO_PREIOS4

```
public static final int CODECSTR_FORMAT_VIDEO_PREIOS4
```

Constant value: **1**

CODECSTR_FORMAT_VIDEO_POSTIOS4

```
public static final int CODECSTR_FORMAT_VIDEO_POSTIOS4
```

Constant value: **2**

Constructors

MediaUtils

```
public MediaUtils()
```

Methods

audioCodecTypeToString

```
public static String audioCodecTypeToString(int codecType)
```

Audio codec ID to string. See IVHost.CODEC_AUDIO_*

Parameters:

codecType - codec id. See IVHost.CODEC_AUDIO_*

Returns:

codec string

videoCodecTypeToString

```
public static String videoCodecTypeToString(int codecType)
```

Video codec ID to string. See IVHost.CODEC_VIDEO_*

Parameters:

codecType - codec id. See IVHost.CODEC_VIDEO_*

Returns:

codec string

com.wowza.util Class NetworkUtils

java.lang.Object

↳ **com.wowza.util.NetworkUtils**

```
public class NetworkUtils
extends Object
```

NetworkUtils: Networking utilities.

Constructor Summary

public	NetworkUtils()
--------	--------------------------------

Method Summary

static boolean	isAddressMulticast (String ipAddress) Returns true if IP address is multicast address
static String	socketAddressToUniqueStr (java.net.InetSocketAddress socketAddress)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

NetworkUtils

```
public NetworkUtils()
```

Methods

isAddressMulticast

```
public static boolean isAddressMulticast(String ipAddress)
```

Returns true if IP address is multicast address

Parameters:

ipAddress - IP address

Returns:

true if IP address is multicast address

socketAddressToUniqueStr

```
public static String socketAddressToUniqueStr(java.net.InetSocketAddress  
socketAddress)
```

com.wowza.util Interface NoMBean

public interface **NoMBean**
extends Annotation

Annotation for excluding a method from the JMX interface. Below is an example of how it would be used

```
import com.wowza.util.NoMBean;
import com.wowza.wms.module.*;

class MyClass extends ModuleBase
{
    @NoMBean public void myMethod()
    {
    }
}
```

Methods inherited from interface java.lang.annotation.Annotation

annotationType, equals, hashCode, toString
--

com.wowza.util Class OnMetadataBasic

java.lang.Object

└-com.wowza.util.OnMetadataBasic

```
public class OnMetadataBasic
extends Object
```

Field Summary

public	audiochannels
public	audiocodecid
public	audiodatarate
public	audiodevice
public	audioinputvolume
public	audiosamplerate
public	author
public	avclevel
public	avcprofile
public	copyright
public	creationdate
public	description
public	displayHeight
public	displayWidth
public	frameHeight
public	framerate
public	frameWidth

public	height
public	keywords
public	presetname
public	rating
public	title
public	videocodecid
public	videodatarate
public	videodevice
public	videokeyframe_frequency
public	width

Constructor Summary

public	OnMetadataBasic()
--------	-----------------------------------

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

author

`public java.lang.String author`

copyright

`public java.lang.String copyright`

description

`public java.lang.String description`

(continued from last page)

keywords

```
public java.lang.String keywords
```

rating

```
public java.lang.String rating
```

title

```
public java.lang.String title
```

presetname

```
public java.lang.String presetname
```

creationdate

```
public java.lang.String creationdate
```

videodevice

```
public java.lang.String videodevice
```

framerate

```
public double framerate
```

width

```
public double width
```

height

```
public double height
```

displayWidth

```
public double displayWidth
```

(continued from last page)

displayHeight

public double **displayHeight**

frameWidth

public double **frameWidth**

frameHeight

public double **frameHeight**

videocodecid

public java.lang.String **videocodecid**

videodatarate

public double **videodatarate**

avclevel

public double **avclevel**

avcprofile

public double **avcprofile**

videokeyframe_frequency

public double **videokeyframe_frequency**

audiodevice

public java.lang.String **audiodevice**

(continued from last page)

audiosamplerate

```
public double audiosamplerate
```

audiochannels

```
public double audiochannels
```

audioinputvolume

```
public double audioinputvolume
```

audiocodecid

```
public java.lang.String audiocodecid
```

audiodatarate

```
public double audiodatarate
```

Constructors

OnMetadataBasic

```
public OnMetadataBasic()
```


com.wowza.util Class PacketFragment

java.lang.Object

└-com.wowza.util.PacketFragment

All Implemented Interfaces:

[IPacketFragment](#)

public class **PacketFragment**

extends Object

implements [IPacketFragment](#)

Field Summary

protected	buffer
protected	len
protected	offset

Constructor Summary

public	PacketFragment (byte[] buffer, int offset, int len)
public	PacketFragment (byte[] buffer)
public	PacketFragment ()

Method Summary

PacketFragment	clone ()
byte[]	getBuffer ()
int	getLen ()
int	getOffset ()
void	setBuffer (byte[] buffer)
void	setLen (int len)
void	setOffset (int offset)
int	size ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.util.IPacketFragment](#)

[clone](#), [getBuffer](#), [getLen](#), [getOffset](#), [setBuffer](#), [setLen](#), [setOffset](#)

Fields

buffer

protected byte **buffer**

offset

protected int **offset**

len

protected int **len**

Constructors

PacketFragment

```
public PacketFragment(byte[] buffer,  
                      int offset,  
                      int len)
```

PacketFragment

```
public PacketFragment(byte[] buffer)
```

PacketFragment

```
public PacketFragment()
```

Methods

(continued from last page)

clone

```
public PacketFragment clone()
```

size

```
public int size()
```

getBuffer

```
public byte[] getBuffer()
```

setBuffer

```
public void setBuffer(byte[] buffer)
```

getOffset

```
public int getOffset()
```

setOffset

```
public void setOffset(int offset)
```

getLen

```
public int getLen()
```

setLen

```
public void setLen(int len)
```

com.wowza.util Class PacketFragmentList

java.lang.Object

└-com.wowza.util.PacketFragmentList

public class **PacketFragmentList**
extends Object

Field Summary

protected	duration
protected	fragments
protected	size
protected	startTime

Constructor Summary

public	PacketFragmentList()
--------	--------------------------------------

Method Summary

void	addPacketFragment (int insertLoc, IPacketFragment fragment)
void	addPacketFragment (IPacketFragment fragment)
void	addPacketFragments (PacketFragmentList frags)
void	clearFragment ()
PacketFragmentList	clone ()
long	getDuration ()
java.util.List	getFragments ()
java.util.List	getFragmentsInternal ()
long	getStartTime ()
void	removeBytes (int offset, int len)

IPacketFragment	removeFragment (int index)
void	setDuration (long duration)
void	setStartTime (long startTime)
int	size ()
byte[]	toByteArray ()
byte[]	toByteArray (boolean copy)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

fragments

protected java.util.List **fragments**

size

protected int **size**

startTime

protected long **startTime**

duration

protected long **duration**

Constructors

PacketFragmentList

public **PacketFragmentList**()

Methods

(continued from last page)

clone

```
public PacketFragmentList clone()
```

addPacketFragments

```
public void addPacketFragments(PacketFragmentList frags)
```

addPacketFragment

```
public void addPacketFragment(IPacketFragment fragment)
```

addPacketFragment

```
public void addPacketFragment(int insertLoc,  
    IPacketFragment fragment)
```

removeFragment

```
public IPacketFragment removeFragment(int index)
```

removeBytes

```
public void removeBytes(int offset,  
    int len)
```

clearFragment

```
public void clearFragment()
```

size

```
public int size()
```

getFragmentsInternal

```
public java.util.List getFragmentsInternal()
```

(continued from last page)

getFragments

```
public java.util.List getFragments()
```

getStartTime

```
public long getStartTime()
```

setStartTime

```
public void setStartTime(long startTime)
```

getDuration

```
public long getDuration()
```

setDuration

```
public void setDuration(long duration)
```

toByteArray

```
public byte[] toByteArray()
```

toByteArray

```
public byte[] toByteArray(boolean copy)
```

com.wowza.util Class PacketFragmentListReader

java.lang.Object

└-com.wowza.util.PacketFragmentListReader

```
public class PacketFragmentListReader
extends Object
```

Constructor Summary

public	PacketFragmentListReader (java.util.List fragments, int size)
--------	---

Method Summary

int	count ()
void	get (byte[] buffer)
void	get (byte[] buffer, int offset, int len)
int	getBytes ()
int	remaining ()
void	skip ()
void	skip (int numberBytes)
static void	trim (java.util.List fragments, int size)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

PacketFragmentListReader

```
public PacketFragmentListReader(java.util.List fragments,
                                int size)
```

Methods

(continued from last page)

trim

```
public static void trim(java.util.List fragments,
    int size)
```

remaining

```
public int remaining()
```

count

```
public int count()
```

getBytes

```
public int getBytes()
```

skip

```
public void skip()
```

skip

```
public void skip(int numberBytes)
```

get

```
public void get(byte[] buffer)
```

get

```
public void get(byte[] buffer,
    int offset,
    int len)
```

com.wowza.util Class RolloverLong

java.lang.Object

└-com.wowza.util.RolloverLong

```
public class RolloverLong
extends Object
```

Constructor Summary

public	RolloverLong (int bits)
--------	---

Method Summary

RolloverLong	clone ()
long	get ()
long	set (long val)
long	setAbs (long val)
void	setHighBits (long val)
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

RolloverLong

```
public RolloverLong(int bits)
```

Methods

clone

```
public RolloverLong clone()
```

get

public long **get**()

setHighBits

public void **setHighBits**(long val)

setAbs

public long **setAbs**(long val)

set

public long **set**(long val)

toString

public String **toString**()

com.wowza.util Class SetUtils

java.lang.Object

└─com.wowza.util.SetUtils

public class **SetUtils**
extends Object

Static utilities for standard set operations: union, intersection, difference, subset and superset.

Constructor Summary

public	SetUtils()
--------	----------------------------

Method Summary

static java.util.Set	diff (java.util.Set set1, java.util.Set set2) Create difference of the 2 sets.
static java.util.Set	intersection (java.util.Set set1, java.util.Set set2) Create intersection of 2 sets.
static boolean	isSubset (java.util.Set set1, java.util.Set set2) Determines if set1 is a subset of set2.
static boolean	isSuperset (java.util.Set set1, java.util.Set set2) Determines if set1 is a superset of set2.
static java.util.Set	union (java.util.Set set1, java.util.Set set2) Create union of 2 sets.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

SetUtils

public **SetUtils**()

Methods

intersection

public static java.util.Set **intersection**(java.util.Set set1,
java.util.Set set2)

(continued from last page)

Create intersection of 2 sets.

Parameters:

set1 - First set
set2 - Second set

Returns:

a new Set, containing the intersection of the 2 sets.

union

```
public static java.util.Set union(java.util.Set set1,  
    java.util.Set set2)
```

Create union of 2 sets.

Parameters:

set1 - First set
set2 - Second set

Returns:

a new Set, containing the union of the 2 sets.

diff

```
public static java.util.Set diff(java.util.Set set1,  
    java.util.Set set2)
```

Create difference of the 2 sets.

Parameters:

set1 - First set
set2 - Second set

Returns:

a new Set, containing the set1 - set2.

isSubset

```
public static boolean isSubset(java.util.Set set1,  
    java.util.Set set2)
```

Determines if set1 is a subset of set2.

Parameters:

set1 - First set
set2 - Second set

Returns:

true if set1 is subset of set2, otherwise false.

isSuperset

```
public static boolean isSuperset(java.util.Set set1,  
    java.util.Set set2)
```

Determines if set1 is a superset of set2.

Parameters:

(continued from last page)

set1 - First set
set2 - Second set

Returns:

true if set1 is superset of set2, otherwise false.

com.wowza.util Class StringUtils

java.lang.Object

└-com.wowza.util.StringUtils

public class **StringUtils**
extends Object

StringUtils: utility class of String utilities.

Constructor Summary

public	StringUtils()
--------	-------------------------------

Method Summary

static boolean	equals (String s1, String s2) Checks if 2 strings are equals, accounting for null cases.
static int	fastStringHash (String contextStr)
static String	getOrDefault (String s, String defaultString) Returns string s, or defaultString if s is null.
static String	intToHexStr (int value, int strLen)
static String	intToStr (int value, int strLen)
static boolean	isEmpty (String s) Checks if string is empty, handling null String case.
static int	length (String s) Returns string length, handling null String case as length of 0.
static String	longToHexStr (long value, int strLen)
static String	longToStr (long value, int strLen)
static String	stampToString (long stamp) Convert a duration (milliseconds) to a formatted string.
static String	stampToStringNoUnits (long stamp) Convert a duration (milliseconds) to a formatted string.
static long	stringToMilliseconds (String stamp) Convert a hh:mm:ss.SSS string to milliseconds No validation that hh:mm:ss are valid ranges
static String	toStringList (java.util.List strings) Convert list of Strings to comma-separated string

static String	toStringList (String[] strings) Convert array of Strings to comma-separated string
static String	toStringList (WMSProperties properties) Convert properties to comma-separated string
static String	valueOf (String s) Returns string, handling null String case as "".

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

StringUtils

```
public StringUtils()
```

Methods

intToStr

```
public static String intToStr(int value,  
    int strLen)
```

intToHexStr

```
public static String intToHexStr(int value,  
    int strLen)
```

longToStr

```
public static String longToStr(long value,  
    int strLen)
```

longToHexStr

```
public static String longToHexStr(long value,  
    int strLen)
```

isEmpty

```
public static boolean isEmpty(String s)
```

(continued from last page)

Checks if string is empty, handling null String case.

Parameters:

s

Returns:

false if string is null or "", true otherwise

length

```
public static int length(String s)
```

Returns string length, handling null String case as length of 0.

Parameters:

s

Returns:

0 if string is null, or length of string.

valueOf

```
public static String valueOf(String s)
```

Returns string, handling null String case as "".

Parameters:

s

Returns:

"" if string is null, or string value.

getOrDefault

```
public static String getOrDefault(String s,  
String defaultString)
```

Returns string s, or defaultString if s is null.

Parameters:

s

defaultString

Returns:

"" if string is null, or string value.

stampToString

```
public static String stampToString(long stamp)
```

Convert a duration (milliseconds) to a formatted string.

Parameters:

stamp - duration (milliseconds)

Returns:

formatted string (example: 3 days 4 minutes 1 seconds)

(continued from last page)

stampToStringNoUnits

```
public static String stampToStringNoUnits(long stamp)
```

Convert a duration (milliseconds) to a formatted string.

Parameters:

stamp - duration (milliseconds)

Returns:

formatted string (example: 03:04:01.123 hours:minutes:seconds.milliseconds)

stringToMilliseconds

```
public static long stringToMilliseconds(String stamp)
```

Convert a hh:mm:ss.SSS string to milliseconds No validation that hh:mm:ss are valid ranges

Parameters:

stamp - string (hours:minutes:seconds.milliseconds)

Returns:

milliseconds, -1 is parse failed

equals

```
public static boolean equals(String s1,  
String s2)
```

Checks if 2 strings are equals, accounting for null cases. If both are null, they are considered equal.

Parameters:

s1 - string one

s2 - string 2

Returns:

true is the strings are equal

toStringList

```
public static String toStringList(WMSProperties properties)
```

Convert properties to comma-separated string

Parameters:

properties

Returns:

comma-separated string

toStringList

```
public static String toStringList(java.util.List strings)
```

Convert list of Strings to comma-separated string

Parameters:

strings

(continued from last page)

Returns:

comma-separated string

toStringList

```
public static String toStringList(String[] strings)
```

Convert array of Strings to comma-separated string

Parameters:

strings

Returns:

comma-separated string

fastStringHash

```
public static int fastStringHash(String contextStr)
```

com.wowza.util Class SystemUtils

java.lang.Object

└-com.wowza.util.SystemUtils

public class **SystemUtils**
extends Object

Nested Class Summary

class	SystemUtils.ReplaceItem SystemUtils.ReplaceItem
-------	--

Field Summary

public static final	defaultLocale
public static final	defaultTimeZone
public static final	gmtTimeZone
protected static final	msb0baseTime Value: 2085978496000
protected static final	msblbaseTime Value: -2208988800000

Constructor Summary

public	SystemUtils()
--------	-------------------------------

Method Summary

static void	addBouncyCastleSecurityProvider() Load bouncy castle providers, Internal use.
static String	expandEnvironmentVariables(String inValue) Expand system level Java properties in a String in the form \${property-name}
static String	expandEnvironmentVariables(String inValue, java.util.Map valueMap) Expand system level Java properties in a String in the form \${property-name}.
static long	getCpuTime() Get CPU time in nanoseconds.
static String	getLinuxSocketParam(String cmdStr)

static byte[]	getMACAddress() Get MAC address of localhost interface (only works on Java 6 or greater)
static long	getSystemTime() Get system time in nanoseconds.
static long	getUserTime() Get user time in nanoseconds.
static long	toNTPTime(long t) Convert a timecode value in milliseconds to NTP time

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

defaultTimeZone

public static final java.util.TimeZone **defaultTimeZone**

gmtTimeZone

public static final java.util.TimeZone **gmtTimeZone**

defaultLocale

public static final java.util.Locale **defaultLocale**

msb0baseTime

protected static final long **msb0baseTime**

Constant value: **2085978496000**

msb1baseTime

protected static final long **msb1baseTime**

Constant value: **-2208988800000**

Constructors

(continued from last page)

SystemUtils

```
public SystemUtils()
```

Methods

expandEnvironmentVariables

```
public static String expandEnvironmentVariables(String inValue)
```

Expand system level Java properties in a String in the form `${property-name}`

Parameters:

inValue - string with properties

Returns:

expanded string

expandEnvironmentVariables

```
public static String expandEnvironmentVariables(String inValue,  
        java.util.Map valueMap)
```

Expand system level Java properties in a String in the form `${property-name}`. You can also pass in a map of name/value pairs that will expand the list of available properties

Parameters:

inValue - string with properties

valueMap - name/value pair map

Returns:

expanded string

getMACAddress

```
public static byte[] getMACAddress()
```

Get MAC address of localhost interface (only works on Java 6 or greater)

Returns:

MAC address of localhost interface

addBouncyCastleSecurityProvider

```
public static void addBouncyCastleSecurityProvider()
```

Load bouncy castle providers, Internal use.

toNTPTime

```
public static long tToNTPTime(long t)
```

Convert a timecode value in milliseconds to NTP time

Parameters:

t - timecode value in milliseconds

(continued from last page)

Returns:NTP time

getCpuTime

```
public static long getCpuTime()
```

Get CPU time in nanoseconds.

getUserTime

```
public static long getUserTime()
```

Get user time in nanoseconds.

getSystemTime

```
public static long getSystemTime()
```

Get system time in nanoseconds.

getLinuxSocketParam

```
public static String getLinuxSocketParam(String cmdStr)
```

com.wowza.util Class SystemUtils.ReplaceItem

java.lang.Object

└-com.wowza.util.SystemUtils.ReplaceItem

public static class **SystemUtils.ReplaceItem**
extends Object

Field Summary

public	end
public	newValue
public	start

Constructor Summary

public	SystemUtils.ReplaceItem (int start, int stop, String newValue)
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

start

public int **start**

end

public int **end**

newValue

public java.lang.String **newValue**

Constructors

(continued from last page)

SystemUtils.ReplaceItem

```
public SystemUtils.ReplaceItem(int start,  
                               int stop,  
                               String newValue)
```

com.wowza.util Class URLUtils

java.lang.Object

└─com.wowza.util.URLUtils

public final class **URLUtils**
extends Object

Class to deal with URLs

Constructor Summary

public	URLUtils()
--------	----------------------------

Method Summary

static String	appendParamsToUrl (String url, String params) Convenience call to add parameters to a url.
static String	decodeValue (String val) Wrapper for URLDecoder.decode(val, "UTF-8");
static String	encodeValue (String val) Wrapper for URLEncoder.encode(val, "UTF-8");
static String	getParamValue (java.util.Map params, String key) Helper funtion to get single value from multiple value parameter Map
static java.util.Map	parseQueryStr (String queryString, boolean doDecode) Parse query string part of url into Map of Lists (to support multiple values) of query parameters
static String	pathToFileURL (String basePath) Convert a path to a url (file://[path])
static String	urlToId (java.net.URL url) Create a MD5 message digest hash of a url

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

URLUtils

public **URLUtils**()

(continued from last page)

Methods

pathToFileURL

```
public static String pathToFileURL(String basePath)
```

Convert a path to a url (file://[path])

Parameters:

basePath - path

Returns:

file url

urlToId

```
public static String urlToId(java.net.URL url)
```

Create a MD5 message digest hash of a url

Parameters:

url - url to hash

Returns:

hashed url

appendParamsToUrl

```
public static String appendParamsToUrl(String url,  
String params)
```

Convenience call to add parameters to a url. If already has ? add &.

Parameters:

url - input url

params - parameters in the form param1=val1¶m2=val2

Returns:

appended url

encodeValue

```
public static String encodeValue(String val)
```

Wrapper for URLEncoder.encode(val, "UTF-8");

Parameters:

val - value to encode

Returns:

encoded value

decodeValue

```
public static String decodeValue(String val)
```

Wrapper for URLDecoder.decode(val, "UTF-8");

(continued from last page)

Parameters:

val - value to decode

Returns:

decoded value

parseQueryStr

```
public static java.util.Map parseQueryStr(String queryString,  
boolean doDecode)
```

Parse query string part of url into Map of Lists (to support multiple values) of query parameters

Parameters:

queryString - query string

doDecode - true to use URLDecoder.decode() to decode parameters

Returns:

Map of Lists

getParamValue

```
public static String getParamValue(java.util.Map params,  
String key)
```

Helper funtion to get single value from multiple value parameter Map

Parameters:

params - params Map

key - key string

Returns:

first value

com.wowza.util Class XMLUtils

java.lang.Object

↳ **com.wowza.util.XMLUtils**

public class **XMLUtils**
extends Object

XMLUtils: utility class for parsing XML files.

Constructor Summary

public	XMLUtils()
--------	----------------------------

Method Summary

static org.w3c.dom.Node	getNodeByTagName (org.w3c.dom.Element node, String name) Return a child Node by tag name.
static String	getNodeValue (org.w3c.dom.Node node) Return the text value of a node.
static String	getNodeValueByTagName (org.w3c.dom.Element node, String name) Get a child Node value by tag name.
static String	getVersion (org.w3c.dom.Element root) Given a Wowza XML file's root element, parse the version attribute
static boolean	getXMLPropertyBool (javax.xml.xpath.XPath xpath, String xpathStr, org.w3c.dom.Element root, boolean defaultVal) Get a boolean int value pointed to by xpath or defaultVal if not found.
static double	getXMLPropertyDouble (javax.xml.xpath.XPath xpath, String xpathStr, org.w3c.dom.Element root, double defaultVal) Get a single double value pointed to by xpath or defaultVal if not found.
static boolean	getXMLPropertyExists (javax.xml.xpath.XPath xpath, String xpathStr, org.w3c.dom.Element root)
static int	getXMLPropertyInt (javax.xml.xpath.XPath xpath, String xpathStr, org.w3c.dom.Element root, int defaultVal) Get a single int value pointed to by xpath or defaultVal if not found.
static int	getXMLPropertyIntSize (javax.xml.xpath.XPath xpath, String xpathStr, org.w3c.dom.Element root, int defaultVal)
static long	getXMLPropertyLong (javax.xml.xpath.XPath xpath, String xpathStr, org.w3c.dom.Element root, long defaultVal) Get a single long value pointed to by xpath or defaultVal if not found.
static long	getXMLPropertyLongSize (javax.xml.xpath.XPath xpath, String xpathStr, org.w3c.dom.Element root, long defaultVal)

static String	getXMLPropertyStr (javax.xml.xpath.XPath xpath, String xpathStr, org.w3c.dom.Element root) Get a single string value pointed to by xpath or null if not found.
static String	getXMLPropertyStr (javax.xml.xpath.XPath xpath, String xpathStr, org.w3c.dom.Element root, String defaultVal) Get a single string value pointed to by xpath or defaultVal if not found.
static void	loadConfigProperties (org.w3c.dom.Element root, String propertiesXPath, WMSProperties properties) Loads <Properties> elemnt by xpath into properties object.
static void	loadConfigProperties (org.w3c.dom.NodeList resultList, WMSProperties properties) Given a nodeList load children as properties.
static javax.xml.xpath.XPath Factory	newXPathFactory () Get a new XPath factory object.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

XMLUtils

public **XMLUtils**()

Methods

getNodeValueByTagName

public static String **getNodeValueByTagName**(org.w3c.dom.Element node, String name)

Get a child Node value by tag name. Return null if does not exist.

Parameters:

node - parent node
name - tag name

Returns:

node value or null if does not exist

getNodeByTagName

public static org.w3c.dom.Node **getNodeByTagName**(org.w3c.dom.Element node, String name)

Return a child Node by tag name. Return null if does not exist.

Parameters:

node - parent node

(continued from last page)

name - tag name

Returns:

Node or null if does not exist

getNodeValue

```
public static String getNodeValue(org.w3c.dom.Node node)
```

Return the text value of a node. Return concatenated value of all children nodes that are text nodes.

Parameters:

node - parent node

Returns:

concatenated text nodes or empty string if not found or no children

loadConfigProperties

```
public static void loadConfigProperties(org.w3c.dom.Element root,  
    String propertiesXPath,  
    WMSProperties properties)
```

Loads <Properties> elemnt by xpath into properties object.

Parameters:

root - root node

propertiesXPath - xpath to search for <Properties> element

properties - properties to add values to

loadConfigProperties

```
public static void loadConfigProperties(org.w3c.dom.NodeList resultList,  
    WMSProperties properties)
```

Given a nodeList load children as properties.

Parameters:

resultList - node list

properties - properties to add values to

getXMLPropertyStr

```
public static String getXMLPropertyStr(javax.xml.xpath.XPath xpath,  
    String xpathStr,  
    org.w3c.dom.Element root)
```

Get a single string value pointed to by xpath or null if not found.

Parameters:

xpath - XPath interface

xpathStr - xpath string

root - root node to start search

Returns:

single string value pointed to by xpath or null if not found

(continued from last page)

getXMLPropertyStr

```
public static String getXMLPropertyStr(javax.xml.xpath.XPath xpath,  
    String xpathStr,  
    org.w3c.dom.Element root,  
    String defaultVal)
```

Get a single string value pointed to by xpath or defaultVal if not found.

Parameters:

xpath - XPath interface
xpathStr - xpath string
root - node to start search
defaultVal - default value

Returns:

single string value pointed to by xpath or defaultVal if not found

getXMLPropertyExists

```
public static boolean getXMLPropertyExists(javax.xml.xpath.XPath xpath,  
    String xpathStr,  
    org.w3c.dom.Element root)
```

getXMLPropertyInt

```
public static int getXMLPropertyInt(javax.xml.xpath.XPath xpath,  
    String xpathStr,  
    org.w3c.dom.Element root,  
    int defaultVal)
```

Get a single int value pointed to by xpath or defaultVal if not found.

Parameters:

xpath - XPath interface
xpathStr - xpath string
root - node to start search
defaultVal - default value

Returns:

int value or defaultVal if not found

getXMLPropertyIntSize

```
public static int getXMLPropertyIntSize(javax.xml.xpath.XPath xpath,  
    String xpathStr,  
    org.w3c.dom.Element root,  
    int defaultVal)
```

getXMLPropertyLong

```
public static long getXMLPropertyLong(javax.xml.xpath.XPath xpath,  
    String xpathStr,  
    org.w3c.dom.Element root,  
    long defaultVal)
```

Get a single long value pointed to by xpath or defaultVal if not found.

(continued from last page)

Parameters:

xpath - XPath interface
xpathStr - xpath string
root - node to start search
defaultVal - default value

Returns:

long value or defaultVal if not found

getXMLPropertyLongSize

```
public static long getXMLPropertyLongSize( javax.xml.xpath.XPath xpath,  
      String xpathStr,  
      org.w3c.dom.Element root,  
      long defaultVal)
```

getXMLPropertyDouble

```
public static double getXMLPropertyDouble( javax.xml.xpath.XPath xpath,  
      String xpathStr,  
      org.w3c.dom.Element root,  
      double defaultVal)
```

Get a single double value pointed to by xpath or defaultVal if not found.

Parameters:

xpath - XPath interface
xpathStr - xpath string
root - node to start search
defaultVal - default value

Returns:

double value or defaultVal if not found

getXMLPropertyBool

```
public static boolean getXMLPropertyBool( javax.xml.xpath.XPath xpath,  
      String xpathStr,  
      org.w3c.dom.Element root,  
      boolean defaultVal)
```

Get a boolean int value pointed to by xpath or defaultVal if not found.

Parameters:

xpath - XPath interface
xpathStr - xpath string
root - node to start search
defaultVal - default value

Returns:

boolean value or defaultVal if not found

newXPathFactory

```
public static javax.xml.xpath.XPathFactory newXPathFactory()
```

(continued from last page)

Get a new XPath factory object. There is a bug in certain implementations of the Sun VM that forces an explicit creation of the "com.sun.org.apache.xpath.internal.jaxp.XPathFactoryImpl". This method will try the correct method for creation and if fails will directly create "com.sun.org.apache.xpath.internal.jaxp.XPathFactoryImpl" object.

Returns:XPathFactory or null if not found

getVersion

```
public static String getVersion(org.w3c.dom.Element root)
```

Given a Wowza XML file's root element, parse the version attribute

Parameters:

root

Returns:

version or "0" if not specified

com.wowza.util Class ZipUtils

java.lang.Object

└-com.wowza.util.ZipUtils

public class **ZipUtils**
extends Object

Constructor Summary

public	ZipUtils()
--------	----------------------------

Method Summary

static byte[]	toGzip (byte[] bytes)
---------------	---------------------------------------

static boolean	zipDirectory (String srcDir, String destDir, String zipFileName)
----------------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ZipUtils

public **ZipUtils**()

Methods

toGzip

public static byte[] **toGzip**(byte[] bytes)

zipDirectory

public static boolean **zipDirectory**(String srcDir,
String destDir,
String zipFileName)

Package

com.wowza.wms.amf

com.wowza.wms.amf

Class AMF3Utils

java.lang.Object

└─com.wowza.wms.amf.AMF3Utils

public class **AMF3Utils**
extends Object

AMF3 utilities

Constructor Summary

public	AMF3Utils()
--------	-----------------------------

Method Summary

static java.util.Date	deserializeDate (java.nio.ByteBuffer data) Deserialize date type
static int	deserializeInt (java.nio.ByteBuffer data) Deserialize int
static String	deserializeString (java.nio.ByteBuffer data) Deserialize string
static String	deserializeString (java.nio.ByteBuffer data, AMFDataContextDeserialize context) Deserialize string
static String	deserializeString (java.nio.ByteBuffer data, int utflen) Deserialize string
static int	serializeDate (java.io.DataOutputStream out, java.util.Date date) Serialize a date object
static int	serializeInt (java.io.DataOutputStream out, int val) Serialize int value
static int	serializeString (java.io.DataOutputStream out, String str) Serialize a string value
static int	serializeStringNoLength (java.io.DataOutputStream out, String str) Serialize string but do not write the length
static void	serializeZeroLengthString (java.io.DataOutputStream out) Serialize empty string

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

AMF3Utils

```
public AMF3Utils()
```

Methods

deserializeDate

```
public static java.util.Date deserializeDate(java.nio.ByteBuffer data)
```

Deserialize date type

Parameters:

data - buffer

Returns:

date

serializeDate

```
public static int serializeDate(java.io.DataOutputStream out,  
    java.util.Date date)
```

Serialize a date object

Parameters:

out - output stream

date - date

Returns:

number of bytes written

deserializeInt

```
public static int deserializeInt(java.nio.ByteBuffer data)
```

Deserialize int

Parameters:

data - buffer

Returns:

int value

serializeInt

```
public static int serializeInt(java.io.DataOutputStream out,  
    int val)
```

Serialize int value

Parameters:

(continued from last page)

out - output stream
val - int value

Returns:
number of bytes written

deserializeString

```
public static String deserializeString(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)  
    throws java.io.IOException
```

Deserialize string

Parameters:
data - data
context - AMF context

Returns:
string value

Throws:
IOException

deserializeString

```
public static String deserializeString(java.nio.ByteBuffer data)  
    throws java.io.IOException
```

Deserialize string

Parameters:
data - data

Returns:
string value

Throws:
IOException

deserializeString

```
public static String deserializeString(java.nio.ByteBuffer data,  
    int utfLen)  
    throws java.io.IOException
```

Deserialize string

Parameters:
data - data
utfLen - len of the string

Returns:
string value

Throws:
IOException

(continued from last page)

serializeZeroLengthString

```
public static void serializeZeroLengthString(java.io.DataOutputStream out)
```

Serialize empty string

Parameters:

out - output stream

serializeStringNoLength

```
public static int serializeStringNoLength(java.io.DataOutputStream out,  
String str)  
throws java.io.IOException
```

Serialize string but do not write the length

Parameters:

out - output stream
str - string value

Returns:

number of bytes written

Throws:

IOException

serializeString

```
public static int serializeString(java.io.DataOutputStream out,  
String str)  
throws java.io.IOException
```

Serialize a string value

Parameters:

out - output stream
str - string value

Returns:

number of bytes written

Throws:

IOException

com.wowza.wms.amf

Class AMFData

java.lang.Object

└-com.wowza.wms.amf.AMFData

Direct Known Subclasses:

[AMFDataObj](#), [AMFDataList](#), [AMFDataItem](#), [AMFDataByteArray](#), [AMFDataArray](#)

```
public abstract class AMFData
extends Object
```

Base abstract class for data in Action Message Format (AMF). Data is sent between the Flash client and the Wowza Streaming Engine using the AMF format. This class cannot be instantiated. It serves as the base class for all AMFData objects.

Field Summary	
public static	AMF_DEFAULT_DESERIALIZE_CHARSETNAME
public static final	AMF_LEVEL0 Value: 0
public static final	AMF_LEVEL3 Value: 3
public static final	DATA_TYPE_AMF3 Value: 17
public static final	DATA_TYPE_AMF3_ARRAY Value: 9
public static final	DATA_TYPE_AMF3_BOOLEAN_FALSE Value: 2
public static final	DATA_TYPE_AMF3_BOOLEAN_TRUE Value: 3
public static final	DATA_TYPE_AMF3_BYTEARRAY Value: 12
public static final	DATA_TYPE_AMF3_DATE Value: 8
public static final	DATA_TYPE_AMF3_INTEGER Value: 4

public static final	DATA_TYPE_AMF3_NULL Value: 1
public static final	DATA_TYPE_AMF3_NUMBER Value: 5
public static final	DATA_TYPE_AMF3_OBJECT Value: 10
public static final	DATA_TYPE_AMF3_STRING Value: 6
public static final	DATA_TYPE_AMF3_UNDEFINED Value: 0
public static final	DATA_TYPE_AMF3_XML_LEGACY Value: 7
public static final	DATA_TYPE_AMF3_XML_TOP Value: 11
public static final	DATA_TYPE_ARRAY Value: 10
public static final	DATA_TYPE_AS_OBJECT Value: 13
public static final	DATA_TYPE_BOOLEAN Value: 1
public static final	DATA_TYPE_BYTEARRAY Value: 33
public static final	DATA_TYPE_CUSTOM_CLASS Value: 16
public static final	DATA_TYPE_DATE Value: 11
public static final	DATA_TYPE_INTEGER Value: 32
public static final	DATA_TYPE_LONG_STRING Value: 12
public static final	DATA_TYPE_MIXED_ARRAY Value: 8

public static final	DATA_TYPE_MOVIE_CLIP Value: 4
public static final	DATA_TYPE_NULL Value: 5
public static final	DATA_TYPE_NUMBER Value: 0
public static final	DATA_TYPE_OBJECT Value: 3
public static final	DATA_TYPE_OBJECT_END Value: 9
public static final	DATA_TYPE_RECORDSET Value: 14
public static final	DATA_TYPE_REFERENCE_OBJECT Value: 7
public static final	DATA_TYPE_STRING Value: 2
public static final	DATA_TYPE_UNDEFINED Value: 6
public static final	DATA_TYPE_UNKNOWN Value: -1
public static final	DATA_TYPE_XML Value: 15
public static final	DATA_TYPE_XML_TOP Value: 34
public static final	MILLS_PER_HOUR Number of milliseconds in an hour Value: 60000
protected	type

Constructor Summary

public	AMFData()
--------	---------------------------

Method Summary

static AMFDataContextDeserialize	createContextDeserialize() Create an AMF3 deserialization context
static AMFDataContextDeserialize	createContextDeserialize(int objectEncoding) Create an AMF3 deserialization context
static AMFDataContextSerialize	createContextSerialize() Create an AMF3 serialization context
static AMFDataContextSerialize	createContextSerialize(int objectEncoding) Create an AMF3 serialization context
abstract void	deserialize(java.nio.ByteBuffer data) Deserialize data in byte buffer
abstract void	deserialize(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Deserialize data in byte buffer
static AMFData	deserializeInnerObject(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Deserialize next item
static AMFData	getReference(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Get AMF3 object reference
int	getType() Returns the data type for this object
abstract Object	getValue() Convert object to Java native class
static boolean	isAMF3Start(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Returns true if next byte in data is AMF3 start
static boolean	isArrayStart(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Returns true if next byte in data is an array start
static boolean	isByteArrayStart(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Returns true if next byte is ByteArray start
static boolean	isMixedArrayStart(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Returns true if next byte in data is mixed array start
static boolean	isObjEnd(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Returns true if next byte is object end
static boolean	isObjStart(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Returns true if next byte in data is object start
static int	peekByte(java.nio.ByteBuffer data) Return the next byte in the buffer without incrementing the data position

abstract byte[]	serialize() Serialize object to byte array
abstract byte[]	serialize(AMFDataContextSerialize context) Serialize object to byte array
abstract void	serialize(java.io.DataOutputStream out) Serialize object to output stream
abstract void	serialize(java.io.DataOutputStream out, AMFDataContextSerialize context) Serialize object to output stream
abstract void	serialize(java.io.DataOutputStream out, int objectEncoding) Serialize object to output stream
abstract byte[]	serialize(int objectEncoding) Serialize object to byte array
void	setType(int type) Sets the the data type for this object
static int	skipByte(java.nio.ByteBuffer data) Skip forward one byte in the byte buffer
static boolean	testNextByte(java.nio.ByteBuffer data, int test) Peek at the next value in data to see if its the test value
static boolean	triggerAMF3Switch(AMFData data) Return true if the object is serialized differently in AMF3

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

DATA_TYPE_UNKNOWN

```
public static final byte DATA_TYPE_UNKNOWN
```

Constant value: **-1**

DATA_TYPE_NUMBER

```
public static final byte DATA_TYPE_NUMBER
```

Constant value: **0**

DATA_TYPE_BOOLEAN

```
public static final byte DATA_TYPE_BOOLEAN
```

(continued from last page)

Constant value: **1**

DATA_TYPE_STRING

```
public static final byte DATA_TYPE_STRING
```

Constant value: **2**

DATA_TYPE_OBJECT

```
public static final byte DATA_TYPE_OBJECT
```

Constant value: **3**

DATA_TYPE_MOVIE_CLIP

```
public static final byte DATA_TYPE_MOVIE_CLIP
```

Constant value: **4**

DATA_TYPE_NULL

```
public static final byte DATA_TYPE_NULL
```

Constant value: **5**

DATA_TYPE_UNDEFINED

```
public static final byte DATA_TYPE_UNDEFINED
```

Constant value: **6**

DATA_TYPE_REFERENCE_OBJECT

```
public static final byte DATA_TYPE_REFERENCE_OBJECT
```

Constant value: **7**

DATA_TYPE_MIXED_ARRAY

```
public static final byte DATA_TYPE_MIXED_ARRAY
```

Constant value: **8**

DATA_TYPE_OBJECT_END

```
public static final byte DATA_TYPE_OBJECT_END
```

Constant value: **9**

(continued from last page)

DATA_TYPE_ARRAY

```
public static final byte DATA_TYPE_ARRAY
```

Constant value: 10

DATA_TYPE_DATE

```
public static final byte DATA_TYPE_DATE
```

Constant value: 11

DATA_TYPE_LONG_STRING

```
public static final byte DATA_TYPE_LONG_STRING
```

Constant value: 12

DATA_TYPE_AS_OBJECT

```
public static final byte DATA_TYPE_AS_OBJECT
```

Constant value: 13

DATA_TYPE_RECORDSET

```
public static final byte DATA_TYPE_RECORDSET
```

Constant value: 14

DATA_TYPE_XML

```
public static final byte DATA_TYPE_XML
```

Constant value: 15

DATA_TYPE_CUSTOM_CLASS

```
public static final byte DATA_TYPE_CUSTOM_CLASS
```

Constant value: 16

DATA_TYPE_AMF3

```
public static final byte DATA_TYPE_AMF3
```

Constant value: 17

DATA_TYPE_INTEGER

```
public static final byte DATA_TYPE_INTEGER
```

(continued from last page)

Constant value: **32**

DATA_TYPE_BYTEARRAY

```
public static final byte DATA_TYPE_BYTEARRAY
```

Constant value: **33**

DATA_TYPE_XML_TOP

```
public static final byte DATA_TYPE_XML_TOP
```

Constant value: **34**

DATA_TYPE_AMF3_UNDEFINED

```
public static final byte DATA_TYPE_AMF3_UNDEFINED
```

Constant value: **0**

DATA_TYPE_AMF3_NULL

```
public static final byte DATA_TYPE_AMF3_NULL
```

Constant value: **1**

DATA_TYPE_AMF3_BOOLEAN_FALSE

```
public static final byte DATA_TYPE_AMF3_BOOLEAN_FALSE
```

Constant value: **2**

DATA_TYPE_AMF3_BOOLEAN_TRUE

```
public static final byte DATA_TYPE_AMF3_BOOLEAN_TRUE
```

Constant value: **3**

DATA_TYPE_AMF3_INTEGER

```
public static final byte DATA_TYPE_AMF3_INTEGER
```

Constant value: **4**

DATA_TYPE_AMF3_NUMBER

```
public static final byte DATA_TYPE_AMF3_NUMBER
```

Constant value: **5**

DATA_TYPE_AMF3_STRING

```
public static final byte DATA_TYPE_AMF3_STRING
```

Constant value: 6

DATA_TYPE_AMF3_XML_LEGACY

```
public static final byte DATA_TYPE_AMF3_XML_LEGACY
```

Constant value: 7

DATA_TYPE_AMF3_DATE

```
public static final byte DATA_TYPE_AMF3_DATE
```

Constant value: 8

DATA_TYPE_AMF3_ARRAY

```
public static final byte DATA_TYPE_AMF3_ARRAY
```

Constant value: 9

DATA_TYPE_AMF3_OBJECT

```
public static final byte DATA_TYPE_AMF3_OBJECT
```

Constant value: 10

DATA_TYPE_AMF3_XML_TOP

```
public static final byte DATA_TYPE_AMF3_XML_TOP
```

Constant value: 11

DATA_TYPE_AMF3_BYTEARRAY

```
public static final byte DATA_TYPE_AMF3_BYTEARRAY
```

Constant value: 12

AMF_LEVEL0

```
public static final byte AMF_LEVEL0
```

Constant value: 0

(continued from last page)

AMF_LEVEL3

```
public static final byte AMF_LEVEL3
```

Constant value: **3**

AMF_DEFAULT_DESERIALIZE_CHARSETNAME

```
public static java.lang.String AMF_DEFAULT_DESERIALIZE_CHARSETNAME
```

MILLS_PER_HOUR

```
public static final int MILLS_PER_HOUR
```

Number of milliseconds in an hour

Constant value: **60000**

type

```
protected int type
```

Constructors

AMFData

```
public AMFData()
```

Methods

getType

```
public int getType()
```

Returns the data type for this object

Returns:

object type DATA_TYPE_*

setType

```
public void setType(int type)
```

Sets the the data type for this object

Parameters:

type - type DATA_TYPE_*

testNextByte

```
public static boolean testNextByte(java.nio.ByteBuffer data,  
int test)
```

(continued from last page)

Peek at the next value in data to see if its the test value

Parameters:

data - binary data being deserialized
test - value being tested

Returns:

return true if the next byte in the buffer equals the test value

peekByte

```
public static int peekByte(java.nio.ByteBuffer data)
```

Return the next byte in the buffer without incrementing the data position

Parameters:

data - binary data being deserialized

Returns:

next byte in buffer

skipByte

```
public static int skipByte(java.nio.ByteBuffer data)
```

Skip forward one byte in the byte buffer

Parameters:

data - binary data being deserialized

Returns:

next byte in buffer

isObjStart

```
public static boolean isObjStart(java.nio.ByteBuffer data,  
AMFDataContextDeserialize context)
```

Returns true if next byte in data is object start

Parameters:

data - binary data being deserialized
context - deserialization context

Returns:

Returns true if next byte in data is object start

isAMF3Start

```
public static boolean isAMF3Start(java.nio.ByteBuffer data,  
AMFDataContextDeserialize context)
```

Returns true if next byte in data is AMF3 start

Parameters:

data - binary data being deserialized
context - deserialization context

(continued from last page)

Returns:

Returns true if next byte in data is object start

isArrayStart

```
public static boolean isArrayStart(java.nio.ByteBuffer data,  
AMFDataContextDeserialize context)
```

Returns true if next byte in data is an array start

Parameters:

data - binary data being deserialized
context - deserialization context

Returns:

Returns true if next byte in data is and array start

isMixedArrayStart

```
public static boolean isMixedArrayStart(java.nio.ByteBuffer data,  
AMFDataContextDeserialize context)
```

Returns true if next byte in data is mixed array start

Parameters:

data - binary data being deserialized
context - deserialization context

Returns:

Returns true if next byte in data is mixed array start

isObjEnd

```
public static boolean isObjEnd(java.nio.ByteBuffer data,  
AMFDataContextDeserialize context)
```

Returns true if next byte is object end

Parameters:

data - binary data being deserialized
context - deserialization context

Returns:

Returns true if next byte in object end

isByteArrayStart

```
public static boolean isByteArrayStart(java.nio.ByteBuffer data,  
AMFDataContextDeserialize context)
```

Returns true if next byte is ByteArray start

Parameters:

data - binary data being deserialized
context - deserialization context

Returns:

true if next byte in object end

getReference

```
public static AMFData getReference(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Get AMF3 object reference

Parameters:

data - binary data being deserialized
context - deserialization context

Returns:

null if not a reference else referenced object

deserializeInnerObject

```
public static AMFData deserializeInnerObject(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)  
throws java.io.IOException
```

Deserialize next item

Parameters:

data - binary data being deserialized
context - deserialization context

Returns:

deserialized object

Throws:

IOException

createContextSerialize

```
public static AMFDataContextSerialize createContextSerialize()
```

Create an AMF3 serialization context

Returns:

AMF3 serialization context

createContextSerialize

```
public static AMFDataContextSerialize createContextSerialize(int objectEncoding)
```

Create an AMF3 serialization context

Parameters:

objectEncoding - object encoding level (see AMF_LEVEL*)

Returns:

AMF3 serialization context

createContextDeserialize

```
public static AMFDataContextDeserialize createContextDeserialize()
```

Create an AMF3 deserialization context

(continued from last page)

Returns:

AMF3 deserialization context

createContextDeserialize

```
public static AMFDataContextDeserialize createContextDeserialize(int objectEncoding)
```

Create an AMF3 deserialization context

Parameters:

objectEncoding - object encoding level (see AMF_LEVEL*)

Returns:

AMF3 deserialization context

serialize

```
public abstract void serialize(java.io.DataOutputStream out)
```

Serialize object to output stream

Parameters:

out - Output stream

serialize

```
public abstract void serialize(java.io.DataOutputStream out,  
int objectEncoding)
```

Serialize object to output stream

Parameters:

out - Output stream

objectEncoding - object encoding level (see AMF_LEVEL*)

serialize

```
public abstract void serialize(java.io.DataOutputStream out,  
AMFDataContextSerialize context)
```

Serialize object to output stream

Parameters:

out - Output stream

context - serialization context used by AMF3

serialize

```
public abstract byte[] serialize()
```

Serial object to byte array

Returns:

serialized byte array

(continued from last page)

serialize

```
public abstract byte[] serialize(int objectEncoding)
```

Serial object to byte array

Parameters:

objectEncoding - object encoding level (see AMF_LEVEL*)

Returns:

serialized byte array

serialize

```
public abstract byte[] serialize(AMFDataContextSerialize context)
```

Serial object to byte array

Parameters:

context - serialization context used by AMF3

Returns:

serialized byte array

deserialize

```
public abstract void deserialize(java.nio.ByteBuffer data)
```

Deserialize data in byte buffer

Parameters:

data - binary data

deserialize

```
public abstract void deserialize(java.nio.ByteBuffer data,  
AMFDataContextDeserialize context)
```

Deserialize data in byte buffer

Parameters:

data - binary data

context - deserialization context used by AMF3

getValue

```
public abstract Object getValue()
```

Convert object to Java native class

Returns:

java native class

triggerAMF3Switch

```
public static boolean triggerAMF3Switch(AMFData data)
```

Return true if the object is serialized differently in AMF3

(continued from last page)

Parameters:

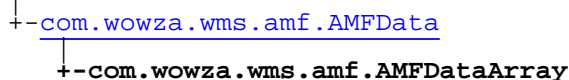
data - AMF object

Returns:

true if the object is serialized differently in AMF3

com.wowza.wms.amf Class AMFDataArray

java.lang.Object



```
public class AMFDataArray
extends AMFData
```

AMFDataArray: class for marshalling data between Wowza Pro server and Flash client. This class is a simple ordered array of items.

Create Array of Strings

```
AMFDataArray amfDataArray = new AMFDataArray();

amfDataArray.add("item1");
amfDataArray.add("item2");
amfDataArray.add("item3");
```

Iterate Items In Array

```
AMFDataArray amfDataArray;

for(int i=0;i<amfDataArray.size();i++)
{
    AMFData amfData = amfDataArray.get(i);
    WMSLoggerFactory.getLogger(null).debug("amfData.getType(): "+amfData.getType());
}
```

NOTE: There is a slight difference between this class and AMFDataList. This class when serialized/deserialized does include the DATA_TYPE_ARRAY header (byte) and array size (int).

NOTE: Simple arrays created in the Flash player client and sent to the Wowza Pro server are of type [AMFDataMixedArray](#).

Fields inherited from class [com.wowza.wms.amf.AMFData](#)

[AMF_DEFAULT_DESERIALIZE_CHARSETNAME](#), [AMF_LEVEL0](#), [AMF_LEVEL3](#), [DATA_TYPE_AMF3](#), [DATA_TYPE_AMF3_ARRAY](#), [DATA_TYPE_AMF3_BOOLEAN_FALSE](#), [DATA_TYPE_AMF3_BOOLEAN_TRUE](#), [DATA_TYPE_AMF3_BYTEARRAY](#), [DATA_TYPE_AMF3_DATE](#), [DATA_TYPE_AMF3_INTEGER](#), [DATA_TYPE_AMF3_NULL](#), [DATA_TYPE_AMF3_NUMBER](#), [DATA_TYPE_AMF3_OBJECT](#), [DATA_TYPE_AMF3_STRING](#), [DATA_TYPE_AMF3_UNDEFINED](#), [DATA_TYPE_AMF3_XML_LEGACY](#), [DATA_TYPE_AMF3_XML_TOP](#), [DATA_TYPE_ARRAY](#), [DATA_TYPE_AS_OBJECT](#), [DATA_TYPE_BOOLEAN](#), [DATA_TYPE_BYTEARRAY](#), [DATA_TYPE_CUSTOM_CLASS](#), [DATA_TYPE_DATE](#), [DATA_TYPE_INTEGER](#), [DATA_TYPE_LONG_STRING](#), [DATA_TYPE_MIXED_ARRAY](#), [DATA_TYPE_MOVIE_CLIP](#), [DATA_TYPE_NULL](#), [DATA_TYPE_NUMBER](#), [DATA_TYPE_OBJECT](#), [DATA_TYPE_OBJECT_END](#), [DATA_TYPE_RECORDSET](#), [DATA_TYPE_REFERENCE_OBJECT](#), [DATA_TYPE_STRING](#), [DATA_TYPE_UNDEFINED](#), [DATA_TYPE_UNKNOWN](#), [DATA_TYPE_XML](#), [DATA_TYPE_XML_TOP](#), [MILLS_PER_HOUR](#), [type](#)

Constructor Summary

public	AMFDataArray () Create empty AMFDataArray object
public	AMFDataArray (byte[] data) Deserialize entire data array and create AMFDataArray object
public	AMFDataArray (byte[] data, int offset, int size) Deserialize data array starting at offset for size bytes and create AMFDataArray object
public	AMFDataArray (java.nio.ByteBuffer data) Deserialize entire data array and create AMFDataArray object
public	AMFDataArray (java.nio.ByteBuffer data, AMFDataContextDeserialize context)

Method Summary

void	add (AMFData data) Append a new item onto the array
void	add (boolean data) Append a boolean (will be wrapped in an AMFDataItem object)
void	add (java.util.Date data) Append a date (will be wrapped in an AMFDataItem object)
void	add (double data) Append a double (will be wrapped in an AMFDataItem object)
void	add (int data) Append a int (will be wrapped in an AMFDataItem object)
void	add (int index, AMFData data) Insert an item into the array
void	add (int index, boolean data) Insert a boolean value (will be wrapped in an AMFDataItem object)
void	add (int index, java.util.Date data) Insert a date value (will be wrapped in an AMFDataItem object)
void	add (int index, double data) Insert a double value (will be wrapped in an AMFDataItem object)

void	add (int index, int data) Insert a int value (will be wrapped in an AMFDataItem object)
void	add (int index, long data) Insert a long value (will be wrapped in an AMFDataItem object)
void	add (int index, String data) Insert a string value (will be wrapped in an AMFDataItem object)
void	add (long data) Append a long (will be wrapped in an AMFDataItem object)
void	add (String data) Append a string (will be wrapped in an AMFDataItem object)
void	deserialize (java.nio.ByteBuffer data)
void	deserialize (java.nio.ByteBuffer data, AMFDataContextDeserialize context)
AMFData	get (int index) Get item at index
boolean	getBoolean (int index) Get item at index return as boolean
byte	getBytes (int index) Get item at index return as byte
java.util.Date	getDate (int index) Get item at index return as Date
double	getDouble (int index) Get item at index return as double
float	getFloat (int index) Get item at index return as float
int	getInt (int index) Get item at index return as int
long	getLong (int index) Get item at index return as long
AMFDataObj	getObject (int index) Get item at index return as AMFDataObj
short	getShort (int index) Get item at index return as short
String	getString (int index) Get item at index return as String
Object	getValue ()
AMFData	remove (int index) Remove an item from the array

byte[]	serialize()
byte[]	serialize (AMFDataContextSerialize context)
void	serialize (java.io.DataOutputStream out)
void	serialize (java.io.DataOutputStream out, AMFDataContextSerialize context)
void	serialize (java.io.DataOutputStream out, int objectEncoding)
byte[]	serialize (int objectEncoding)
void	set (int index, AMFData data) Set an array item
void	set (int index, boolean data) Set a boolean value (will be wrapped in an AMFDataItem object)
void	set (int index, java.util.Date data) Set a date value (will be wrapped in an AMFDataItem object)
void	set (int index, double data) Set a double value (will be wrapped in an AMFDataItem object)
void	set (int index, int data) Set an int value (will be wrapped in an AMFDataItem object)
void	set (int index, long data) Set a long value (will be wrapped in an AMFDataItem object)
void	set (int index, String data) Set a string value (will be wrapped in an AMFDataItem object)
int	size () Returns the number of items in array
String	toString () Return object as formatted string

Methods inherited from class [com.wowza.wms.amf.AMFData](#)

[createContextDeserialize](#), [createContextDeserialize](#), [createContextSerialize](#), [createContextSerialize](#), [deserialize](#), [deserialize](#), [deserializeInnerObject](#), [getReference](#), [getType](#), [getValue](#), [isAMF3Start](#), [isArrayStart](#), [isByteArrayStart](#), [isMixedArrayStart](#), [isObjEnd](#), [isObjStart](#), [peekByte](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [setType](#), [skipByte](#), [testNextByte](#), [triggerAMF3Switch](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

(continued from last page)

AMFDataArray

```
public AMFDataArray()
```

Create empty AMFDataArray object

AMFDataArray

```
public AMFDataArray(byte[] data)
```

Deserialize entire data array and create AMFDataArray object

Parameters:

data - binary data

AMFDataArray

```
public AMFDataArray(byte[] data,  
                    int offset,  
                    int size)
```

Deserialize data array starting at offset for size bytes and create AMFDataArray object

Parameters:

data - binary data

offset - starting offset into data

size - size of data to deserialize

AMFDataArray

```
public AMFDataArray(java.nio.ByteBuffer data)
```

Deserialize entire data array and create AMFDataArray object

Parameters:

data - binary data

AMFDataArray

```
public AMFDataArray(java.nio.ByteBuffer data,  
                   AMFDataContextDeserialize context)
```

Methods

remove

```
public AMFData remove(int index)
```

Remove an item from the array

Parameters:

index - index

Returns:

delete item or null if not found

size

```
public int size()
```

Returns the number of items in array

Returns:

number of items in array

add

```
public void add(AMFData data)
```

Append a new item onto the array

Parameters:

data - AMFData object

add

```
public void add(String data)
```

Append a string (will be wrapped in an AMFDataItem object)

Parameters:

data - string value

add

```
public void add(double data)
```

Append a double (will be wrapped in an AMFDataItem object)

Parameters:

data - double value

add

```
public void add(int data)
```

Append a int (will be wrapped in an AMFDataItem object)

Parameters:

data - int value

add

```
public void add(long data)
```

Append a long (will be wrapped in an AMFDataItem object)

Parameters:

data - long value

add

```
public void add(java.util.Date data)
```

(continued from last page)

Append a date (will be wrapped in an AMFDataItem object)

Parameters:

data - date value

add

```
public void add(boolean data)
```

Append a boolean (will be wrapped in an AMFDataItem object)

Parameters:

data - boolean value

add

```
public void add(int index,  
               AMFData data)
```

Insert an item into the array

Parameters:

index - index

data - AMFData object

add

```
public void add(int index,  
               String data)
```

Insert a string value (will be wrapped in an AMFDataItem object)

Parameters:

index - index

data - string value

add

```
public void add(int index,  
               double data)
```

Insert a double value (will be wrapped in an AMFDataItem object)

Parameters:

index - index

data - double value

add

```
public void add(int index,  
               int data)
```

Insert a int value (will be wrapped in an AMFDataItem object)

Parameters:

index - index

data - int value

add

```
public void add(int index,  
                long data)
```

Insert a long value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - long value

add

```
public void add(int index,  
                java.util.Date data)
```

Insert a date value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - date value

add

```
public void add(int index,  
                boolean data)
```

Insert a boolean value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - boolean value

set

```
public void set(int index,  
                AMFData data)
```

Set an array item

Parameters:

index - index
data - AMFData object

set

```
public void set(int index,  
                String data)
```

Set a string value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - string value

set

```
public void set(int index,  
                double data)
```

(continued from last page)

Set an double value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - double value

set

```
public void set(int index,  
               int data)
```

Set an int value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - int value

set

```
public void set(int index,  
               long data)
```

Set an long value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - long value

set

```
public void set(int index,  
               java.util.Date data)
```

Set an date value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - date value

set

```
public void set(int index,  
               boolean data)
```

Set an boolean value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - boolean value

get

```
public AMFData get(int index)
```

Get item at index

Parameters:

index

(continued from last page)

Returns:

Returns AMFData object or null if out of bounds

getString

```
public String getString(int index)
```

Get item at index return as String

Parameters:

index

Returns:

Return item as String or null if out of bounds

getInt

```
public int getInt(int index)
```

Get item at index return as int

Parameters:

index

Returns:

Return item as int or 0 if out of bounds

getLong

```
public long getLong(int index)
```

Get item at index return as long

Parameters:

index

Returns:

Return item as long or 0 if out of bounds

getShort

```
public short getShort(int index)
```

Get item at index return as short

Parameters:

index

Returns:

Return item as short or 0 if out of bounds

getBytes

```
public byte getBytes(int index)
```

Get item at index return as byte

Parameters:

(continued from last page)

index

Returns:

Return item as byte or 0 if out of bounds

getBoolean

```
public boolean getBoolean(int index)
```

Get item at index return as boolean

Parameters:

index

Returns:

Return item as boolean or false if out of bounds

getDate

```
public java.util.Date getDate(int index)
```

Get item at index return as Date

Parameters:

index

Returns:

Return item as Date or null if out of bounds

getObject

```
public AMFDataObj getObject(int index)
```

Get item at index return as AMFDataObj

Parameters:

index

Returns:

Return item as AMFDataObj or null if out of bounds

getDouble

```
public double getDouble(int index)
```

Get item at index return as double

Parameters:

index

Returns:

Return item as double or 0 if out of bounds

getFloat

```
public float getFloat(int index)
```

Get item at index return as float

(continued from last page)

Parameters:

index

Returns:

Return item as float or 0 if out of bounds

deserialize

```
public void deserialize(java.nio.ByteBuffer data)
```

Deserialize data in byte buffer

deserialize

```
public void deserialize(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Deserialize data in byte buffer

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    int objectEncoding)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    AMFDataContextSerialize context)
```

Serialize object to output stream

serialize

```
public byte[] serialize()
```

Serial object to byte array

serialize

```
public byte[] serialize(int objectEncoding)
```

Serial object to byte array

serialize

```
public byte[] serialize(AMFDataContextSerialize context)
```

Serial object to byte array

(continued from last page)

getValue

```
public Object getValue()
```

Convert object to Java native class

toString

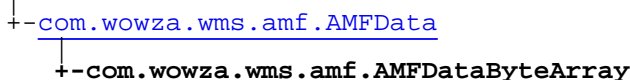
```
public String toString()
```

Return object as formatted string

com.wowza.wms.amf

Class AMFDataByteArray

java.lang.Object



```

public class AMFDataByteArray
extends AMFData
  
```

AMFDataByteArray: class for marshalling data between Wowza Pro server and Flash client. This class is a simple byte array.

Fields inherited from class [com.wowza.wms.amf.AMFData](#)

[AMF_DEFAULT_DESERIALIZE_CHARSETNAME](#), [AMF_LEVEL0](#), [AMF_LEVEL3](#), [DATA_TYPE_AMF3](#), [DATA_TYPE_AMF3_ARRAY](#), [DATA_TYPE_AMF3_BOOLEAN_FALSE](#), [DATA_TYPE_AMF3_BOOLEAN_TRUE](#), [DATA_TYPE_AMF3_BYTEARRAY](#), [DATA_TYPE_AMF3_DATE](#), [DATA_TYPE_AMF3_INTEGER](#), [DATA_TYPE_AMF3_NULL](#), [DATA_TYPE_AMF3_NUMBER](#), [DATA_TYPE_AMF3_OBJECT](#), [DATA_TYPE_AMF3_STRING](#), [DATA_TYPE_AMF3_UNDEFINED](#), [DATA_TYPE_AMF3_XML_LEGACY](#), [DATA_TYPE_AMF3_XML_TOP](#), [DATA_TYPE_ARRAY](#), [DATA_TYPE_AS_OBJECT](#), [DATA_TYPE_BOOLEAN](#), [DATA_TYPE_BYTEARRAY](#), [DATA_TYPE_CUSTOM_CLASS](#), [DATA_TYPE_DATE](#), [DATA_TYPE_INTEGER](#), [DATA_TYPE_LONG_STRING](#), [DATA_TYPE_MIXED_ARRAY](#), [DATA_TYPE_MOVIE_CLIP](#), [DATA_TYPE_NULL](#), [DATA_TYPE_NUMBER](#), [DATA_TYPE_OBJECT](#), [DATA_TYPE_OBJECT_END](#), [DATA_TYPE_RECORDSET](#), [DATA_TYPE_REFERENCE_OBJECT](#), [DATA_TYPE_STRING](#), [DATA_TYPE_UNDEFINED](#), [DATA_TYPE_UNKNOWN](#), [DATA_TYPE_XML](#), [DATA_TYPE_XML_TOP](#), [MILLS_PER_HOUR](#), [type](#)

Constructor Summary

public	AMFDataByteArray() Create empty AMFDataByteArray object
public	AMFDataByteArray(byte[] data) Deserialize entire byte array and create AMFDataByteArray object.
public	AMFDataByteArray(byte[] data, int offset, int size) Deserialize data array starting at offset for size bytes and create AMFDataByteArray object.
public	AMFDataByteArray(java.nio.ByteBuffer data) Deserialize entire data array and create AMFDataByteArray object.
public	AMFDataByteArray(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Deserialize entire data array and create AMFDataByteArray object.

Method Summary

int	compress() Compress the internal buffer using the ZLIB compression library
int	decompress() Decompress the internal buffer using the ZLIB compression library

void	deserialize (java.nio.ByteBuffer data)
void	deserialize (java.nio.ByteBuffer data, AMFDataContextDeserialize context)
Object	getValue () Returns the underlying byte[] data buffer
byte[]	serialize ()
byte[]	serialize (AMFDataContextSerialize context)
void	serialize (java.io.DataOutputStream out)
void	serialize (java.io.DataOutputStream out, AMFDataContextSerialize context)
void	serialize (java.io.DataOutputStream out, int objectEncoding)
byte[]	serialize (int objectEncoding)
int	size () Returns the number of bytes in the byte array
byte[]	toArray () Returns the underlying data buffer (not a copy)
java.nio.ByteBuffer	toByteBuffer () Wraps the underlying data buffer with a ByteBuffer object.
String	toString () Return object as formatted string
static AMFDataByteArray	wrap (byte[] data) Wraps a byte[] into a AMFDataByteArray.
static AMFDataByteArray	wrap (java.nio.ByteBuffer data) Wraps a ByteBuffer into a AMFDataByteArray.

Methods inherited from class [com.wowza.wms.amf.AMFData](#)

[createContextDeserialize](#), [createContextDeserialize](#), [createContextSerialize](#), [createContextSerialize](#), [deserialize](#), [deserialize](#), [deserializeInnerObject](#), [getReference](#), [getType](#), [getValue](#), [isAMF3Start](#), [isArrayStart](#), [isByteArrayStart](#), [isMixedArrayStart](#), [isObjEnd](#), [isObjStart](#), [peekByte](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [setType](#), [skipByte](#), [testNextByte](#), [triggerAMF3Switch](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

(continued from last page)

AMFDataByteArray

```
public AMFDataByteArray()
```

Create empty AMFDataByteArray object

AMFDataByteArray

```
public AMFDataByteArray(byte[] data)
```

Deserialize entire byte array and create AMFDataByteArray object. Note: This is for AMF3 deserialization and cannot be used to create an AMFDataByteArray with the passed in data. To create a new AMDDDataByteArray from either a byte[] or ByteBuffer, use the static wrap method.

Parameters:

data - binary data

AMFDataByteArray

```
public AMFDataByteArray(byte[] data,  
                        int offset,  
                        int size)
```

Deserialize data array starting at offset for size bytes and create AMFDataByteArray object. Note: This is for AMF3 deserialization and cannot be used to create an AMFDataByteArray with the passed in data. To create a new AMDDDataByteArray from either a byte[] or ByteBuffer, use the static wrap method.

Parameters:

data - binary data

offset - starting offset into data

size - size of data to deserialize

AMFDataByteArray

```
public AMFDataByteArray(java.nio.ByteBuffer data)
```

Deserialize entire data array and create AMFDataByteArray object. Note: This is for AMF3 deserialization and cannot be used to create an AMFDataByteArray with the passed in data. To create a new AMDDDataByteArray from either a byte[] or ByteBuffer, use the static wrap method.

Parameters:

data - binary data

AMFDataByteArray

```
public AMFDataByteArray(java.nio.ByteBuffer data,  
                        AMFDataContextDeserialize context)
```

Deserialize entire data array and create AMFDataByteArray object. Note: This is for AMF3 deserialization and cannot be used to create an AMFDataByteArray with the passed in data. To create a new AMDDDataByteArray from either a byte[] or ByteBuffer, use the static wrap method.

Parameters:

data - binary data

context - deserialization context (used for AMF3 decoding)

Methods

(continued from last page)

size

```
public int size()
```

Returns the number of bytes in the byte array

Returns:

number of bytes in the array

toArray

```
public byte[] toArray()
```

Returns the underlying data buffer (not a copy)

Returns:

data buffer (not a copy)

toByteBuffer

```
public java.nio.ByteBuffer toByteBuffer()
```

Wraps the underlying data buffer with a ByteBuffer object.

Returns:

byte[] wrapped as ByteBuffer

wrap

```
public static AMFDataByteArray wrap(byte[] data)
```

Wraps a byte[] into a AMFDataByteArray. Note: This method does not copy the array.

Parameters:

data - byte[] data

Returns:

wrapped byte[]

wrap

```
public static AMFDataByteArray wrap(java.nio.ByteBuffer data)
```

Wraps a ByteBuffer into a AMFDataByteArray. Note: This method only copies the ByteBuffer data if the ByteBuffer.array() method fails.

Parameters:

data - ByteBuffer data

Returns:

wrapped ByteBuffer

getValue

```
public Object getValue()
```

Returns the underlying byte[] data buffer

deserialize

```
public void deserialize(java.nio.ByteBuffer data)
```

Deserialize data in byte buffer

deserialize

```
public void deserialize(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Deserialize data in byte buffer

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    int objectEncoding)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    AMFDataContextSerialize context)
```

Serialize object to output stream

serialize

```
public byte[] serialize()
```

Serial object to byte array

serialize

```
public byte[] serialize(int objectEncoding)
```

Serial object to byte array

serialize

```
public byte[] serialize(AMFDataContextSerialize context)
```

Serial object to byte array

compress

```
public int compress()
```

Compress the internal buffer using the ZLIB compression library

Returns:

(continued from last page)

size of compressed buffer

decompress

```
public int decompress()
```

Decompress the internal buffer using the ZLIB compression library

Returns:

size of decompressed buffer

toString

```
public String toString()
```

Return object as formatted string

com.wowza.wms.amf

Class AMFDataContextDeserialize

java.lang.Object

└─com.wowza.wms.amf.AMFDataContextDeserialize

```
public class AMFDataContextDeserialize
extends Object
```

AMF context used for deserialization

Constructor Summary

public	AMFDataContextDeserialize() Constructor
public	AMFDataContextDeserialize(int objectEncoding) Constructor with encoding

Method Summary

void	addObject(Object obj) Add an object to the object cache
void	addString(String str) Add a string to the string cache
void	addTrait(AMFDataTrait obj) Add a trait to the trait cache
int	clearIntData() Internal use, get and clear int data
String	getCharsetName() Get charset name used to deserialize strings (default is AMFData.AMF_DEFAULT_DESERIALIZE_CHARSETNAME = UTF-8)
int	getIntData() Internal use, get int data
Object	getObject(int index) Get an object from the object cache
int	getObjectEncoding() Get object encoding, see AMFData.AMF_LEVEL*
String	getString(int index) Get a string from the string cache
AMFDataTrait	getTrait(int index) Get a trait from the trait cache
boolean	isAMF0() Is context AMF0

boolean	isAMF3() Is context AMF3
boolean	isIntData() Internal use, get int data
void	setCharsetName(String charsetName) Set charset name used to deserialize strings (default is AMFData.AMF_DEFAULT_DESERIALIZE_CHARSETNAME = UTF-8)
void	setIntData(int intData) Internal use, set int data
void	setObjectEncoding(int objectEncoding) Set object encoding, see AMFData.AMF_LEVEL*

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

AMFDataContextDeserialize

```
public AMFDataContextDeserialize()
```

Constructor

AMFDataContextDeserialize

```
public AMFDataContextDeserialize(int objectEncoding)
```

Constructor with encoding

Parameters:

objectEncoding - object encoding, see AMFData.AMF_LEVEL*

Methods

isIntData

```
public boolean isIntData()
```

Internal use, get int data

Returns:

returns true if pending int data

setIntData

```
public void setIntData(int intData)
```

Internal use, set int data

Parameters:

(continued from last page)

intData - int data

getIntData

```
public int getIntData()
```

Internal use, get int data

Returns:

int data

clearIntData

```
public int clearIntData()
```

Internal use, get and clear int data

Returns:

int data

getObjectEncoding

```
public int getObjectEncoding()
```

Get object encoding, see AMFData.AMF_LEVEL*

Returns:

object encoding, see AMFData.AMF_LEVEL*

setObjectEncoding

```
public void setObjectEncoding(int objectEncoding)
```

Set object encoding, see AMFData.AMF_LEVEL*

Parameters:

objectEncoding - object encoding, see AMFData.AMF_LEVEL*

isAMF3

```
public boolean isAMF3()
```

Is context AMF3

Returns:

true, if AMF3

isAMF0

```
public boolean isAMF0()
```

Is context AMF0

Returns:

true, if AMF0

(continued from last page)

addString

```
public void addString(String str)
```

Add a string to the string cache

Parameters:

str - string value

getString

```
public String getString(int index)  
throws IndexOutOfBoundsException
```

Get a string from the string cache

Parameters:

index - index

Returns:

string value

Throws:

IndexOutOfBoundsException

addObject

```
public void addObject(Object obj)
```

Add an object to the object cache

Parameters:

obj - object value

getObject

```
public Object getObject(int index)  
throws IndexOutOfBoundsException
```

Get an object from the object cache

Parameters:

index - index

Returns:

object value

Throws:

IndexOutOfBoundsException

addTrait

```
public void addTrait(AMFDataTrait obj)
```

Add a trait to the trait cache

Parameters:

obj - trait object

getTrait

```
public AMFDataTrait getTrait(int index)  
    throws IndexOutOfBoundsException
```

Get a trait from the trait cache

Parameters:

index - index

Returns:

trait object

Throws:

[IndexOutOfBoundsException](#)

getCharsetName

```
public String getCharsetName()
```

Get charset name used to deserialize strings (default is `AMFData.AMF_DEFAULT_DESERIALIZE_CHARSETNAME = UTF-8`)

Returns:

charset name used to decode/encode strings

setCharsetName

```
public void setCharsetName(String charsetName)
```

Set charset name used to deserialize strings (default is `AMFData.AMF_DEFAULT_DESERIALIZE_CHARSETNAME = UTF-8`)

Parameters:

charsetName - charset name used to decode/encode strings

com.wowza.wms.amf Class AMFDataContextSerialize

java.lang.Object

└-com.wowza.wms.amf.AMFDataContextSerialize

```
public class AMFDataContextSerialize
extends Object
```

AMF context used for serialization

Constructor Summary

public	AMFDataContextSerialize() Constructor
public	AMFDataContextSerialize(int objectEncoding) Constructor with object encoding, see AMFData.AMF_LEVEL*

Method Summary

int	getObjectEncoding() Get object encoding, see AMFData.AMF_LEVEL*
int	getObjectReference(Object obj) Get index of object in object cache
int	getStringReference(String str) Get index of string item in string cache
int	getTargetEncoding() Get target encoding, see AMFData.AMF_LEVEL*
int	getTraitReference(AMFDataTrait obj) Get index of trait object in trait cache
boolean	isAMF0() Is context AMF0
boolean	isAMF3() Is context AMF3
void	setObjectEncoding(int objectEncoding) Set object encoding, see AMFData.AMF_LEVEL*
void	setTargetEncoding(int targetEncoding) Set target encoding, , see AMFData.AMF_LEVEL*
void	writeString(java.io.DataOutputStream out, String str) Write a stream to the output buffer

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Constructors

AMFDataContextSerialize

```
public AMFDataContextSerialize()
```

Constructor

AMFDataContextSerialize

```
public AMFDataContextSerialize(int objectEncoding)
```

Constructor with object encoding, see AMFData.AMF_LEVEL*

Parameters:

objectEncoding - object encoding, see AMFData.AMF_LEVEL*

Methods

getObjectEncoding

```
public int getObjectEncoding()
```

Get object encoding, see AMFData.AMF_LEVEL*

Returns:

object encoding, see AMFData.AMF_LEVEL*

setObjectEncoding

```
public void setObjectEncoding(int objectEncoding)
```

Set object encoding, see AMFData.AMF_LEVEL*

Parameters:

objectEncoding - object encoding, see AMFData.AMF_LEVEL*

getTargetEncoding

```
public int getTargetEncoding()
```

Get target encoding, see AMFData.AMF_LEVEL*

Returns:

target encoding, see AMFData.AMF_LEVEL*

setTargetEncoding

```
public void setTargetEncoding(int targetEncoding)
```

Set target encoding, , see AMFData.AMF_LEVEL*

(continued from last page)

Parameters:

targetEncoding - target encoding, , see AMFData.AMF_LEVEL*

isAMF3public boolean **isAMF3**()

Is context AMF3

Returns:true, if AMF3

isAMF0public boolean **isAMF0**()

Is context AMF0

Returns:true, if AMF0

getStringReferencepublic int **getStringReference**(String str)

Get index of string item in string cache

Parameters:

str - string value

Returns:index

getObjectReferencepublic int **getObjectReference**(Object obj)

Get index of object in object cache

Parameters:

obj - object value

Returns:index

getTraitReferencepublic int **getTraitReference**([AMFDataTrait](#) obj)

Get index of trait object in trait cache

Parameters:

obj - trait object

Returns:index

(continued from last page)

writeString

```
public void writeString(java.io.DataOutputStream out,  
    String str)
```

Write a stream to the output buffer

Parameters:

out - output buffer

str - string value

com.wowza.wms.amf Class AMFDataItem

```
java.lang.Object
  |
  +- com.wowza.wms.amf.AMFData
      |
      +- com.wowza.wms.amf.AMFDataItem
```

```
public class AMFDataItem
extends AMFData
```

AMFDataItem: class for marshalling data between Wowza Pro server and Flash client. The type wraps native Java data types.

- DATA_TYPE_NUMBER = int, long, short, double, float
- DATA_TYPE_STRING = String
- DATA_TYPE_BOOLEAN = boolean
- DATA_TYPE_DATE = Date
- DATA_TYPE_NULL = 'null'

Create Native Java Types

```
AMFDataItem amfDataString = new AMFDataItem("here is my string"); // String
AMFDataItem amfDataLong = new AMFDataItem(1234L); // long
AMFDataItem amfDataDouble = new AMFDataItem(1.234); // double
AMFDataItem amfDataBoolean = new AMFDataItem(true); // boolean
AMFDataItem amfDataNull = new AMFDataItem(); // null
```

Get Native Java Types

```
String dataString = amfDataString.getType()==AMFData.DATA_TYPE_LONG_STRING?
    amfDataString.toString():"";

long dataLong = amfDataLong.getType()==AMFData.DATA_TYPE_NUMBER?
    amfDataLong.longValue():0;

double dataDouble = amfDataDouble.getType()==AMFData.DATA_TYPE_NUMBER?
    amfDataLong.doubleValue():0.0;

boolean dataBoolean = amfDataBoolean.getType()==AMFData.DATA_TYPE_BOOLEAN?
    amfDataLong.booleanValue():false;

Object dataNull = amfDataNull.getType()==AMFData.DATA_TYPE_NULL?
    null:null;
```

Field Summary

public static final	DATEFORMAT Value: EEE, dd MMM yyyy HH:mm:ss
protected	fastDateFormat

Fields inherited from class [com.wowza.wms.amf.AMFData](#)

[AMF_DEFAULT_DESERIALIZE_CHARSETNAME](#), [AMF_LEVEL0](#), [AMF_LEVEL3](#), [DATA_TYPE_AMF3](#), [DATA_TYPE_AMF3_ARRAY](#), [DATA_TYPE_AMF3_BOOLEAN_FALSE](#), [DATA_TYPE_AMF3_BOOLEAN_TRUE](#), [DATA_TYPE_AMF3_BYTEARRAY](#), [DATA_TYPE_AMF3_DATE](#), [DATA_TYPE_AMF3_INTEGER](#), [DATA_TYPE_AMF3_NULL](#), [DATA_TYPE_AMF3_NUMBER](#), [DATA_TYPE_AMF3_OBJECT](#), [DATA_TYPE_AMF3_STRING](#), [DATA_TYPE_AMF3_UNDEFINED](#), [DATA_TYPE_AMF3_XML_LEGACY](#), [DATA_TYPE_AMF3_XML_TOP](#), [DATA_TYPE_ARRAY](#), [DATA_TYPE_AS_OBJECT](#), [DATA_TYPE_BOOLEAN](#), [DATA_TYPE_BYTEARRAY](#), [DATA_TYPE_CUSTOM_CLASS](#), [DATA_TYPE_DATE](#), [DATA_TYPE_INTEGER](#), [DATA_TYPE_LONG_STRING](#), [DATA_TYPE_MIXED_ARRAY](#), [DATA_TYPE_MOVIE_CLIP](#), [DATA_TYPE_NULL](#), [DATA_TYPE_NUMBER](#), [DATA_TYPE_OBJECT](#), [DATA_TYPE_OBJECT_END](#), [DATA_TYPE_RECORDSET](#), [DATA_TYPE_REFERENCE_OBJECT](#), [DATA_TYPE_STRING](#), [DATA_TYPE_UNDEFINED](#), [DATA_TYPE_UNKNOWN](#), [DATA_TYPE_XML](#), [DATA_TYPE_XML_TOP](#), [MILLS_PER_HOUR](#), [type](#)

Constructor Summary

public	AMFDataItem() Construct AMF type DATA_TYPE_NULL object
public	AMFDataItem(String value) Construct AMF type DATA_TYPE_STRING object
public	AMFDataItem(int value) Construct AMF type DATA_TYPE_NUMBER object
public	AMFDataItem(long value) Construct AMF type DATA_TYPE_NUMBER object
public	AMFDataItem(double value) Construct AMF type DATA_TYPE_NUMBER object
public	AMFDataItem(boolean value) Construct AMF type DATA_TYPE_BOOLEAN
public	AMFDataItem(java.util.Date value) Construct AMF type DATA_TYPE_DATE
public	AMFDataItem(byte[] data) Deserialize entire data array and create AMFDataItem object
public	AMFDataItem(byte[] data, int offset, int size) Deserialize data array starting at offset for size bytes and create AMFDataItem object
public	AMFDataItem(java.nio.ByteBuffer data) Deserialize entire data array and create AMFDataItem object

public	AMFDataItem (java.nio.ByteBuffer data, AMFDataContextDeserialize context)
--------	---

Method Summary

boolean	booleanValue () Return object as boolean.
byte	byteValue () Return object as byte.
java.util.Date	dateValue () Return object as Date.
void	deserialize (java.nio.ByteBuffer data)
void	deserialize (java.nio.ByteBuffer data, AMFDataContextDeserialize context)
double	doubleValue () Return object as double.
float	floatValue () Return object as float.
Object	getValue () Return value as Java class
int	intValue () Return object as int.
long	longValue () Return object as long.
byte[]	serialize ()
byte[]	serialize (AMFDataContextSerialize context)
void	serialize (java.io.DataOutputStream out)
void	serialize (java.io.DataOutputStream out, AMFDataContextSerialize context)
void	serialize (java.io.DataOutputStream out, int objectEncoding)
byte[]	serialize (int objectEncoding)
short	shortValue () Return object as short.
String	toString () Return object as formatted string

Methods inherited from class [com.wowza.wms.amf.AMFData](#)

[createContextDeserialize](#), [createContextDeserialize](#), [createContextSerialize](#), [createContextSerialize](#), [deserialize](#), [deserialize](#), [deserializeInnerObject](#), [getReference](#), [getType](#), [getValue](#), [isAMF3Start](#), [isArrayStart](#), [isByteArrayStart](#), [isMixedArrayStart](#), [isObjEnd](#), [isObjStart](#), [peekByte](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [setType](#), [skipByte](#), [testNextByte](#), [triggerAMF3Switch](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

DATEFORMAT

`public static final java.lang.String DATEFORMAT`

Constant value: `EEE, dd MMM yyyy HH:mm:ss`

fastDateFormat

`protected org.apache.commons.lang.time.FastDateFormat fastDateFormat`

Constructors

AMFDataItem

`public AMFDataItem()`

Construct AMF type `DATA_TYPE_NULL` object

AMFDataItem

`public AMFDataItem(String value)`

Construct AMF type `DATA_TYPE_STRING` object

Parameters:

value - String value

AMFDataItem

`public AMFDataItem(int value)`

Construct AMF type `DATA_TYPE_NUMBER` object

Parameters:

value - int value

AMFDataItem

`public AMFDataItem(long value)`

(continued from last page)

Construct AMF type DATA_TYPE_NUMBER object

Parameters:

value - long value

AMFDataItem

```
public AMFDataItem(double value)
```

Construct AMF type DATA_TYPE_NUMBER object

Parameters:

value - double value

AMFDataItem

```
public AMFDataItem(boolean value)
```

Construct AMF type DATA_TYPE_BOOLEAN

Parameters:

value - boolean value

AMFDataItem

```
public AMFDataItem(java.util.Date value)
```

Construct AMF type DATA_TYPE_DATE

Parameters:

value - Date value

AMFDataItem

```
public AMFDataItem(byte[] data)
```

Deserialize entire data array and create AMFDataItem object

Parameters:

data - binary data

AMFDataItem

```
public AMFDataItem(byte[] data,  
                  int offset,  
                  int size)
```

Deserialize data array starting at offset for size bytes and create AMFDataItem object

Parameters:

data - binary data

offset - starting offset into data

size - size of data to deserialize

AMFDataItem

```
public AMFDataItem(java.nio.ByteBuffer data)
```

(continued from last page)

Deserialize entire data array and create AMFDataItem object

Parameters:

data - binary data

AMFDataItem

```
public AMFDataItem(java.nio.ByteBuffer data,  
                   AMFDataContextDeserialize context)
```

Methods

longValue

```
public long longValue()
```

Return object as long. Valid object types are DATA_TYPE_NUMBER and DATA_TYPE_STRING.

Returns:

long value or 0 if failure

intValue

```
public int intValue()
```

Return object as int. Valid object types are DATA_TYPE_NUMBER and DATA_TYPE_STRING.

Returns:

int value or 0 if failure

doubleValue

```
public double doubleValue()
```

Return object as double. Valid object types are DATA_TYPE_NUMBER and DATA_TYPE_STRING.

Returns:

double value or 0 if failure

floatValue

```
public float floatValue()
```

Return object as float. Valid object types are DATA_TYPE_NUMBER and DATA_TYPE_STRING.

Returns:

float value or 0 if failure

shortValue

```
public short shortValue()
```

Return object as short. Valid object types are DATA_TYPE_NUMBER and DATA_TYPE_STRING.

Returns:

short value or 0 if failure

byteValue

```
public byte byteValue()
```

Return object as byte. Valid object types are DATA_TYPE_NUMBER and DATA_TYPE_STRING.

Returns:

byte value or 0 if failure

dateValue

```
public java.util.Date dateValue()
```

Return object as Date. Valid object types are DATA_TYPE_DATE.

Returns:

Date value or null if failure

booleanValue

```
public boolean booleanValue()
```

Return object as boolean. Valid object types are DATA_TYPE_BOOLEAN and DATA_TYPE_STRING.

Returns:

boolean value or false if failure

deserialize

```
public void deserialize(java.nio.ByteBuffer data)
```

Deserialize data in byte buffer

deserialize

```
public void deserialize(java.nio.ByteBuffer data,  
AMFDataContextDeserialize context)
```

Deserialize data in byte buffer

getValue

```
public Object getValue()
```

Return value as Java class

toString

```
public String toString()
```

Return object as formatted string

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    int objectEncoding)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    AMFDataContextSerialize context)
```

Serialize object to output stream

serialize

```
public byte[] serialize()
```

Serial object to byte array

serialize

```
public byte[] serialize(int objectEncoding)
```

Serial object to byte array

serialize

```
public byte[] serialize(AMFDataContextSerialize context)
```

Serial object to byte array

com.wowza.wms.amf

Class AMFDataList

```
java.lang.Object
  |
  +- com.wowza.wms.amf.AMFData
      |
      +- com.wowza.wms.amf.AMFDataList
```

```
public class AMFDataList
extends AMFData
```

AMFDataList: class for marshalling data between Wowza Pro server and Flash client. This class is for internal server marshalling of AMF event messages between the Flash client and Wowza Pro server.

NOTE: There is a slight difference between this class and AMFDataArray. This class when serialized/deserialized does NOT include the DATA_TYPE_ARRAY header (byte) and array size (int). AMF formatted functions use this class since they do not include these elements.

Fields inherited from class [com.wowza.wms.amf.AMFData](#)

[AMF_DEFAULT_DESERIALIZE_CHARSETNAME](#), [AMF_LEVEL0](#), [AMF_LEVEL3](#), [DATA_TYPE_AMF3](#), [DATA_TYPE_AMF3_ARRAY](#), [DATA_TYPE_AMF3_BOOLEAN_FALSE](#), [DATA_TYPE_AMF3_BOOLEAN_TRUE](#), [DATA_TYPE_AMF3_BYTEARRAY](#), [DATA_TYPE_AMF3_DATE](#), [DATA_TYPE_AMF3_INTEGER](#), [DATA_TYPE_AMF3_NULL](#), [DATA_TYPE_AMF3_NUMBER](#), [DATA_TYPE_AMF3_OBJECT](#), [DATA_TYPE_AMF3_STRING](#), [DATA_TYPE_AMF3_UNDEFINED](#), [DATA_TYPE_AMF3_XML_LEGACY](#), [DATA_TYPE_AMF3_XML_TOP](#), [DATA_TYPE_ARRAY](#), [DATA_TYPE_AS_OBJECT](#), [DATA_TYPE_BOOLEAN](#), [DATA_TYPE_BYTEARRAY](#), [DATA_TYPE_CUSTOM_CLASS](#), [DATA_TYPE_DATE](#), [DATA_TYPE_INTEGER](#), [DATA_TYPE_LONG_STRING](#), [DATA_TYPE_MIXED_ARRAY](#), [DATA_TYPE_MOVIE_CLIP](#), [DATA_TYPE_NULL](#), [DATA_TYPE_NUMBER](#), [DATA_TYPE_OBJECT](#), [DATA_TYPE_OBJECT_END](#), [DATA_TYPE_RECORDSET](#), [DATA_TYPE_REFERENCE_OBJECT](#), [DATA_TYPE_STRING](#), [DATA_TYPE_UNDEFINED](#), [DATA_TYPE_UNKNOWN](#), [DATA_TYPE_XML](#), [DATA_TYPE_XML_TOP](#), [MILLS_PER_HOUR](#), [type](#)

Constructor Summary

public	AMFDataList() Create empty AMFDataList object
public	AMFDataList(byte[] data) Deserialize entire data array and create AMFDataList object
public	AMFDataList(byte[] data, int offset, int size) Deserialize data array starting at offset for size bytes and create AMFDataList object
public	AMFDataList(java.nio.ByteBuffer data) Deserialize entire data array and create AMFDataList object
public	AMFDataList(java.nio.ByteBuffer data, AMFDataContextDeserialize context)

Method Summary

void	add(AMFData data) Append a new item onto the array
------	---

void	add (boolean data) Append a boolean (will be wrapped in an AMFDataItem object)
void	add (java.util.Date data) Append a date (will be wrapped in an AMFDataItem object)
void	add (double data) Append a double (will be wrapped in an AMFDataItem object)
void	add (int data) Append a int (will be wrapped in an AMFDataItem object)
void	add (int index, AMFData data) Insert an item into the array
void	add (int index, boolean data) Insert a boolean value (will be wrapped in an AMFDataItem object)
void	add (int index, java.util.Date data) Insert a date value (will be wrapped in an AMFDataItem object)
void	add (int index, double data) Insert a double value (will be wrapped in an AMFDataItem object)
void	add (int index, int data) Insert a int value (will be wrapped in an AMFDataItem object)
void	add (int index, long data) Insert a long value (will be wrapped in an AMFDataItem object)
void	add (int index, String data) Insert a string value (will be wrapped in an AMFDataItem object)
void	add (long data) Append a long (will be wrapped in an AMFDataItem object)
void	add (String data) Append a string (will be wrapped in an AMFDataItem object)
void	deserialize (java.nio.ByteBuffer data)
void	deserialize (java.nio.ByteBuffer data, AMFDataContextDeserialize context)
AMFData	get (int index) Get item at index
boolean	getBoolean (int index) Get item at index return as boolean
byte	getBytes (int index) Get item at index return as byte
java.util.Date	getDate (int index) Get item at index return as Date
double	getDouble (int index) Get item at index return as double

float	getFloat (int index) Get item at index return as float
int	getInt (int index) Get item at index return as int
long	getLong (int index) Get item at index return as long
AMFDataObj	getObject (int index) Get item at index return as AMFDataObj
short	getShort (int index) Get item at index return as short
String	getString (int index) Get item at index return as String
int	getType (int index) Get type of item at index.
Object	getValue ()
AMFData	remove (int index) Remove an element from the AMFDataList object
byte[]	serialize ()
byte[]	serialize (AMFDataContextSerialize context)
byte[]	serialize (AMFDataContextSerialize context, byte[] prepend)
void	serialize (java.io.DataOutputStream out)
void	serialize (java.io.DataOutputStream out, AMFDataContextSerialize context)
void	serialize (java.io.DataOutputStream out, AMFDataContextSerialize context, byte[] prepend)
void	serialize (java.io.DataOutputStream out, int objectEncoding)
byte[]	serialize (int objectEncoding)
void	set (int index, AMFData data) Set an array item
void	set (int index, boolean data) Set an boolean value (will be wrapped in an AMFDataItem object)
void	set (int index, java.util.Date data) Set an date value (will be wrapped in an AMFDataItem object)
void	set (int index, double data) Set an double value (will be wrapped in an AMFDataItem object)

void	set (int index, int data) Set an int value (will be wrapped in an AMFDataItem object)
void	set (int index, long data) Set an long value (will be wrapped in an AMFDataItem object)
void	set (int index, String data) Set an string value (will be wrapped in an AMFDataItem object)
int	size () Returns the number of items in array
String	toString () Return object as formatted string

Methods inherited from class [com.wowza.wms.amf.AMFData](#)

[createContextDeserialize](#), [createContextDeserialize](#), [createContextSerialize](#), [createContextSerialize](#), [deserialize](#), [deserialize](#), [deserializeInnerObject](#), [getReference](#), [getType](#), [getValue](#), [isAMF3Start](#), [isArrayStart](#), [isByteArrayStart](#), [isMixedArrayStart](#), [isObjEnd](#), [isObjStart](#), [peekByte](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [setType](#), [skipByte](#), [testNextByte](#), [triggerAMF3Switch](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

AMFDataList

```
public AMFDataList()
```

Create empty AMFDataList object

AMFDataList

```
public AMFDataList(byte[] data)
```

Deserialize entire data array and create AMFDataList object

Parameters:

data - binary data

AMFDataList

```
public AMFDataList(byte[] data,  
                   int offset,  
                   int size)
```

Deserialize data array starting at offset for size bytes and create AMFDataList object

Parameters:

data - binary data

offset - starting offset into data

(continued from last page)

size - size of data to deserialize

AMFDataList

```
public AMFDataList(java.nio.ByteBuffer data)
```

Deserialize entire data array and create AMFDataList object

Parameters:

data - binary data

AMFDataList

```
public AMFDataList(java.nio.ByteBuffer data,  
AMFDataContextDeserialize context)
```

Methods

remove

```
public AMFData remove(int index)
```

Remove an element from the AMFDataList object

Parameters:

index - index

Returns:

removed element

size

```
public int size()
```

Returns the number of items in array

Returns:

number of items in array

add

```
public void add(AMFData data)
```

Append a new item onto the array

Parameters:

data - AMFData object

add

```
public void add(String data)
```

Append a string (will be wrapped in an AMFDataItem object)

Parameters:

data - string value

add

```
public void add(double data)
```

Append a double (will be wrapped in an AMFDataItem object)

Parameters:

data - double value

add

```
public void add(int data)
```

Append a int (will be wrapped in an AMFDataItem object)

Parameters:

data - int value

add

```
public void add(long data)
```

Append a long (will be wrapped in an AMFDataItem object)

Parameters:

data - long value

add

```
public void add(java.util.Date data)
```

Append a date (will be wrapped in an AMFDataItem object)

Parameters:

data - date value

add

```
public void add(boolean data)
```

Append a boolean (will be wrapped in an AMFDataItem object)

Parameters:

data - boolean value

add

```
public void add(int index,  
    AMFData data)
```

Insert an item into the array

Parameters:

index - index

data - AMFData object

(continued from last page)

add

```
public void add(int index,  
                String data)
```

Insert a string value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - string value

add

```
public void add(int index,  
                double data)
```

Insert a double value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - double value

add

```
public void add(int index,  
                int data)
```

Insert a int value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - int value

add

```
public void add(int index,  
                long data)
```

Insert a long value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - long value

add

```
public void add(int index,  
                java.util.Date data)
```

Insert a date value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - date value

add

```
public void add(int index,  
                boolean data)
```

(continued from last page)

Insert a boolean value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - boolean value

set

```
public void set(int index,  
                AMFData data)
```

Set an array item

Parameters:

data - AMFData object

set

```
public void set(int index,  
                String data)
```

Set an string value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - string value

set

```
public void set(int index,  
                double data)
```

Set an double value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - double value

set

```
public void set(int index,  
                int data)
```

Set an int value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - int value

set

```
public void set(int index,  
                long data)
```

Set an long value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - long value

set

```
public void set(int index,  
                java.util.Date data)
```

Set an date value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - date value

set

```
public void set(int index,  
                boolean data)
```

Set an boolean value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - boolean value

getType

```
public int getType(int index)
```

Get type of item at index. Return AMFData.DATA_TYPE_UNKNOWN if item does not exist

Parameters:

index

Returns:

type of item at index

get

```
public AMFData get(int index)
```

Get item at index

Parameters:

index

Returns:

Returns AMFData object or null if out of bounds

getString

```
public String getString(int index)
```

Get item at index return as String

Parameters:

index

Returns:

Return item as String or null if out of bounds

getInt

```
public int getInt(int index)
```

Get item at index return as int

Parameters:
index

Returns:
Return item as int or 0 if out of bounds

getLong

```
public long getLong(int index)
```

Get item at index return as long

Parameters:
index

Returns:
Return item as long or 0 if out of bounds

getDouble

```
public double getDouble(int index)
```

Get item at index return as double

Parameters:
index

Returns:
Return item as double or 0 if out of bounds

getFloat

```
public float getFloat(int index)
```

Get item at index return as float

Parameters:
index

Returns:
Return item as float or 0 if out of bounds

getShort

```
public short getShort(int index)
```

Get item at index return as short

Parameters:
index

(continued from last page)

Returns:

Return item as short or 0 if out of bounds

getBytes

```
public byte getBytes(int index)
```

Get item at index return as byte

Parameters:

index

Returns:

Return item as byte or 0 if out of bounds

getBoolean

```
public boolean getBoolean(int index)
```

Get item at index return as boolean

Parameters:

index

Returns:

Return item as boolean or false if out of bounds

getDate

```
public java.util.Date getDate(int index)
```

Get item at index return as Date

Parameters:

index

Returns:

Return item as Date or null if out of bounds

getObject

```
public AMFDataObj getObject(int index)
```

Get item at index return as AMFDataObj

Parameters:

index

Returns:

Return item as AMFDataObj or null if out of bounds

deserialize

```
public void deserialize(java.nio.ByteBuffer data)
```

Deserialize data in byte buffer

(continued from last page)

deserialize

```
public void deserialize(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Deserialize data in byte buffer

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    int objectEncoding)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    AMFDataContextSerialize context)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    AMFDataContextSerialize context,  
    byte[] prepend)
```

serialize

```
public byte[] serialize()
```

Serial object to byte array

serialize

```
public byte[] serialize(int objectEncoding)
```

Serial object to byte array

serialize

```
public byte[] serialize(AMFDataContextSerialize context)
```

Serial object to byte array

serialize

```
public byte[] serialize(AMFDataContextSerialize context,  
    byte[] prepend)
```

getValue

```
public Object getValue()
```

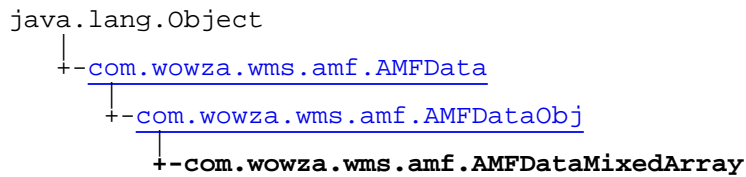
Convert object to Java native class

toString

```
public String toString()
```

Return object as formatted string

com.wowza.wms.amf Class AMFDataMixedArray



All Implemented Interfaces:

[IAMFDataObj](#)

```

public class AMFDataMixedArray
extends AMFDataObj
  
```

AMFDataMixedArray: class for marshalling data between Wowza Pro server and Flash client. Array of mixed data types. An Array object created in the Flash client is wrapped in this data type when sent to the Wowza Pro server.

Create Array of Strings

```

AMFDataMixedArray amfDataMixedArray = new AMFDataMixedArray();

amfDataMixedArray.put("0", "item1");
amfDataMixedArray.put("1", "item2");
amfDataMixedArray.put("2", "item3");
  
```

Iterate Mixed Array

```

AMFDataMixedArray amfDataMixedArray;

int len = amfDataMixedArray.size();
for(int i=0;i<len;i++)
{
    String value = amfDataMixedArray.getString(i);
    int itemType = amfDataMixedArray.getType(i);
    WMSLoggerFactory.getLogger(null).debug("item:
["+i+":"+amfDataMixedArray.getKey(i)+"]="+value+" type:"+itemType);
}
  
```

NOTE: A AMFDataMixedArray is exactly the same as a AMFDataObj except its type is DATA_TYPE_MIXED_ARRAY.

This objects acts like a Map and a List at the same time. As items are added by key the order and position of each object is recorded. Objects can be retrieved either by key or by index.

Fields inherited from class [com.wowza.wms.amf.AMFDataObj](#)

[DECODE_OBJ_REF](#), [DECODE_TRAITS](#), [DECODE_TRAITS_EXT](#), [DECODE_TRAITS_REF](#), [DECODE_UNDEFINED](#), [members](#), [order](#), [serializer](#), [trait](#)

Fields inherited from class [com.wowza.wms.amf.AMFData](#)

[AMF_DEFAULT_DESERIALIZE_CHARSETNAME](#), [AMF_LEVEL0](#), [AMF_LEVEL3](#), [DATA_TYPE_AMF3](#), [DATA_TYPE_AMF3_ARRAY](#), [DATA_TYPE_AMF3_BOOLEAN_FALSE](#), [DATA_TYPE_AMF3_BOOLEAN_TRUE](#), [DATA_TYPE_AMF3_BYTEARRAY](#), [DATA_TYPE_AMF3_DATE](#), [DATA_TYPE_AMF3_INTEGER](#), [DATA_TYPE_AMF3_NULL](#), [DATA_TYPE_AMF3_NUMBER](#), [DATA_TYPE_AMF3_OBJECT](#), [DATA_TYPE_AMF3_STRING](#), [DATA_TYPE_AMF3_UNDEFINED](#), [DATA_TYPE_AMF3_XML_LEGACY](#), [DATA_TYPE_AMF3_XML_TOP](#), [DATA_TYPE_ARRAY](#), [DATA_TYPE_AS_OBJECT](#), [DATA_TYPE_BOOLEAN](#), [DATA_TYPE_BYTEARRAY](#), [DATA_TYPE_CUSTOM_CLASS](#), [DATA_TYPE_DATE](#), [DATA_TYPE_INTEGER](#), [DATA_TYPE_LONG_STRING](#), [DATA_TYPE_MIXED_ARRAY](#), [DATA_TYPE_MOVIE_CLIP](#), [DATA_TYPE_NULL](#), [DATA_TYPE_NUMBER](#), [DATA_TYPE_OBJECT](#), [DATA_TYPE_OBJECT_END](#), [DATA_TYPE_RECORDSET](#), [DATA_TYPE_REFERENCE_OBJECT](#), [DATA_TYPE_STRING](#), [DATA_TYPE_UNDEFINED](#), [DATA_TYPE_UNKNOWN](#), [DATA_TYPE_XML](#), [DATA_TYPE_XML_TOP](#), [MILLS_PER_HOUR](#), [type](#)

Constructor Summary

public	AMFDataMixedArray() Create empty AMFDataMixedArray object
public	AMFDataMixedArray(byte[] data) Deserialize entire data array and create AMFDataMixedArray object
public	AMFDataMixedArray(byte[] data, int offset, int size) Deserialize data array starting at offset for size bytes and create AMFDataMixedArray object
public	AMFDataMixedArray(java.nio.ByteBuffer data) Deserialize entire data array and create AMFDataMixedArray object
public	AMFDataMixedArray(java.nio.ByteBuffer data, AMFDataContextDeserialize context)

Method Summary

void	deserialize(java.nio.ByteBuffer data)
void	deserialize(java.nio.ByteBuffer data, AMFDataContextDeserialize context)
void	serialize(java.io.DataOutputStream out)
void	serialize(java.io.DataOutputStream out, AMFDataContextSerialize context)
void	serialize(java.io.DataOutputStream out, int objectEncoding)
String	toString() Return object as formatted string

Methods inherited from class [com.wowza.wms.amf.AMFDataObj](#)

[containsKey](#), [deserialize](#), [deserialize](#), [get](#), [get](#), [getBoolean](#), [getBoolean](#), [getBytes](#), [getBytes](#), [getClassName](#), [getDate](#), [getDate](#), [getDouble](#), [getDouble](#), [getFloat](#), [getFloat](#), [getInt](#), [getInt](#), [getKey](#), [getKeys](#), [getLong](#), [getLong](#), [getObject](#), [getObject](#), [getSerializer](#), [getShort](#), [getShort](#), [getString](#), [getString](#), [getTrait](#), [getValue](#), [put](#), [put](#), [put](#), [put](#), [put](#), [put](#), [put](#), [remove](#), [remove](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [setClassName](#), [setSerializer](#), [size](#), [toString](#)

Methods inherited from class [com.wowza.wms.amf.AMFData](#)

[createContextDeserialize](#), [createContextDeserialize](#), [createContextSerialize](#), [createContextSerialize](#), [deserialize](#), [deserialize](#), [deserializeInnerObject](#), [getReference](#), [getType](#), [getValue](#), [isAMF3Start](#), [isArrayStart](#), [isByteArrayStart](#), [isMixedArrayStart](#), [isObjEnd](#), [isObjStart](#), [peekByte](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [setType](#), [skipByte](#), [testNextByte](#), [triggerAMF3Switch](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.amf.IAMFDataObj](#)

[containsKey](#), [get](#), [get](#), [getBoolean](#), [getBoolean](#), [getBytes](#), [getBytes](#), [getDate](#), [getDate](#), [getDouble](#), [getDouble](#), [getFloat](#), [getFloat](#), [getInt](#), [getInt](#), [getKey](#), [getKeys](#), [getLong](#), [getLong](#), [getObject](#), [getObject](#), [getShort](#), [getShort](#), [getString](#), [getString](#), [put](#), [put](#), [put](#), [put](#), [put](#), [put](#), [remove](#), [remove](#)

Constructors

AMFDataMixedArray

```
public AMFDataMixedArray()
```

Create empty AMFDataMixedArray object

AMFDataMixedArray

```
public AMFDataMixedArray(byte[] data)
```

Deserialize entire data array and create AMFDataMixedArray object

Parameters:

data - binary data

AMFDataMixedArray

```
public AMFDataMixedArray(byte[] data,
                          int offset,
                          int size)
```

Deserialize data array starting at offset for size bytes and create AMFDataMixedArray object

Parameters:

data - binary data

(continued from last page)

offset - starting offset into data
size - size of data to deserialize

AMFDataMixedArray

```
public AMFDataMixedArray(java.nio.ByteBuffer data)
```

Deserialize entire data array and create AMFDataMixedArray object

Parameters:

data - binary data

AMFDataMixedArray

```
public AMFDataMixedArray(java.nio.ByteBuffer data,  
                          AMFDataContextDeserialize context)
```

Methods

deserialize

```
public void deserialize(java.nio.ByteBuffer data)
```

Deserialize data in byte buffer

deserialize

```
public void deserialize(java.nio.ByteBuffer data,  
                          AMFDataContextDeserialize context)
```

Deserialize data in byte buffer

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
                      int objectEncoding)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
                      AMFDataContextSerialize context)
```

Serialize object to output stream

toString

```
public String toString()
```

Return object as formatted string

com.wowza.wms.amf Class AMFDataObj

```
java.lang.Object
  |
  +- com.wowza.wms.amf.AMFData
      |
      +- com.wowza.wms.amf.AMFDataObj
```

All Implemented Interfaces:

[IAMFDataObj](#)

Direct Known Subclasses:

[AMFDataMixedArray](#)

```
public class AMFDataObj
  extends AMFData
  implements IAMFDataObj
```

AMFDataObj: class for marshalling data between Wowza Pro server and Flash client. Object with attributes. Implementation is very similar to a java.util.Map. Each parameter is an item in the map.

Create AMFDataObj

```
AMFDataObj amfDataObj = new AMFDataObj();

amfDataObj.put("key1", "item1");
amfDataObj.put("key2", "item2");
amfDataObj.put("key3", "item3");
```

Iterate AMFDataObj

```
AMFDataObj amfDataObj;

List keys = amfDataObj.getKeys();
Iterator iter = keys.iterator();
while(iter.hasNext())
{
    String key = (String)iter.next();
    AMFData value = amfDataObj.get(key);
    int itemType = value.getType();
    WMSLoggerFactory.getLogger(null).debug(key+"="+value.toString()+"
(type:"+itemType+" )");
}
```

Direct Access To Attributes

```
AMFDataObj amfDataObj;

// If you know the type you can access it directly
String dataString = amfDataObj.getString("stringData");
long dataLong = amfDataObj.getLong("longData");
double dataDouble = amfDataObj.getDouble("doubleData");
boolean dataBoolean = amfDataObj.getBoolean("booleanData");

// This illustrate how to decode the value if
// you don't know the type
AMFData myItemKey1 = amfDataObj.get("theData");
switch (myItemKey1.getType())
{
default:
case AMFDataItem.DATA_TYPE_UNDEFINED:
case AMFDataItem.DATA_TYPE_UNKNOWN:
case AMFDataItem.DATA_TYPE_NULL:
    // the value is null or undefined
    break;
case AMFDataItem.DATA_TYPE_NUMBER:
    double amfDataDouble = ((AMFDataItem)myItemKey1).doubleValue();
    break;
case AMFDataItem.DATA_TYPE_BOOLEAN:
    boolean amfDataBoolean = ((AMFDataItem)myItemKey1).booleanValue();
    break;
case AMFDataItem.DATA_TYPE_STRING:
    String amfDataString = ((AMFDataItem)myItemKey1).toString();
    break;
case AMFDataItem.DATA_TYPE_DATE:
    Date amfDataDate = ((AMFDataItem)myItemKey1).dateValue();
    break;
case AMFDataItem.DATA_TYPE_OBJECT:
    AMFDataObj amfDataValObj = (AMFDataObj)myItemKey1;
    break;
case AMFDataItem.DATA_TYPE_MIXED_ARRAY:
    AMFDataMixedArray amfDataMixedArray = (AMFDataMixedArray)myItemKey1;
    break;
case AMFDataItem.DATA_TYPE_ARRAY:
    AMFDataArray amfDataArray = (AMFDataArray)myItemKey1;
    break;
}
```

NOTE: A AMFDataObj is exactly the same as a AMFDataMixedArray except its type is DATA_TYPE_OBJECT.

Field Summary

public static final	DECODE_OBJ_REF Value: 1
public static final	DECODE_TRAITS Value: 4
public static final	DECODE_TRAITS_EXT Value: 3
public static final	DECODE_TRAITS_REF Value: 2
public static final	DECODE_UNDEFINED Value: 0
protected	members
protected	order
protected	serializer
protected	trait

Fields inherited from class [com.wowza.wms.amf.AMFData](#)

[AMF_DEFAULT_DESERIALIZE_CHARSETNAME](#), [AMF_LEVEL0](#), [AMF_LEVEL3](#), [DATA_TYPE_AMF3](#), [DATA_TYPE_AMF3_ARRAY](#), [DATA_TYPE_AMF3_BOOLEAN_FALSE](#), [DATA_TYPE_AMF3_BOOLEAN_TRUE](#), [DATA_TYPE_AMF3_BYTEARRAY](#), [DATA_TYPE_AMF3_DATE](#), [DATA_TYPE_AMF3_INTEGER](#), [DATA_TYPE_AMF3_NULL](#), [DATA_TYPE_AMF3_NUMBER](#), [DATA_TYPE_AMF3_OBJECT](#), [DATA_TYPE_AMF3_STRING](#), [DATA_TYPE_AMF3_UNDEFINED](#), [DATA_TYPE_AMF3_XML_LEGACY](#), [DATA_TYPE_AMF3_XML_TOP](#), [DATA_TYPE_ARRAY](#), [DATA_TYPE_AS_OBJECT](#), [DATA_TYPE_BOOLEAN](#), [DATA_TYPE_BYTEARRAY](#), [DATA_TYPE_CUSTOM_CLASS](#), [DATA_TYPE_DATE](#), [DATA_TYPE_INTEGER](#), [DATA_TYPE_LONG_STRING](#), [DATA_TYPE_MIXED_ARRAY](#), [DATA_TYPE_MOVIE_CLIP](#), [DATA_TYPE_NULL](#), [DATA_TYPE_NUMBER](#), [DATA_TYPE_OBJECT](#), [DATA_TYPE_OBJECT_END](#), [DATA_TYPE_RECORDSET](#), [DATA_TYPE_REFERENCE_OBJECT](#), [DATA_TYPE_STRING](#), [DATA_TYPE_UNDEFINED](#), [DATA_TYPE_UNKNOWN](#), [DATA_TYPE_XML](#), [DATA_TYPE_XML_TOP](#), [MILLS_PER_HOUR](#), [type](#)

Constructor Summary

public	AMFDataObj() Create empty AMFDataObj object
public	AMFDataObj(byte[] data) Deserialize entire data array and create AMFDataObj object
public	AMFDataObj(byte[] data, int offset, int size) Deserialize data array starting at offset for size bytes and create AMFDataObj object
public	AMFDataObj(java.nio.ByteBuffer data) Deserialize entire data array and create AMFDataObj object

public	AMFDataObj (java.nio.ByteBuffer data, AMFDataContextDeserialize context)
--------	--

Method Summary

boolean	containsKey (String name)
void	deserialize (java.nio.ByteBuffer data)
void	deserialize (java.nio.ByteBuffer data, AMFDataContextDeserialize context)
AMFData	get (int index)
AMFData	get (String name)
boolean	getBoolean (int index)
boolean	getBoolean (String name)
byte	getBytes (int index)
byte	getBytes (String name)
String	getClassName ()
java.util.Date	getDate (int index)
java.util.Date	getDate (String name)
double	getDouble (int index)
double	getDouble (String name)
float	getFloat (int index)
float	getFloat (String name)
int	getInt (int index)
int	getInt (String name)
String	getKey (int index)
java.util.List	getKeys ()
long	getLong (int index)
long	getLong (String name)

AMFDataObj	getObject (int index)
AMFDataObj	getObject (String name)
IAMFExternalizable	getSerializer ()
short	getShort (int index)
short	getShort (String name)
String	getString (int index)
String	getString (String name)
AMFDataTrait	getTrait ()
Object	getValue ()
void	put (String name, AMFData data)
void	put (String name, boolean data)
void	put (String name, java.util.Date data)
void	put (String name, double data)
void	put (String name, int data)
void	put (String name, long data)
void	put (String name, String data)
AMFData	remove (int index)
AMFData	remove (String name)
byte[]	serialize ()
byte[]	serialize (AMFDataContextSerialize context)
void	serialize (java.io.DataOutputStream out)
void	serialize (java.io.DataOutputStream out, AMFDataContextSerialize context)
void	serialize (java.io.DataOutputStream out, int objectEncoding)
byte[]	serialize (int objectEncoding)

void	setClassName (String className)
void	setSerializer (IAMFExternalizable serializer)
int	size () Return the number of members of this object/array
String	toString () Return object as formatted string

Methods inherited from class [com.wowza.wms.amf.AMFData](#)

[createContextDeserialize](#), [createContextDeserialize](#), [createContextSerialize](#), [createContextSerialize](#), [deserialize](#), [deserialize](#), [deserializeInnerObject](#), [getReference](#), [getType](#), [getValue](#), [isAMF3Start](#), [isArrayStart](#), [isByteArrayStart](#), [isMixedArrayStart](#), [isObjEnd](#), [isObjStart](#), [peekByte](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [setType](#), [skipByte](#), [testNextByte](#), [triggerAMF3Switch](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.amf.IAMFDataObj](#)

[containsKey](#), [get](#), [get](#), [getBoolean](#), [getBoolean](#), [getBytes](#), [getBytes](#), [getDate](#), [getDate](#), [getDouble](#), [getDouble](#), [getFloat](#), [getFloat](#), [getInt](#), [getInt](#), [getKey](#), [getKeys](#), [getLong](#), [getLong](#), [getObject](#), [getObject](#), [getShort](#), [getShort](#), [getString](#), [getString](#), [put](#), [put](#), [put](#), [put](#), [put](#), [put](#), [remove](#), [remove](#)

Fields

DECODE_UNDEFINED

```
public static final int DECODE_UNDEFINED
```

Constant value: **0**

DECODE_OBJ_REF

```
public static final int DECODE_OBJ_REF
```

Constant value: **1**

DECODE_TRAITS_REF

```
public static final int DECODE_TRAITS_REF
```

Constant value: **2**

(continued from last page)

DECODE_TRAITS_EXT

```
public static final int DECODE_TRAITS_EXT
```

Constant value: **3**

DECODE_TRAITS

```
public static final int DECODE_TRAITS
```

Constant value: **4**

members

```
protected java.util.Map members
```

order

```
protected java.util.List order
```

trait

```
protected com.wowza.wms.amf.AMFDataTrait trait
```

serializer

```
protected com.wowza.wms.amf.IAMFExternalizable serializer
```

Constructors

AMFDataObj

```
public AMFDataObj()
```

Create empty AMFDataObj object

AMFDataObj

```
public AMFDataObj(byte[] data)
```

Deserialize entire data array and create AMFDataObj object

Parameters:

data - binary data

(continued from last page)

AMFDataObj

```
public AMFDataObj(byte[] data,  
                  int offset,  
                  int size)
```

Deserialize data array starting at offset for size bytes and create AMFDataObj object

Parameters:

data - binary data
offset - starting offset into data
size - size of data to deserialize

AMFDataObj

```
public AMFDataObj(java.nio.ByteBuffer data)
```

Deserialize entire data array and create AMFDataObj object

Parameters:

data - binary data

AMFDataObj

```
public AMFDataObj(java.nio.ByteBuffer data,  
                  AMFDataContextDeserialize context)
```

Methods

size

```
public int size()
```

Return the number of members of this object/array

Returns:

number of members

containsKey

```
public boolean containsKey(String name)
```

put

```
public void put(String name,  
               AMFData data)
```

put

```
public void put(String name,  
               String data)
```

put

```
public void put(String name,  
                double data)
```

put

```
public void put(String name,  
                int data)
```

put

```
public void put(String name,  
                long data)
```

put

```
public void put(String name,  
                java.util.Date data)
```

put

```
public void put(String name,  
                boolean data)
```

getKeys

```
public java.util.List getKeys()
```

getKey

```
public String getKey(int index)
```

get

```
public AMFData get(String name)
```

get

```
public AMFData get(int index)
```

remove

```
public AMFData remove(String name)
```

remove

```
public AMFData remove(int index)
```

getString

```
public String getString(String name)
```

getInt

```
public int getInt(String name)
```

getLong

```
public long getLong(String name)
```

getShort

```
public short getShort(String name)
```

getDouble

```
public double getDouble(String name)
```

getFloat

```
public float getFloat(String name)
```

getByte

```
public byte getByte(String name)
```

getBoolean

```
public boolean getBoolean(String name)
```

(continued from last page)

getDate

```
public java.util.Date getDate(String name)
```

getObject

```
public AMFDataObj getObject(String name)
```

getString

```
public String getString(int index)
```

getInt

```
public int getInt(int index)
```

getLong

```
public long getLong(int index)
```

getShort

```
public short getShort(int index)
```

getByte

```
public byte getByte(int index)
```

getDouble

```
public double getDouble(int index)
```

getFloat

```
public float getFloat(int index)
```

(continued from last page)

getBoolean

```
public boolean getBoolean(int index)
```

getDate

```
public java.util.Date getDate(int index)
```

getObject

```
public AMFDataObj getObject(int index)
```

deserialize

```
public void deserialize(java.nio.ByteBuffer data)
```

Deserialize data in byte buffer

deserialize

```
public void deserialize(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Deserialize data in byte buffer

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    int objectEncoding)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    AMFDataContextSerialize context)
```

Serialize object to output stream

serialize

```
public byte[] serialize()
```

Serial object to byte array

(continued from last page)

serialize

```
public byte[] serialize(int objectEncoding)
```

Serial object to byte array

serialize

```
public byte[] serialize(AMFDataContextSerialize context)
```

Serial object to byte array

getValue

```
public Object getValue()
```

Convert object to Java native class

toString

```
public String toString()
```

Return object as formatted string

getClassName

```
public String getClassName()
```

setClassName

```
public void setClassName(String className)
```

getTrait

```
public AMFDataTrait getTrait()
```

getSerializer

```
public IAMFExternalizable getSerializer()
```

setSerializer

```
public void setSerializer(IAMFExternalizable serializer)
```

com.wowza.wms.amf Class AMFDataTrait

java.lang.Object

└-com.wowza.wms.amf.AMFDataTrait

```
public class AMFDataTrait
extends Object
```

AMF trait used to describe an AMF class in AMF3

Constructor Summary

public	AMFDataTrait() Constructor
--------	---

Method Summary

void	addMember(String member) Add a member
AMFDataTrait	clone() clone the trait
String	getClassName() Get class name
AMFData	getInnerObj() Get inner object
String	getMember(int i) Get member by index
int	getMemberCount() Get the number of members
java.util.List	getMembers() Get a list of trait members
boolean	isDynamic() Is class dynamic
boolean	isMember(String member) Return true if member of this trait
void	setClassName(String className) Set class name
void	setDynamic(boolean isDynamic) Set isDynamic
void	setInnerObj(AMFData innerObj) Set inner object

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Constructors

AMFDataTrait

```
public AMFDataTrait()
```

Constructor

Methods

clone

```
public AMFDataTrait clone()
```

clone the trait

addMember

```
public void addMember(String member)
```

Add a member

Parameters:

member - member name

isMember

```
public boolean isMember(String member)
```

Return true if member of this trait

Parameters:

member - member name

Returns:

true, if member

getMembers

```
public java.util.List getMembers()
```

Get a list of trait members

Returns:

list of trait members

getMemberCount

```
public int getMemberCount()
```

(continued from last page)

Get the number of members

Returns:

number of members

getMember

```
public String getMember(int i)
```

Get member by index

Parameters:

i - index

Returns:

member name

getClassName

```
public String getClassName()
```

Get class name

Returns:

class name

setClassName

```
public void setClassName(String className)
```

Set class name

Parameters:

className - class name

isDynamic

```
public boolean isDynamic()
```

Is class dynamic

Returns:

true, if dynamic

setDynamic

```
public void setDynamic(boolean isDynamic)
```

Set isDynamic

Parameters:

isDynamic - true, if dynamic

getInnerObj

```
public AMFData getInnerObj()
```

Get inner object

(continued from last page)

Returns:

inner object

setInnerObj

public void **setInnerObj**([AMFData](#) innerObj)

Set inner object

Parameters:

innerObj - inner object

com.wowza.wms.amf Class AMFObj

java.lang.Object

└─com.wowza.wms.amf.AMFObj

```
public class AMFObj
extends Object
```

AMFObj: class that stores the state of channel between the client and the server.

Field Summary

public static final	AMFDEBUGHEADERSIZE Value: false
public static final	WOWZDEBUGHEADERSIZE Value: false

Constructor Summary

public	AMFObj (int id) Create new AMFObj for a given channel (id)
public	AMFObj (int id, int objectEncoding) Create new AMFObj for a given channel (id)

Method Summary

void	addChunk (byte[] buffer, int offset, int len) Add a chunk to the chunk list
void	clearByteContainer () Clear the byte container
long	getAbsTimecode () Get the absolute time code
int	getByteContainerLevel () Fake container for processing
long	getChunkCounter ()
java.util.List	getChunks () Get the chunks that make up this packet
int	getId () Get channel id
int	getObjectEncoding ()

int	getSize() Get packet size
int	getSrc() Get stream id (0 if not stream data)
long	getTimecode() Get timecode (milliseconds) sometimes relative
int	getType() Get content type IVHost.CONTENTTYPE_*
long	incAbsTimecode(long absTimecode) Increment the absolute timecode
void	incByteContainerLevel(int byteContainerLevel) Fake container for processing
boolean	isByteContainerEmpty() Fake container for processing
boolean	isByteContainerFull() Fake container for processing
boolean	isLastSentAbsTimecode()
boolean	isLongTimecode() Get is a 32 bit timecode
boolean	isNew() Is this a new packet.
boolean	isObjectEncodingAMF0()
boolean	isObjectEncodingAMF3()
long	setAbsTimecodeLong(long absTimecode) Set the absolute timecode
long	setAbsTimecodeShort(long absTimecode) Set the absolute timecode
void	setByteContainerLevel(int byteContainerLevel) Fake container for processing
void	setChunkCounter(long chunkCounter)
void	setId(int id) Set channel id
void	setLastSentAbsTimecode(boolean isLastSentAbsTimecode)
void	setLongTimecode(boolean isLongTimecode) Set is a 32 bit timecode
void	setNew(boolean isNew) Set is new packet

void	setObjectEncoding (int objectEncoding)
void	setSize (int size) Set packet size
void	setSrc (int src) Set stream id (0 if not stream data)
void	setTimecode (long timecode) Set timecode (milliseconds) sometimes relative
void	setType (int type) Set content type IVHost.CONTENTTYPE_*
String	toString () Return object as formatted string

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

AMFDEBUGHEADERSIZE

```
public static final boolean AMFDEBUGHEADERSIZE
```

Constant value: **false**

WOWZDEBUGHEADERSIZE

```
public static final boolean WOWZDEBUGHEADERSIZE
```

Constant value: **false**

Constructors

AMFObj

```
public AMFObj(int id)
```

Create new AMFObj for a given channel (id)

Parameters:

id - channel id

AMFObj

```
public AMFObj(int id,  
int objectEncoding)
```

Create new AMFObj for a given channel (id)

(continued from last page)

Parameters:

id - channel id
objectEncoding - object encoding level (AMF0 or AMF3)

Methods

getChunks

```
public java.util.List getChunks()
```

Get the chunks that make up this packet

Returns:

chunks that make up this packet

addChunk

```
public void addChunk(byte[] buffer,  
    int offset,  
    int len)
```

Add a chunk to the chunk list

Parameters:

buffer - buffer
offset - offset
len - length

getId

```
public int getId()
```

Get channel id

Returns:

channel id

setId

```
public void setId(int id)
```

Set channel id

Parameters:

id - channel id

getSize

```
public int getSize()
```

Get packet size

Returns:

packet size

setSize

```
public void setSize(int size)
```

(continued from last page)

Set packet size

Parameters:

size - packet size

getType

```
public int getType()
```

Get content type IVHost.CONTENTTYPE_*

Returns:

content type

setType

```
public void setType(int type)
```

Set content type IVHost.CONTENTTYPE_*

Parameters:

type - content type

getSrc

```
public int getSrc()
```

Get stream id (0 if not stream data)

Returns:

stream id

setSrc

```
public void setSrc(int src)
```

Set stream id (0 if not stream data)

Parameters:

src - stream id

toString

```
public String toString()
```

Return object as formatted string

getTimecode

```
public long getTimecode()
```

Get timecode (milliseconds) sometimes relative

Returns:

timecode (milliseconds)

(continued from last page)

setTimecode

```
public void setTimecode(long timecode)
```

Set timecode (milliseconds) sometimes relative

Parameters:

timecode - timecode (milliseconds)

isNew

```
public boolean isNew()
```

Is this a new packet. If new entire packet header needs to be sent

Returns:

is new packet

setNew

```
public void setNew(boolean isNew)
```

Set is new packet

Parameters:

isNew - is new packet

getAbsTimecode

```
public long getAbsTimecode()
```

Get the absolute time code

Returns:

absolute timecode

setAbsTimecodeLong

```
public long setAbsTimecodeLong(long absTimecode)
```

Set the absolute timecode

Parameters:

absTimecode - absolute timecode

Returns:

absolute timecode

setAbsTimecodeShort

```
public long setAbsTimecodeShort(long absTimecode)
```

Set the absolute timecode

Parameters:

absTimecode

Returns:

(continued from last page)

absolute timecode

incAbsTimecode

```
public long incAbsTimecode(long absTimecode)
```

Increment the absolute timecode

Parameters:

absTimecode - absolute timecode

Returns:

absolute timecode

getByteContainerLevel

```
public int getByteContainerLevel()
```

Fake container for processing

Returns:

current container level

clearByteContainer

```
public void clearByteContainer()
```

Clear the byte container

setByteContainerLevel

```
public void setByteContainerLevel(int byteContainerLevel)
```

Fake container for processing

Parameters:

byteContainerLevel - current container level

incByteContainerLevel

```
public void incByteContainerLevel(int byteContainerLevel)
```

Fake container for processing

Parameters:

byteContainerLevel - current container level

isByteContainerEmpty

```
public boolean isByteContainerEmpty()
```

Fake container for processing

Returns:

is container full

(continued from last page)

isByteContainerFull

```
public boolean isByteContainerFull()
```

Fake container for processing

Returns:

is container full

isLongTimecode

```
public boolean isLongTimecode()
```

Get is a 32 bit timecode

Returns:

true if 32 bit timecode

setLongTimecode

```
public void setLongTimecode(boolean isLongTimecode)
```

Set is a 32 bit timecode

Parameters:

isLongTimecode - is a 32 bit timecode

isLastSentAbsTimecode

```
public boolean isLastSentAbsTimecode()
```

setLastSentAbsTimecode

```
public void setLastSentAbsTimecode(boolean isLastSentAbsTimecode)
```

isObjectEncodingAMF3

```
public boolean isObjectEncodingAMF3()
```

isObjectEncodingAMF0

```
public boolean isObjectEncodingAMF0()
```

setObjectEncoding

```
public void setObjectEncoding(int objectEncoding)
```

(continued from last page)

getObjectEncoding

```
public int getObjectEncoding()
```

getChunkCounter

```
public long getChunkCounter()
```

setChunkCounter

```
public void setChunkCounter(long chunkCounter)
```

com.wowza.wms.amf Class AMFObjChunk

java.lang.Object

└-com.wowza.wms.amf.AMFObjChunk

```
public class AMFObjChunk
extends Object
```

Field Summary

public	buffer
public	len
public	offset

Constructor Summary

public	AMFObjChunk (byte[] buffer, int offset, int len)
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

buffer

```
public byte buffer
```

offset

```
public int offset
```

len

```
public int len
```

Constructors

(continued from last page)

AMFObjChunk

```
public AMFObjChunk(byte[] buffer,  
                   int offset,  
                   int len)
```

com.wowza.wms.amf

Class AMFPacket

java.lang.Object

└─com.wowza.wms.amf.AMFPacket

```
public class AMFPacket
extends Object
```

AMFPacket: data container for data being transferred to and from the server from the Flash client. AMFPacket is also used to store data read/written to/from an flv file.

Constructor Summary

public	AMFPacket() Create new empty packet
public	AMFPacket(int type, int src, int size) Create new packet with given values
public	AMFPacket(int type, int src, byte[] data) Create new packet with given values

Method Summary

int	addData(byte[] data, int offset, int size) Add data to the packet
int	addDataEx(byte[] srcData, int srcOffset, int destOffset, int srcBytes) Add data to the packet
static int	calcTotalPacketSize(int packetSize, int headerSize, int chunkSize, int amfNumber, boolean isLongTimecode) Calculate the total packet size for given packet parameters
AMFPacket	clone()
AMFPacket	clone(boolean doCopy)
boolean	containsExtraDataKey(String key) Return true if extra data contains the key
static AMFPacket	deserializePacket(byte[] buffer)
java.util.Map	extraDataClone() Deep copy the extra data and return as a Map
static java.util.Map	extraDataClone(java.util.Map extraData)
long	getAbsTimecode() Get absolute timecode (milliseconds)

byte[]	getData() Get data as byte[]
java.nio.ByteBuffer	getDataBuffer() Get data as ByteBuffer
IAMFPacketExtraData	getExtraData(String key) Get extra data value
java.util.Set	getExtraDataKeys() Get a set of the extra data keys
int	getFirstByte() Get first byte of data (used to peek into packet)
Object	getLock() Get lock (mostly used for extra data access)
int	getMissing() Get the number of bytes remaining unfilled in the packet
int	getSecondByte() Get second byte of data (used to peek into packet)
long	getSeq() Get packet sequence number.
int	getSize() Get packet size
int	getSrc() Get stream id (0 if not stream data)
long	getTimecode() Get timecode (milliseconds) relative to the <i>previous</i> packet.
int	getType() Get content type IVHost.CONTENTTYPE_*
boolean	isAudio() Is this an audio packet IVHost.CONTENTTYPE_AUDIO
boolean	isExtraData() Returns true if this packet contains any extra data
boolean	isVideo() Is this an audio packet IVHost.CONTENTTYPE_VIDEO
void	putAllExtraData(java.util.Map entries) Add extra data key value pairs
IAMFPacketExtraData	putExtraData(String key, IAMFPacketExtraData value) Add extra data value
byte[]	serializePacket()
void	setAbsTimecode(long absTimecode) Set absolute timecode (milliseconds)

void	setDataBuffer (byte[] data) Set the data buffer to a byte array
void	setDataBuffer (java.nio.ByteBuffer data) Set the data for this packet
void	setSeq (long seq) Set packet sequence.
void	setSize (int size) Set packet size
void	setSrc (int src) Set stream id (0 if not stream data)
void	setTimecode (long timecode) Set timecode (milliseconds) relative,
void	setTimecodes (long timecode, long absTimecode) Set both relative and absolute timecode in one call (milliseconds)
void	setType (int type) Set content type IVHost.CONTENTTYPE_*
String	toString () Return object as formatted string
void	truncatePacket (int newSize)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

AMFPacket

```
public AMFPacket()
```

Create new empty packet

AMFPacket

```
public AMFPacket(int type,  
                 int src,  
                 int size)
```

Create new packet with given values

Parameters:

type - packet content type: IVHost.CONTENTTYPE_*
src - stream id
size - packet size (bytes)

(continued from last page)

AMFPacket

```
public AMFPacket(int type,  
                 int src,  
                 byte[] data)
```

Create new packet with given values

Parameters:

type - packet content type: IVHost.CONTENTTYPE_*
src - stream id
data - data buffer

Methods

clone

```
public AMFPacket clone()
```

clone

```
public AMFPacket clone(boolean doCopy)
```

getSize

```
public int getSize()
```

Get packet size

Returns:

packet size

setSize

```
public void setSize(int size)
```

Set packet size

Parameters:

size - packet size

truncatePacket

```
public void truncatePacket(int newSize)
```

getMissing

```
public int getMissing()
```

Get the number of bytes remaining unfilled in the packet

Returns:

number of bytes unfilled in packet

setDataBuffer

```
public void setDataBuffer(java.nio.ByteBuffer data)
```

Set the data for this packet

Parameters:

data - byte buffer that holds packet data

setDataBuffer

```
public void setDataBuffer(byte[] data)
```

Set the data buffer to a byte array

Parameters:

data - data buffer byte array

addData

```
public int addData(byte[] data,  
                  int offset,  
                  int size)
```

Add data to the packet

Parameters:

data - byte buffer with data
offset - offset in byte buffer
size - size of data

Returns:

number of bytes unfilled in packet

getType

```
public int getType()
```

Get content type IVHost.CONTENTTYPE_*

Returns:

content type

setType

```
public void setType(int type)
```

Set content type IVHost.CONTENTTYPE_*

Parameters:

type - content type

getSrc

```
public int getSrc()
```

Get stream id (0 if not stream data)

(continued from last page)

Returns:

stream id

setSrc

```
public void setSrc(int src)
```

Set stream id (0 if not stream data)

Parameters:

src - stream id

toString

```
public String toString()
```

Return object as formatted string

getTimecode

```
public long getTimecode()
```

Get timecode (milliseconds) relative to the *previous* packet.

Returns:

timecode (milliseconds)

setTimecodes

```
public void setTimecodes(long timecode,  
    long absTimecode)
```

Set both relative and absolute timecode in one call (milliseconds)

Note this time is relative to the *previous* packet.

Parameters:

timecode - relative timecode (milliseconds)

absTimecode - absolute timecode (milliseconds)

setTimecode

```
public void setTimecode(long timecode)
```

Set timecode (milliseconds) relative,

Note this time is relative to the *previous* packet.

Parameters:

timecode - timecode (milliseconds)

getAbsTimecode

```
public long getAbsTimecode()
```

Get absolute timecode (milliseconds)

Returns:

absolute timecode

setAbsTimecode

```
public void setAbsTimecode(long absTimecode)
```

Set absolute timecode (milliseconds)

Parameters:

absTimecode - absolute timecode

getSeq

```
public long getSeq()
```

Get packet sequence number. Used for live streams to keep track of packet ordering.

Returns:

packet sequence

setSeq

```
public void setSeq(long seq)
```

Set packet sequence. Used for live streams to keep track of packet ordering.

Parameters:

seq - packet sequence

isAudio

```
public boolean isAudio()
```

Is this an audio packet IVHost.CONTENTTYPE_AUDIO

Returns:

true if audio packet

isVideo

```
public boolean isVideo()
```

Is this an audio packet IVHost.CONTENTTYPE_VIDEO

Returns:

true if video packet

getDataBuffer

```
public java.nio.ByteBuffer getDataBuffer()
```

Get data as ByteBuffer

Returns:

data as ByteBuffer

getData

```
public byte[] getData()
```

(continued from last page)

Get data as byte[]

Returns:

data as byte[] null if no data

getFirstByte

```
public int getFirstByte()
```

Get first byte of data (used to peek into packet)

Returns:

first byte of data in packet

getSecondByte

```
public int getSecondByte()
```

Get second byte of data (used to peek into packet)

Returns:

second byte of data in packet

calcTotalPacketSize

```
public static int calcTotalPacketSize(int packetSize,  
    int headerSize,  
    int chunkSize,  
    int amfNumber,  
    boolean isLongTimecode)
```

Calculate the total packet size for given packet parameters

Parameters:

packetSize - data size
headerSize - header size
chunkSize - chunk size
amfNumber - amf number
isLongTimecode - is long timecode

Returns:

total bytes

addDataEx

```
public int addDataEx(byte[] srcData,  
    int srcOffset,  
    int destOffset,  
    int srcBytes)
```

Add data to the packet

Parameters:

srcData - - source byte buffer with data
srcOffset - - start copying from source buffer at this offset
destOffset - - copy into destination buffer from this offset
srcBytes - - size of data to copy

Returns:

(continued from last page)

number of bytes unfilled in packet

serializePacket

```
public byte[] serializePacket()
```

deserializePacket

```
public static AMFPacket deserializePacket(byte[] buffer)
```

getLock

```
public Object getLock()
```

Get lock (mostly used for extra data access)

Returns:

lock

putExtraData

```
public IAMFPacketExtraData putExtraData(String key,  
    IAMFPacketExtraData value)
```

Add extra data value

Parameters:

key - key
value - extra data

Returns:

extra data currently at that key

putAllExtraData

```
public void putAllExtraData(java.util.Map entries)
```

Add extra data key value pairs

Parameters:

entries - extra data key value pairs

getExtraData

```
public IAMFPacketExtraData getExtraData(String key)
```

Get extra data value

Parameters:

key - key

Returns:

extra data value

getExtraDataKeys

```
public java.util.Set getExtraDataKeys()
```

Get a set of the extra data keys

Returns:

extra data keys

containsExtraDataKey

```
public boolean containsExtraDataKey(String key)
```

Return true if extra data contains the key

Parameters:

key - key

Returns:

true if extra data contains the key

isExtraData

```
public boolean isExtraData()
```

Returns true if this packet contains any extra data

Returns:

true if this packet contains any extra data

extraDataClone

```
public static java.util.Map extraDataClone(java.util.Map extraData)
```

extraDataClone

```
public java.util.Map extraDataClone()
```

Deep copy the extra data and return as a Map

Returns:

deep copy of extra data

com.wowza.wms.amf Interface IAMFDataObj

All Known Implementing Classes:

[AMFDataObj](#)

```
public interface IAMFDataObj
extends
```

Method Summary

boolean	containsKey (String name) Return true if the object/array contains key
AMFData	get (int index) Return the object at a particular index.
AMFData	get (String name) Return the object at a particular key.
boolean	getBoolean (int index) Get item at index return as boolean
boolean	getBoolean (String name) Get item at key return as boolean
byte	getBytes (int index) Get item at index return as byte
byte	getBytes (String name) Get item at key return as byte
java.util.Date	getDate (int index) Get item at index return as Date
java.util.Date	getDate (String name) Get item at key return as Date
double	getDouble (int index) Get item at index return as double
double	getDouble (String name) Get item at key return as double
float	getFloat (int index) Get item at index return as float
float	getFloat (String name) Get item at key return as float
int	getInt (int index) Get item at index return as int
int	getInt (String name) Get item at key return as int

String	getKey (int index) Return the key at a particular index.
java.util.List	getKeys () Return a list of all the keys (the list is a copy)
long	getLong (int index) Get item at index return as long
long	getLong (String name) Get item at key return as long
AMFDataObj	getObject (int index) Get item at index return as AMFDataObj
AMFDataObj	getObject (String name) Get item at key return as AMFDataObj
short	getShort (int index) Get item at index return as short
short	getShort (String name) Get item at key return as short
String	getString (int index) Get item at index return as String
String	getString (String name) Get item at key return as String
void	put (String name, AMFData data) Put or replace object at key
void	put (String name, boolean data) Put or replace boolean value at key (data will be wrapped in an AMFDataItem object)
void	put (String name, java.util.Date data) Put or replace date value at key (data will be wrapped in an AMFDataItem object)
void	put (String name, double data) Put or replace double value at key (data will be wrapped in an AMFDataItem object)
void	put (String name, int data) Put or replace int value at key (data will be wrapped in an AMFDataItem object)
void	put (String name, long data) Put or replace long value at key (data will be wrapped in an AMFDataItem object)
void	put (String name, String data) Put or replace string value at key (data will be wrapped in an AMFDataItem object)
AMFData	remove (int index) Remove element by index
AMFData	remove (String name) Remove element by key

(continued from last page)

Methods

containsKey

```
public boolean containsKey(String name)
```

Return true if the object/array contains key

Parameters:

name - key

Returns:

Return true the object/array contains key

put

```
public void put(String name,  
                AMFData data)
```

Put or replace object at key

Parameters:

name - key

data - object

put

```
public void put(String name,  
                String data)
```

Put or replace string value at key (data will be wrapped in an AMFDataItem object)

Parameters:

name - key

data - string value

put

```
public void put(String name,  
                double data)
```

Put or replace double value at key (data will be wrapped in an AMFDataItem object)

Parameters:

name - key

data - double value

put

```
public void put(String name,  
                int data)
```

Put or replace int value at key (data will be wrapped in an AMFDataItem object)

Parameters:

name - key

data - int value

put

```
public void put(String name,  
                long data)
```

Put or replace long value at key (data will be wrapped in an AMFDataItem object)

Parameters:

name - key
data - long value

put

```
public void put(String name,  
                java.util.Date data)
```

Put or replace date value at key (data will be wrapped in an AMFDataItem object)

Parameters:

name - key
data - date value

put

```
public void put(String name,  
                boolean data)
```

Put or replace boolean value at key (data will be wrapped in an AMFDataItem object)

Parameters:

name - key
data - boolean value

getKeys

```
public java.util.List getKeys()
```

Return a list of all the keys (the list is a copy)

Returns:

new list that contains one entry for each key

getKey

```
public String getKey(int index)
```

Return the key at a particular index.

Parameters:

index

Returns:

Return key at index or null if out of bounds

get

```
public AMFData get(String name)
```

(continued from last page)

Return the object at a particular key.

Parameters:

name - key

Returns:

Return object or null if out of bounds

get

public [AMFData](#) **get**(int index)

Return the object at a particular index.

Parameters:

index - index

Returns:

Return object or null if out of bounds

remove

public [AMFData](#) **remove**(String name)

Remove element by key

Parameters:

name - key

Returns:

removed object or null if not found

remove

public [AMFData](#) **remove**(int index)

Remove element by index

Parameters:

index - index

Returns:

removed object or null if not found

getString

public String **getString**(String name)

Get item at key return as String

Parameters:

name - key

Returns:

Return item as String or null if out of bounds

(continued from last page)

getInt

```
public int getInt(String name)
```

Get item at key return as int

Parameters:

name - key

Returns:

Return item as int or 0 if out of bounds

getLong

```
public long getLong(String name)
```

Get item at key return as long

Parameters:

name - key

Returns:

Return item as long or 0 if out of bounds

getShort

```
public short getShort(String name)
```

Get item at key return as short

Parameters:

name - key

Returns:

Return item as short or 0 if out of bounds

getDouble

```
public double getDouble(String name)
```

Get item at key return as double

Parameters:

name - key

Returns:

Return item as double or 0 if out of bounds

getFloat

```
public float getFloat(String name)
```

Get item at key return as float

Parameters:

name - key

Returns:

Return item as float or 0 if out of bounds

getBytes

```
public byte getBytes(String name)
```

Get item at key return as byte

Parameters:

name - key

Returns:

Return item as byte or 0 if out of bounds

getBoolean

```
public boolean getBoolean(String name)
```

Get item at key return as boolean

Parameters:

name - key

Returns:

Return item as boolean or false if out of bounds

getDate

```
public java.util.Date getDate(String name)
```

Get item at key return as Date

Parameters:

name - key

Returns:

Return item as Date or null if out of bounds

getObject

```
public AMFDataObj getObject(String name)
```

Get item at key return as AMFDataObj

Parameters:

name - key

Returns:

Return item as AMFDataObj or null if out of bounds

getString

```
public String getString(int index)
```

Get item at index return as String

Parameters:

index - index

(continued from last page)

Returns:

Return item as String or null if out of bounds

getInt

```
public int getInt(int index)
```

Get item at index return as int

Parameters:

index - index

Returns:

Return item as int or 0 if out of bounds

getLong

```
public long getLong(int index)
```

Get item at index return as long

Parameters:

index - index

Returns:

Return item as long or 0 if out of bounds

getShort

```
public short getShort(int index)
```

Get item at index return as short

Parameters:

index - index

Returns:

Return item as short or 0 if out of bounds

getByte

```
public byte getByte(int index)
```

Get item at index return as byte

Parameters:

index - index

Returns:

Return item as byte or 0 if out of bounds

getDouble

```
public double getDouble(int index)
```

Get item at index return as double

Parameters:

(continued from last page)

index - index

Returns:

Return item as double or 0 if out of bounds

getFloat

```
public float getFloat(int index)
```

Get item at index return as float

Parameters:

index - index

Returns:

Return item as float or 0 if out of bounds

getBoolean

```
public boolean getBoolean(int index)
```

Get item at index return as boolean

Parameters:

index - index

Returns:

Return item as boolean or false if out of bounds

getDate

```
public java.util.Date getDate(int index)
```

Get item at index return as Date

Parameters:

index - index

Returns:

Return item as Date or null if out of bounds

getObject

```
public AMFDataObj getObject(int index)
```

Get item at index return as AMFDataObj

Parameters:

index - index

Returns:

Return item as AMFDataObj or null if out of bounds

com.wowza.wms.amf Interface IAMFExternalizable

public interface **IAMFExternalizable**
extends

Method Summary

void	deserialize (AMFDataObj amfObj, java.nio.ByteBuffer data, AMFDataContextDeserialize context)
String	getClassName ()
void	serialize (AMFDataObj amfObj, java.io.DataOutputStream out, AMFDataContextSerialize context)
void	setClassName (String className)

Methods

deserialize

```
public void deserialize(AMFDataObj amfObj,  
    java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

serialize

```
public void serialize(AMFDataObj amfObj,  
    java.io.DataOutputStream out,  
    AMFDataContextSerialize context)
```

getClassName

```
public String getClassName()
```

setClassName

```
public void setClassName(String className)
```

com.wowza.wms.amf Interface IAMFPacketExtraData

public interface **IAMFPacketExtraData**
extends

Method Summary

IAMFPacketExtraData	clone() Return a deep copy of the extra data item
-------------------------------------	--

Methods

clone

public [IAMFPacketExtraData](#) **clone()**

Return a deep copy of the extra data item

Returns:

deep copy of the extra data item

Package

com.wowza.wms.application

com.wowza.wms.application Interface IApplication

public interface **IApplication**
extends

IApplication: public interface to Application object

Field Summary

public static final	DEFAULT_APPLICATION_NAME Value: _defapp_
---------------------	--

Method Summary

void	addApplicationInstanceListener (IApplicationInstanceNotify applicationInstanceListener) Add applicationInstance listener.
IApplicationInstance	getAppInstance (String name) Get applicationInstance object by name
java.util.List	getAppInstanceNames () Get a list of application instance names
String	getApplicationPath () Get the root path for application
String	getConfigPath () Get full path to Application.xml file
ConnectionCounter	getConnectionCounter () Get the connectionCounter for application
ConnectionCounterSimple	getConnectionCounter (int counterIndex) Get the connectionCounter for application for application for a specific technology (see IVHost.COUNTER_*)
String	getDateStarted () Get date application started
IOPerformanceCounter	getIoPerformanceCounter () Get the performance counter for application
IOPerformanceCounter	getIoPerformanceCounter (int counterIndex) Get the performance counter for application for a specific technology (see IVHost.COUNTER_*)
String	getName () Get the name of application
WMSProperties	getProperties () Get application properties

void	getProtocolUsage (boolean[] protocolsInUse) Get the protocols in use by this application instance (see IApplicationInstance.PROTOCOLUSAGE_*)
String	getTimeRunning () Get time application running
double	getTimeRunningSeconds () Get time running in seconds
IVHost	getVHost () Get the parent vHost object
boolean	isAppInstanceLoaded (String name) Return true if application instance is loaded
boolean	isRunning () Returns true if the application is in running state
String	readAppConfig (String sName) Method to read xml config file..
void	removeAppInstance (IApplicationInstance appInstance) Disconnect all clients connected to an application instance and remove it from the IApplication application list.
void	removeApplicationInstanceListener (IApplicationInstanceNotify applicationInstanceListener) Remove applicationInstance listener.
void	setName (String name) Set name of application
void	shutdown (boolean isServerShutdown) shutdown application
void	shutdownAppInstance (String appInstanceName) Shutdown an application instance by name.
boolean	writeAppConfig (String sName, String data) Method to write xml config file..

Fields

DEFAULT_APPLICATION_NAME

```
public static final java.lang.String DEFAULT_APPLICATION_NAME
```

Constant value: **_defapp_**

Methods

shutdown

```
public void shutdown(boolean isServerShutdown)
```

shutdown application

(continued from last page)

Parameters:

isServerShutdown - true if due to shutdown of server

getApplicationPathpublic String **getApplicationPath**()

Get the root path for application

Returns:

root path for application

getConfigPathpublic String **getConfigPath**()

Get full path to Application.xml file

Returns:

full path to Application.xml file

getAppInstancepublic [IApplicationInstance](#) **getAppInstance**(String name)

Get applicationInstance object by name

Parameters:

name - applicationInstance name

Returns:

applicationInstance object

isAppInstanceLoadedpublic boolean **isAppInstanceLoaded**(String name)

Return true if application instance is loaded

Parameters:

name - applicationInstance name

Returns:

true if application instance is loaded

getNamepublic String **getName**()

Get the name of application

Returns:

name of application

setNamepublic void **setName**(String name)

(continued from last page)

Set name of application

Parameters:

name - name of application

getVHost

```
public IVHost getVHost()
```

Get the parent vHost object

Returns:

parent vHost

getProperties

```
public WMSProperties getProperties()
```

Get application properties

Returns:

application properties

addApplicationInstanceListener

```
public void addApplicationInstanceListener(IApplicationInstanceNotify  
applicationInstanceListener)
```

Add applicationInstance listener. Will be invoked each time applicationInstance created/deleted

Parameters:

applicationInstanceListener - applicationInstance listener

removeApplicationInstanceListener

```
public void removeApplicationInstanceListener(IApplicationInstanceNotify  
applicationInstanceListener)
```

Remove applicationInstance listener. Will be invoked each time applicationInstance created/deleted

Parameters:

applicationInstanceListener - applicationInstance listener

getConnectionCounter

```
public ConnectionCounter getConnectionCounter()
```

Get the connectionCounter for application

Returns:

connectionCounter for application

getConnectionCounter

```
public ConnectionCounterSimple getConnectionCounter(int counterIndex)
```

Get the connectionCounter for application for application for a specific technology (see IVHost.COUNTER_*)

(continued from last page)

Parameters:

counterIndex - counter index (see IVHost.COUNTER_*)

Returns:

connection ocunter

getIoPerformanceCounter

```
public IOPerformanceCounter getIoPerformanceCounter()
```

Get the performance counter for application

Returns:

performance counter for application

getIoPerformanceCounter

```
public IOPerformanceCounter getIoPerformanceCounter(int counterIndex)
```

Get the performance counter for application for a specific technology (see IVHost.COUNTER_*)

Parameters:

counterIndex - counter index (see IVHost.COUNTER_*)

Returns:

performance counter

getDateStarted

```
public String getDateStarted()
```

Get date application started

Returns:

date application started

getTimeRunning

```
public String getTimeRunning()
```

Get time application running

Returns:

time application running

getTimeRunningSeconds

```
public double getTimeRunningSeconds()
```

Get time running in seconds

Returns:

time running in seconds

getAppInstanceNames

```
public java.util.List getAppInstanceNames()
```

(continued from last page)

Get a list of application instance names

Returns:

list of application instance names

removeAppInstance

public void **removeAppInstance**([IApplicationInstance](#) appInstance)

Disconnect all clients connected to an application instance and remove it from the IApplication application list. The proper way to call this is:

```
public void shutdownAppInstance(IApplicationInstance appInstance)
{
    IVHost vhost = appInstance.getVHost();
    IApplication app = appInstance.getApplication();

    WMSReadWriteLock appLock = vhost.getApplicationLock();
    appLock.writeLock().lock();
    try
    {
        app.removeAppInstance(appInstance);
    }
    catch (Exception e)
    {
        WMSLoggerFactory.getLogger(Application.class).error("Application.shutdownAppInstance ",
        e);
    }
    finally
    {
        appLock.writeLock().unlock();
    }
}
```

Parameters:

appInstance - application instance to remove

shutdownAppInstance

public void **shutdownAppInstance**(String appInstanceName)

Shutdown an application instance by name. This will disconnect all clients connected to this application instance.

Parameters:

appInstanceName - application instance name

(continued from last page)

readAppConfig

```
public String readAppConfig(String sName)
```

Method to read xml config file..

writeAppConfig

```
public boolean writeAppConfig(String sName,  
    String data)
```

Method to write xml config file..

getProtocolUsage

```
public void getProtocolUsage(boolean[] protocolsInUse)
```

Get the protocols in use by this application instance (see IApplicationInstance.PROTOCOLUSAGE_*)

isRunning

```
public boolean isRunning()
```

Returns true if the application is in running state

Returns:

true if the application is in running state

com.wowza.wms.application Interface IApplicationInstance

public interface **IApplicationInstance**
extends

IApplicationInstance: public interface to ApplicationInstance object

Field Summary	
public static final	DEFAULT_APPINSTANCE_NAME Value: _definst_
public static final	PROTOCOLUSAGE_CUPERTINO Value: 7
public static final	PROTOCOLUSAGE_MC_CUPERTINO Value: 50
public static final	PROTOCOLUSAGE_MC_LIVEREPEATER Value: 44
public static final	PROTOCOLUSAGE_MC_MPEGTSTCP Value: 51
public static final	PROTOCOLUSAGE_MC_RTP Value: 45
public static final	PROTOCOLUSAGE_MC_SHOUTCAST Value: 43
public static final	PROTOCOLUSAGE_MC_SRTRECEIVER Value: 52
public static final	PROTOCOLUSAGE_MEDIACACHE Value: 20
public static final	PROTOCOLUSAGE_MPEGDASH Value: 10
public static final	PROTOCOLUSAGE_ORIGINCUPERTINO Value: 15
public static final	PROTOCOLUSAGE_ORIGINMPEGDASH Value: 18

public static final	PROTOCOLUSAGE_ORIGINSANJOSE Value: 17
public static final	PROTOCOLUSAGE_ORIGINSMOOTH Value: 16
public static final	PROTOCOLUSAGE_PUSHUBLISHING Value: 19
public static final	PROTOCOLUSAGE_RTMP Value: 0
public static final	PROTOCOLUSAGE_RTMP_IN Value: 21
public static final	PROTOCOLUSAGE_RTMP_OUT Value: 22
public static final	PROTOCOLUSAGE_RTMP_E Value: 4
public static final	PROTOCOLUSAGE_RTMP_E_IN Value: 29
public static final	PROTOCOLUSAGE_RTMP_E_OUT Value: 30
public static final	PROTOCOLUSAGE_RTMP_S Value: 2
public static final	PROTOCOLUSAGE_RTMP_S_IN Value: 25
public static final	PROTOCOLUSAGE_RTMP_S_OUT Value: 26
public static final	PROTOCOLUSAGE_RTMP_T Value: 1
public static final	PROTOCOLUSAGE_RTMP_T_IN Value: 23
public static final	PROTOCOLUSAGE_RTMP_T_OUT Value: 24
public static final	PROTOCOLUSAGE_RTMP_T_E Value: 5

public static final	PROTOCOLUSAGE_RTMPTE_IN Value: 31
public static final	PROTOCOLUSAGE_RTMPTE_OUT Value: 32
public static final	PROTOCOLUSAGE_RTMPPTS Value: 3
public static final	PROTOCOLUSAGE_RTMPPTS_IN Value: 27
public static final	PROTOCOLUSAGE_RTMPPTS_OUT Value: 28
public static final	PROTOCOLUSAGE_RTP Value: 6
public static final	PROTOCOLUSAGE_RTP_IN Value: 33
public static final	PROTOCOLUSAGE_RTP_OUT Value: 34
public static final	PROTOCOLUSAGE_RTSP_IN Value: 35
public static final	PROTOCOLUSAGE_RTSP_OUT Value: 36
public static final	PROTOCOLUSAGE_RTSPULL_IN Value: 46
public static final	PROTOCOLUSAGE_RTSPULL_OUT Value: 47
public static final	PROTOCOLUSAGE_SANJOSE Value: 9
public static final	PROTOCOLUSAGE_SMOOTH Value: 8
public static final	PROTOCOLUSAGE_TOTAL Value: 53
public static final	PROTOCOLUSAGE_WEBM Value: 11

public static final	PROTOCOLUSAGE_WEBRTC_IN Value: 48
public static final	PROTOCOLUSAGE_WEBRTC_OUT Value: 49
public static final	PROTOCOLUSAGE_WOWZ Value: 12
public static final	PROTOCOLUSAGE_WOWZ_IN Value: 37
public static final	PROTOCOLUSAGE_WOWZ_OUT Value: 38
public static final	PROTOCOLUSAGE_WOWZE Value: 13
public static final	PROTOCOLUSAGE_WOWZE_IN Value: 39
public static final	PROTOCOLUSAGE_WOWZE_OUT Value: 40
public static final	PROTOCOLUSAGE_WOWZS Value: 14
public static final	PROTOCOLUSAGE_WOWZS_IN Value: 41
public static final	PROTOCOLUSAGE_WOWZS_OUT Value: 42

Method Summary

void	addClientListener (IClientNotify clientListener) Add client listener.
void	addDvrRecorderListener (ILiveStreamDvrRecorderActionNotify listener) Add a Dvr Recorder listener (see: ILiveStreamDvrRecorderActionNotify)
void	addDvrStreamManagerListener (IDvrStreamManagerActionNotify listener) Add a Dvr Application Store Manager listener (see: IDvrStoreActionNotify)
void	addHTTPListener (IHTTPSessionNotify httpListener) Add listener to be notified of HTTPSession create and destroy.
void	addHTTPStreamerSession (IHTTPStreamerSession httpStreamerSession) Add a HTTPStreamerSession to this application instance

void	addLiveStreamPacketizerListener (ILiveStreamPacketizerActionNotify liveStreamPacketizerListener) Add a Live Stream Packetizer listener (see: ILiveStreamPacketizerActionNotify)
void	addLiveStreamTranscoderListener (ILiveStreamTranscoderNotify liveStreamTranscoderListener) Add a live stream transcoder listener
void	addMediaCasterListener (IMediaCasterNotify mediaCasterListener) Add mediaCaster listener.
void	addMediaCasterListener (IMediaCasterNotify2 mediaCasterListener) Add mediaCaster listener.
void	addMediaReaderListener (IMediaReaderActionNotify mediaReaderListener) Add media reader listener.
void	addMediaStreamListener (IMediaStreamNotify mediaStreamListener) Add mediaStream listener.
void	addMediaWriterListener (IMediaWriterActionNotify listener) Add a MediaWriter listener class.
void	addModuleListener (IModuleNotify moduleListener) Add module listener.
void	addPlayStreamByName (IMediaStream stream, String name) Add a media stream to the list of streams that are listening for a published stream
void	addPublisher (Publisher publisher) Add a server side publisher to this application instance
void	addPushPublishSession (IMediaStream stream, IPushPublishSession pushPublishSession) Add a push publish session to the list of active push publish sessions
void	addPushPublishSessionListener (IPushPublishSessionNotify pushPublishSessionListener) Add a push publish session listener (see IPushPublishSessionNotify)
void	addRTPIncomingDatagramPortAll () Allow all incoming RTP UDP ports for this application instance
void	addRTPIncomingDatagramPortRange (int startPort, int endPort) Add a port range to the list of valid incoming RTP UDP ports
void	addRTPListener (IRTPSessionNotify rtpListener) Add listener to be notified of RTPSession create and destroy.
void	addRTPSession (RTPSession rtpSession) Add an RTP session to this application instance
void	addSharedObjectListener (ISharedObjectNotify sharedObjectListener, boolean isPersistent) Add sharedObject listener.
void	addSourceControlSession (String streamName, ISourceControlSession sourceControlSession) Add a source control session to the list of active source control sessions associated with the given stream name

void	addSourceControlSessionListener (ISourceControlSessionNotify sourceControlSessionListener) Add a source control session listener (see ISourceControlSessionNotify)
void	broadcastMsg (java.util.List clientList, String handlerName) Broadcast a message to a specific list of clients connected to this application instance
void	broadcastMsg (java.util.List clientList, String handlerName, Object[] params) Broadcast a message to a specific list of clients connected to this application instance
void	broadcastMsg (String handlerName, Object[] params) Broadcast a message to all clients connected to this applicationInstance
boolean	containsDvrRecorder (String dvrRecorder) Does this application instance contain a references to this DVR recorder.
boolean	containsHTTPStreamer (String httpStreamer) Does this application instance allow streaming of a given HTTPStreamer
boolean	containsLiveStreamPacketizer (String liveStreamPacketizer) Does this application instance contain a references to this live stream packetizer.
boolean	containsLiveStreamTranscoder (String liveStreamTranscoder) Return true if this application instance contains the transcoder name
String	decodeStorageDir (String storageDir) This function will take a storage path that uses variables and expand the variables based on the context.
String[]	getAllowDomains () Get the list of domain names used to control access to this application.
IApplication	getApplication () Get parent application
int	getApplicationInstanceTouchTimeout () Get the application instance touch timeout (milliseconds).
int	getApplicationTimeout () Get application timeout (milliseconds)
IClient	getClient (int index) Deprecated. Get the client connection at index. This method is deprecated. It is best to use getClient() to return a List objects.
IClient	getClientById (int index) Get a client connection by the client Id
int	getClientCount () Get number of client connections currently connected to applicationInstance
int	getClientCountTotal () Get number of client connections in total that have connected to this applicationInstance
int	getClientIdleFrequency () Get default client idle frequency (milliseconds)
java.util.List	getClients () Get the set of clients currently connected to this application instance (replaces getClient(index))

edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock	getClientsLockObj() Get the read/write lock for this application instance
ConnectionCounter	getConnectionCounter() Get the connectionCounter for applicationInstance
ConnectionCounterSimple	getConnectionCounter(int counterIndex) Get the connectionCounter for applicationInstance for a specific technology (see IVHost.COUNTER_*)
String	getContextStr() Returns the application context string in the form [application]/[appInstance].
String	getDateStarted() Get date applicationInstance started
DvrApplicationContext	getDvrApplicationContext() Get live stream dvr application context
DvrApplicationConverterContext	getDvrConverter() Get dvr application converter context
WMSProperties	getDvrProperties() Get the property collection of DVR settings that are specific to this application instance.
String	getDvrRecorderList() Get the comma separated list of Dvr Recorder names being used by this application (see conf/Dvr.xml)
IHTTPStreamerApplicationContext	getHTTPStreamerApplicationContext(String httpStreamName, boolean doCreate) Get the HTTPStreamer application context for a given HTTPStreamer adapter
String	getHTTPStreamerList() Get the comma separated list of HTTPStreamers names being used by this application (see conf/HTTPStreamers.xml)
WMSProperties	getHTTPStreamerProperties() Get the property collection of HTTPStreamer settings that are specific to this application instance
int	getHTTPStreamerSessionCount() Get the current number of HTTPStreamerSessions associated with this application instance
int	getHTTPStreamerSessionCount(int protocol) Get the current number of HTTPStreamerSessions associated with this application instance by protocol.
int	getHTTPStreamerSessionCount(int protocol, String streamName) Get the current number of HTTPStreamerSessions associated with this application instance and stream name by protocol.
int	getHTTPStreamerSessionCount(String streamName) Get the current number of HTTPStreamerSessions associated with this application instance and stream name
java.util.Map	getHTTPStreamerSessionCountsByName(int protocol) Get a map of session counts by name for a given protocol

java.util.List	getHTTPStreamerSessions() Get the HTTPStreamerSessions associated with this application instance
java.util.List	getHTTPStreamerSessions(int protocol) Get the HTTPStreamerSessions associated with this application instance by protocol.
java.util.List	getHTTPStreamerSessions(int protocol, String streamName) Get the HTTPStreamerSessions associated with this application instance for a stream name by protocol.
java.util.List	getHTTPStreamerSessions(String streamName) Get the HTTPStreamerSessions associated with this application instance for a stream name
IOPerformanceCounter	getIOPerformanceCounter() Get the performance counter for applicationInstance
IOPerformanceCounter	getIOPerformanceCounter(int counterIndex) Get the performance counter for applicationInstance for a specific technology (see IVHost.COUNTER_*)
long	getLastTouchTime() Get the last time the instance was touched (milliseconds)
ILiveStreamDvrRecorderControl	getLiveStreamDvrRecorderControl() Get the Live Stream DVR Recorder Controller.
ILiveStreamPacketizerControl	getLiveStreamPacketizerControl() Get the Live Stream Packetizer Controller.
String	getLiveStreamPacketizerList() Get the comma separated list of LiveStreamPacketizers names being used by this application (see conf/LiveStreamPacketizers.xml)
WMSProperties	getLiveStreamPacketizerProperties() Get the property collection of LiveStreamPacketizer settings that are specific to this application instance
ILiveStreamTranscoderControl	getLiveStreamTranscoderControl() Get the Live Stream Transcoder Controller.
String	getLiveStreamTranscoderList() Get comma separated list of transcoders to use for this application instance
WMSProperties	getManagerProperties() Get Application's manager's properties collection
int	getMaximumPendingReadBytes() Set maximum number of bytes a client connection can have waiting to be written before the connection is terminated.
int	getMaximumPendingWriteBytes() Get maximum number a bytes a client connection can have waiting to be sent before the connection is terminated.
int	getMaximumSetBufferTime() Get maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call.
int	getMaxStorageDirDepth() Maximum folder depth allowed for the StreamStorageDir and SharedObjectStorageDir paths

java.util.List	getMediaCacheFilters() Get the list of allowed MediaCache sources.
WMSProperties	getMediaCasterProperties() Get the property collection of media caster settings that are specific to this application instance
int	getMediacasterRTPRTSP RTPTransportMode() RTP MediaCaster RTSP/RTP transport mode.
MediaCasterStreamMap	getMediaCasterStreams() Get the media caster streams attached to this application instance
IMediaCasterValidateMediaCaster	getMediaCasterValidator() Get the MediaCaster validator interface for this application instance
IMediaListProvider	getMediaListProvider() Get the current media list provider.
int	getMediaReaderContentType(String mediaType) Get the content type of a media stream name prefix (see IMediaReader.CONTENTTYPE_*)
WMSProperties	getMediaReaderProperties() Get the property collection of media reader settings that are specific to this application instance
WMSProperties	getMediaWriterProperties() Get the property collection of media reader settings that are specific to this application instance
ModuleFunctions	getModFunctions() Get list of application modules
Object	getModuleInstance(String name) Get the instance of the module class for this application instance.
ModuleList	getModuleList() Get the list of loaded modules.
String	getName() Get applicationInstance name
int	getPingTimeout() Get ping timeout (milliseconds)
int	getPlayStreamCount(String streamName) Get the number of Flash players playing a given stream name
java.util.Map	getPlayStreamCountsByName() Get a map of stream names to number of Flash players playing the stream name
java.util.List	getPlayStreamsByName(String name) Get a list of media streams that are listening for published stream.
WMSProperties	getProperties() Get applicationInstance properties
boolean[]	getProtocolUsage() Get the protocols in use by this application instance (see IApplicationInstance.PROTOCOLUSAGE_*)

void	getProtocolUsage (boolean[] protocolsInUse) Get the protocols in use by this application instance (see IApplicationInstance.PROTOCOLUSAGE_*)
int	getPublisherCount () Get the current number of server side publishers
java.util.List	getPublishers () Get the set of server side publishers
java.util.List	getPublishStreamNames () Get the list of live stream names currently being published.
int	getPushPublishSessionCount () Get the number of push publishing sessions.
java.util.List	getPushPublishSessions () Get all active push publish sessions
java.util.List	getPushPublishSessions (IMediaStream stream) Get the current push publish sessions for a given IMediaStream
String	getRepeaterOriginUrl () Get the Repeater Origin URL used by the Live Stream Repeater
String	getRepeaterQueryString () Get the Repeater query string that is used to connect to the origin.
String	getRsoStorageDir () Get remote shared object storage path
String	getRsoStoragePath () Get the resolved storage path to the shared objects
int	getRTPAVSyncMethod () Get RTP audio/video sync method (RTPStream.AVSYNCMETHODS_SENDERREPORT, RTPStream.AVSYNCMETHODS_SYSTEMCLOCK, RTPStream.AVSYNCMETHODS_RTPTIMECODE)
int	getRTPIdleFrequency () Set the default RTP idle frequency (milliseconds)
int	getRTPMaxRTCPWaitTime () Get the maximum time to wait for RTCP packets (milliseconds)
String	getRTPPlayAuthenticationMethod () Get the RTP play authentication method (as defined in conf/Authentication.xml)
WMSProperties	getRTPProperties () Get the property collection of RTP settings that are specific to this application instance
String	getRTPPublishAuthenticationMethod () Get the RTP publish authentication method (as defined in conf/Authentication.xml)
int	getRTPSessionCount () Get the number of RTP sessions running under this application instance
int	getRTPSessionCount (String streamName) Get the number of RTP player streams playing a given stream name

java.util.Map	getRTSPSessionCountsByName() Get a map of stream names and session counts of RTP sessions
java.util.List	getRTSPSessions() Get a list of RTP sessions running under this application instance
java.util.List	getRTSPSessions(String streamName) Get a list of RTP sessions running under this application instance playing a given stream name
String	getRTSPBindIpAddress() Set the IP address to which UDP ports will be bound for RTSP/RTP sessions
String	getRTSPConnectionAddressType() Get the connection IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session
String	getRTSPConnectionIpAddress() Get the connection IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session
int	getRTSPMaximumPendingWriteBytes() Get the maximum number of pending write bytes for an RTSP session
String	getRTSPOriginAddressType() Get the origin IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session
String	getRTSPOriginIpAddress() Get the origin IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session
int	getRTSPSessionTimeout() Get the RTSP session timeout (milliseconds)
String	getSharedObjectReadAccess() Get the default shared object read access
ISharedObjects	getSharedObjects() Get non-persistent shared object collection
ISharedObjects	getSharedObjects(boolean isPersistent) Get either persistent or non-persistent shared object collection
String	getSharedObjectWriteAccess() Get the default shared object write access
ISourceControlSession	getSourceControlSession(String streamName) Get the source control session for the given stream name
int	getSourceControlSessionCount() Get the number of source control sessions.
java.util.List	getSourceControlSessions() Get all active source control sessions
String	getStreamAudioSampleAccess() Get the default stream audio sample access
int	getStreamCount() Get the total number of open streams attached to this application instance

IMediaStreamFileMapper	getStreamFileMapper() Get the stream file mapper.
String	getStreamKeyDir() Get the stream key path
String	getStreamKeyPath() Get the resolved key path to the MediaStreams encryption keys
IMediaStreamNameAliasProvider	getStreamNameAliasProvider() Get the stream name alias provider
WMSProperties	getStreamProperties() Get the property collection of stream settings that are specific to this application instance
String	getStreamReadAccess() Get the default stream read access
WMSProperties	getStreamRecorderProperties() Get the property collection of StreamRecorder settings that are specific to this application instance
MediaStreamMap	getStreams() Get all the mediaStream objects attached to this applicationInstance
String	getStreamStorageDir() Get stream storage path
String	getStreamStoragePath() Get the resolved storage path to the MediaStreams
String	getStreamType() Get default streamType for application.
String	getStreamVideoSampleAccess() Get the default stream video sample access
String	getStreamWriteAccess() Get the default stream write access
WMSProperties	getTimedTextProperties() Get the property collection of timed text settings that are specific to this application instance.
String	getTimeRunning() Get time applicationInstance running
double	getTimeRunningSeconds() Get time running in seconds
LiveStreamTranscoderApplicationContext	getTranscoderApplicationContext() Get live stream transcoder application context
WMSProperties	getTranscoderProperties() Get the property collection of Transcoder settings that are specific to this application instance
int	getValidationFrequency() Get time between validation pings (milliseconds)
IVHost	getVHost() Get parent vHost

String	getVODTimedTextProviderList() Get the comma separated list of VODTimedTextProvider names being used by this application (see conf/TimedTextProviders.xml)
java.util.List	getVODTimedTextProviderSet()
com.wowza.wms.webrtc.model.WebRTCApplicationContext	getWebRTCApplicationContext() Get the WebRTC application level context
int	getWebRTCSessionCount() Get count of WebRTC sessions
int	getWebRTCSessionCount(String streamName) Get count of WebRTC sessions by stream name
java.util.Map	getWebRTCSessionCountsByName() Get a map of WebRTC sessions by stream name
java.util.List	getWebRTCSessions() Get list of WebRTC sessions
java.util.List	getWebRTCSessions(String streamName) Get list of WebRTC sessions by stream name
void	incClientCountTotal() Increment the total number of connected client counter by one
boolean	isAcceptConnection() Is auto accept connection on/off
boolean	isDebugAppTimeout() If true appTimeout processing will be logged.
boolean	isLive() Returns true if the application stream type of the application instance is live
boolean	isMediaCacheSourceAllowed(String sourceName) Test to see if a MediaCache source name is allowed
boolean	isRTPIncomingDatagramPortValid(int port) Check a port number to be sure it is a valid RTP UDP port for this application instance
boolean	isValidateFMLEConnections() Returns true if validating FMLE connection (default is false)
void	notifyDvrStreamManagerCreate(IDvrStreamManager dvrStoreManager, String streamName) Notify listeners that Dvr Application Store Manager has been created.
void	notifyDvrStreamManagerDestroy(IDvrStreamManager dvrManager) Notify listeners that Dvr Application Store Manager has been destroyed.
void	notifyDvrStreamManagerInit(IDvrStreamManager dvrStoreManager) Notify listeners that Dvr Application Store Manager has been initialized.
void	notifyHTTPSessionCreate(IHTTPStreamerSession httpSession) Notify HTTP session create

void	notifyHTTPSessionDestroy (IHTTPStreamerSession httpSession) Notify HTTP session destroy
void	notifyLiveStreamDvrRecorderCreate (ILiveStreamDvrRecorder dvr, String streamName) Notify Dvr Recorder Create
void	notifyLiveStreamDvrRecorderDestroy (ILiveStreamDvrRecorder dvr) Notify DVR Recorder has been destroyed.
void	notifyLiveStreamDvrRecorderInit (ILiveStreamDvrRecorder dvr, String streamName) Notify DVR Recorder has been initialized.
void	notifyLiveStreamPacketizerCreate (ILiveStreamPacketizer liveStreamPacketizer, String streamName) Notify Live Stream Packetizer Create
void	notifyLiveStreamPacketizerDestroy (ILiveStreamPacketizer liveStreamPacketizer) Notify Live Stream Packetizer Destory
void	notifyLiveStreamPacketizerInit (ILiveStreamPacketizer liveStreamPacketizer, String streamName) Notify Live Stream Packetizer Init
void	notifyLiveStreamTranscoderCreate (ILiveStreamTranscoder liveStreamTranscoder, IMediaStream stream) Notify live stream transcoder create
void	notifyLiveStreamTranscoderDestroy (ILiveStreamTranscoder liveStreamTranscoder, IMediaStream stream) Notify live stream transcoder destroy
void	notifyLiveStreamTranscoderInit (ILiveStreamTranscoder liveStreamTranscoder, IMediaStream stream) Notify live stream transcoder init
void	notifyMediaReaderClose (IMediaReader mediaReader, IMediaStream stream) Notify media reader notifyMediaReaderClose
void	notifyMediaReaderCreate (IMediaReader mediaReader) Notify media reader notifyMediaReaderCreate
void	notifyMediaReaderExtractMetaData (IMediaReader mediaReader, IMediaStream stream) Notify media reader notifyMediaReaderExtractMetaData
void	notifyMediaReaderInit (IMediaReader mediaReader, IMediaStream stream) Notify media reader notifyMediaReaderInit
void	notifyMediaReaderOpen (IMediaReader mediaReader, IMediaStream stream) Notify media reader notifyMediaReaderOpen
void	notifyMediaWriterOnFLVAddMetadata (IMediaStream stream, java.util.Map extraMetadata) Notify all MediaWriter listeners of onFLVAddMetadata
void	notifyMediaWriterOnWriteComplete (IMediaStream stream, java.io.File file) Notify all MediaWriter listeners of onWriteComplete

void	notifyPushPublishSessionCreate (String streamName, IMediaStream stream, IPushPublishSession pushPublishSession) Notify push publish session create
void	notifyPushPublishSessionDestroy (String streamName, IMediaStream stream, IPushPublishSession pushPublishSession) Notify push publish session destroy
void	notifyRTPSessionCreate (RTPSession rtpSession) Notify RTP session create
void	notifyRTPSessionDestroy (RTPSession rtpSession) Notify RTP session destroy
void	notifySourceControlSessionCreate (String streamName, ISourceControlSession sourceControlSession) Notify source control session create
void	notifySourceControlSessionDestroy (String streamName, ISourceControlSession sourceControlSession) Notify source control session destroy
void	parseAllowDomains (String domainFilterStr) Parse a comma delimited list of domain names used to control access to this application.
String	readAppInstConfig (String sName) Method to read xml config file..
void	registerPlayRTPSession (RTPSession rtpSession) Register an RTP session as a play session
void	removeClientListener (IClientNotify clientListener) Remove client listener.
void	removeDvrRecorderListener (ILiveStreamDvrRecorderActionNotify listener) Remove a Dvr Recorder listener (see: ILiveStreamDvrRecorderActionNotify)
void	removeDvrStreamManagerListener (IDvrStreamManagerActionNotify listener) Remove a Dvr Application Store Manager listener (see: IDvrStoreActionNotify)
void	removeHTTPListener (IHTTPSessionNotify httpListener) Remove listner to be notified of HTTPSession create and destroy.
void	removeHTTPStreamerSession (IHTTPStreamerSession httpStreamerSession) Remove a HTTPStreamerSession from this application instance
void	removeLiveStreamPacketizerListener (ILiveStreamPacketizerActionNotify LiveStreamPacketizerListener) Remove a Live Stream Packetizer listener (see: ILiveStreamPacketizerActionNotify)
void	removeLiveStreamTranscoderListener (ILiveStreamTranscoderNotify LiveStreamTranscoderListener) Remove a live stream transcoder listener
void	removeMediaCasterListener (IMediaCasterNotify mediaCasterListener) Remove mediaCaster listener.
void	removeMediaReaderListener (IMediaReaderActionNotify mediaReaderListener) Remove media reader listener.

void	removeMediaStreamListener (IMediaStreamNotify mediaStreamListener) Remove mediaStream listener.
void	removeMediaWriterListener (IMediaWriterActionNotify listener) remove MediaWriter listener class.
void	removeModuleListener (IModuleNotify moduleListener) Remove module listener
void	removePlayStreamByName (IMediaStream stream) Remove media stream from the list of streams that are listening for a published stream
void	removePublisher (Publisher publisher) Remove a server side publisher from this application instance
void	removePushPublishSession (IMediaStream stream, IPushPublishSession pushPublishSession) Remove a push publish session
void	removePushPublishSessionListener (IPushPublishSessionNotify pushPublishSessionListener) Remove a push publish session listener (see IPushPublishSessionNotify)
void	removePushPublishSessions (IMediaStream stream) Remove all push publish sessions for a give stream
void	removeRTPLListener (IRTPSessionNotify rtpListener) Remove listner to be notified of RTPSession create and destroy.
void	removeRTPSession (RTPSession rtpSession) Remove an RTP session from this application instance
void	removeSharedObjectListener (ISharedObjectNotify sharedObjectListener, boolean isPersistent) Remove sharedObject listener.
void	removeSourceControlSession (String streamName) Remove the source control session for the given stream name from the application instance
void	removeSourceControlSessionListener (ISourceControlSessionNotify sourceControlSessionListener) Remove the provided source control session listener from the list of source control session listeners (see ISourceControlSessionNotify)
boolean	resetMediaCasterStream (String streamName) Reset a media caster stream
boolean	resetMediaCasterStream (String streamName, String streamExt) Reset a media caster stream
void	setAcceptConnection (boolean acceptConnection) Set is auto accept connection
void	setAllowDomains (String[] domainFilter) Set the list of domain names used to control access to this application.
void	setApplicationInstanceTouchTimeout (int applicationInstanceTouchTimeout) Set the application instance touch timeout (milliseconds).
void	setApplicationTimeout (int applicationTimeout) Set application timeout (milliseconds)

void	setClientIdleFrequency (int clientIdleFrequency) Set default client idle frequency (milliseconds)
void	setDebugAppTimeout (boolean debugAppTimeout) If true appTimeout processing will be logged.
void	setDvrRecorderList (String recorderList) Set the comma separated list of Dvr Recorder names being used by this application (see conf/Dvr.xml)
void	setHTTPStreamerList (String httpStreamerList) Set the comma separated list of HTTPStreamer names being used by this application (see conf/HTTPStreamers.xml)
void	setLiveStreamDvrRecorderControl (ILiveStreamDvrRecorderControl controller) Set the Live Stream DVR Controller.
void	setLiveStreamPacketizerControl (ILiveStreamPacketizerControl liveStreamPacketizerControl) Set the Live Stream Packetizer Controller.
void	setLiveStreamPacketizerList (String liveStreamPacketizerList) Set the comma separated list of LiveStreamPacketizers names being used by this application (see conf/LiveStreamPacketizers.xml)
void	setLiveStreamTranscoderControl (ILiveStreamTranscoderControl liveStreamTranscoderControl) Set the Live Stream Transcoder Controller.
void	setLiveStreamTranscoderList (String liveStreamTranscoderList) Set comma separated list of transcoders to use for this application instance
void	setMaximumPendingReadBytes (int maximumPendingReaderBytes) Get maximum number of bytes a client connection can have waiting to be written before the connection is terminated.
void	setMaximumPendingWriteBytes (int maximumPendingWriteBytes) Set maximum number a bytes a client connection can have waiting to be sent before the connection is terminated.
void	setMaximumSetBufferTime (int maximumSetBufferTime) Set maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call.
void	setMaxStorageDirDepth (int maxStorageDirDepth) Maximum folder depth allowed for the StreamStorageDir and SharedObjectStorageDir paths
void	setMediacasterRTPRTSPRTPTransportMode (int mediacasterRTPRTSPRTPTransportMode) RTP MediaCaster RTSP/RTP transport mode.
void	setMediaCasterValidator (IMediaCasterValidateMediaCaster mediaCasterValidator) Set the MediaCaster validator interface for this application instance
void	setMediaListProvider (IMediaListProvider mediaListProvider) Set the current media list provider.
void	setName (String name) Set applicationInstance name

void	<u>setPingTimeout</u> (int pingTimeout) Set ping timeout (milliseconds)
void	<u>setRepeaterOriginUrl</u> (String repeaterOriginUrl) Set the Repeater Origin URL used by the Live Stream Repeater
void	<u>setRepeaterQueryString</u> (String repeaterQueryString) Set the Repeater query string that is used to connect to the origin.
void	<u>setRsoStorageDir</u> (String rsoStorageDir) Set remote shared object storage path
void	<u>setRTPAVSyncMethod</u> (int rtpAVSyncMethod) Set RTP audio/video sync method (RTPStream.AVSYNCMETHODS_SENDERREPORT, RTPStream.AVSYNCMETHODS_SYSTEMCLOCK, RTPStream.AVSYNCMETHODS_RTPTIMECODE)
void	<u>setRTPIidleFrequency</u> (int rtspIdleFrequency) Get the default RTP idle frequency (milliseconds)
void	<u>setRTPMaxRTCPWaitTime</u> (int rtpMaxRTCPWaitTime) Set the maximum time to wait for RTCP packets (milliseconds)
void	<u>setRTPPlayAuthenticationMethod</u> (String rtpPlayAuthenticationMethod) Set the RTP play authentication method (as defined in conf/Authentication.xml)
void	<u>setRTPPublishAuthenticationMethod</u> (String rtpPublishAuthenticationMethod) Set the RTP publish authentication method (as defined in conf/Authentication.xml)
void	<u>setRTSPBindIpAddress</u> (String rtspBindIpAddress) Get the IP address to which UDP ports will be bound for RTSP/RTP sessions
void	<u>setRTSPConnectionAddressType</u> (String rtspConnectionAddressType) Set the connection IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session
void	<u>setRTSPConnectionIpAddress</u> (String rtspConnectionIpAddress) Set the connection IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session
void	<u>setRTSPMaximumPendingWriteBytes</u> (int rtspMaximumPendingWriteBytes) Set the maximum number of pending write bytes for an RTSP session
void	<u>setRTSPOriginAddressType</u> (String rtspOriginAddressType) Set the origin IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session
void	<u>setRTSPOriginIpAddress</u> (String rtspOriginIpAddress) Set the origin IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session
void	<u>setRTSPSessionTimeout</u> (int rtspSessionTimeout) Set the RTSP session timeout (milliseconds)
void	<u>setSharedObjectReadAccess</u> (String sharedObjectReadAccess) Set the default shared object read access
void	<u>setSharedObjectWriteAccess</u> (String sharedObjectWriteAccess) Set the default shared object write access

void	setStreamAudioSampleAccess (String streamAudioSampleAccess) Set the default stream audio sample access
void	setStreamFileMapper (IMediaStreamFileMapper streamFileMapper) Set the stream file mapper.
void	setStreamKeyDir (String keyStorageDir) Set the stream key path
void	setStreamNameAliasProvider (IMediaStreamNameAliasProvider streamNameAliasProvider) Set the stream name alias provider
void	setStreamReadAccess (String streamReadAccess) Set the default stream read access
void	setStreamStorageDir (String streamStorageDir) Set stream storage path
void	setStreamType (String streamType) Set default stream type for application.
void	setStreamVideoSampleAccess (String streamVideoSampleAccess) Set the default stream video sample access
void	setStreamWriteAccess (String streamWriteAccess) Set the default stream write access
void	setValidateFMLEConnections (boolean validateFMLEConnections) Returns true if validating FMLE connection (default is false)
void	setValidationFrequency (int validationFrequency) Set time between validation pings (milliseconds)
void	setVODTimedTextProviderList (String timedTextProviderList) Set the comma separated list of VODTimedTextProvider names being used by this application (see conf/TimedTextProviders.xml)
void	shutdown (boolean isServerShutdown, boolean isAppShutdown) shutdown applicationInstance
void	shutdownClient (IClient client) shutdown a client connection immediately
boolean	startMediaCasterStream (String streamName, String mediaCasterType) Start a media caster stream
boolean	startMediaCasterStream (String streamName, String streamExt, String mediaCasterType) Start a media caster stream
void	stopMediaCasterStream (String streamName) Stop a media caster stream
void	touch () Touch the application instance so that it stays loaded for at least applicationInstanceTouchTimeout
boolean	writeAppInstConfig (String sName, String data) Method to write xml config file..

Fields

PROTOCOLUSAGE_RTMP

```
public static final int PROTOCOLUSAGE_RTMP
```

Constant value: **0**

PROTOCOLUSAGE_RTMP1

```
public static final int PROTOCOLUSAGE_RTMP1
```

Constant value: **1**

PROTOCOLUSAGE_RTMP2

```
public static final int PROTOCOLUSAGE_RTMP2
```

Constant value: **2**

PROTOCOLUSAGE_RTMP3

```
public static final int PROTOCOLUSAGE_RTMP3
```

Constant value: **3**

PROTOCOLUSAGE_RTMP4

```
public static final int PROTOCOLUSAGE_RTMP4
```

Constant value: **4**

PROTOCOLUSAGE_RTMP5

```
public static final int PROTOCOLUSAGE_RTMP5
```

Constant value: **5**

PROTOCOLUSAGE_RTMP6

```
public static final int PROTOCOLUSAGE_RTMP6
```

Constant value: **6**

PROTOCOLUSAGE_CUPERTINO

```
public static final int PROTOCOLUSAGE_CUPERTINO
```

Constant value: **7**

PROTOCOLUSAGE_SMOOTH

```
public static final int PROTOCOLUSAGE_SMOOTH
```

Constant value: **8**

PROTOCOLUSAGE_SANJOSE

```
public static final int PROTOCOLUSAGE_SANJOSE
```

Constant value: **9**

PROTOCOLUSAGE_MPEGDASH

```
public static final int PROTOCOLUSAGE_MPEGDASH
```

Constant value: **10**

PROTOCOLUSAGE_WEBM

```
public static final int PROTOCOLUSAGE_WEBM
```

Constant value: **11**

PROTOCOLUSAGE_WOWZ

```
public static final int PROTOCOLUSAGE_WOWZ
```

Constant value: **12**

PROTOCOLUSAGE_WOWZE

```
public static final int PROTOCOLUSAGE_WOWZE
```

Constant value: **13**

PROTOCOLUSAGE_WOWZS

```
public static final int PROTOCOLUSAGE_WOWZS
```

Constant value: **14**

PROTOCOLUSAGE_ORIGINCUPERTINO

```
public static final int PROTOCOLUSAGE_ORIGINCUPERTINO
```

Constant value: **15**

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PROTOCOLUSAGE_ORIGINSMOOTH

```
public static final int PROTOCOLUSAGE_ORIGINSMOOTH
```

Constant value: **16**

PROTOCOLUSAGE_ORIGINSANJOSE

```
public static final int PROTOCOLUSAGE_ORIGINSANJOSE
```

Constant value: **17**

PROTOCOLUSAGE_ORIGINMPEGDASH

```
public static final int PROTOCOLUSAGE_ORIGINMPEGDASH
```

Constant value: **18**

PROTOCOLUSAGE_PUSHUBLISHING

```
public static final int PROTOCOLUSAGE_PUSHUBLISHING
```

Constant value: **19**

PROTOCOLUSAGE_MEDIACACHE

```
public static final int PROTOCOLUSAGE_MEDIACACHE
```

Constant value: **20**

PROTOCOLUSAGE_RTMP_IN

```
public static final int PROTOCOLUSAGE_RTMP_IN
```

Constant value: **21**

PROTOCOLUSAGE_RTMP_OUT

```
public static final int PROTOCOLUSAGE_RTMP_OUT
```

Constant value: **22**

PROTOCOLUSAGE_RTMP_IN

```
public static final int PROTOCOLUSAGE_RTMP_IN
```

Constant value: **23**

PROTOCOLUSAGE_RTMP_OUT

```
public static final int PROTOCOLUSAGE_RTMP_OUT
```

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Constant value: **24**

PROTOCOLUSAGE_RTMPS_INpublic static final int **PROTOCOLUSAGE_RTMPS_IN**Constant value: **25**

PROTOCOLUSAGE_RTMPS_OUTpublic static final int **PROTOCOLUSAGE_RTMPS_OUT**Constant value: **26**

PROTOCOLUSAGE_RTMPTS_INpublic static final int **PROTOCOLUSAGE_RTMPTS_IN**Constant value: **27**

PROTOCOLUSAGE_RTMPTS_OUTpublic static final int **PROTOCOLUSAGE_RTMPTS_OUT**Constant value: **28**

PROTOCOLUSAGE_RTMPE_INpublic static final int **PROTOCOLUSAGE_RTMPE_IN**Constant value: **29**

PROTOCOLUSAGE_RTMPE_OUTpublic static final int **PROTOCOLUSAGE_RTMPE_OUT**Constant value: **30**

PROTOCOLUSAGE_RTMPTE_INpublic static final int **PROTOCOLUSAGE_RTMPTE_IN**Constant value: **31**

PROTOCOLUSAGE_RTMPTE_OUTpublic static final int **PROTOCOLUSAGE_RTMPTE_OUT**Constant value: **32**

PROTOCOLUSAGE_RTP_IN

```
public static final int PROTOCOLUSAGE_RTP_IN
```

Constant value: **33**

PROTOCOLUSAGE_RTP_OUT

```
public static final int PROTOCOLUSAGE_RTP_OUT
```

Constant value: **34**

PROTOCOLUSAGE_RTSP_IN

```
public static final int PROTOCOLUSAGE_RTSP_IN
```

Constant value: **35**

PROTOCOLUSAGE_RTSP_OUT

```
public static final int PROTOCOLUSAGE_RTSP_OUT
```

Constant value: **36**

PROTOCOLUSAGE_WOWZ_IN

```
public static final int PROTOCOLUSAGE_WOWZ_IN
```

Constant value: **37**

PROTOCOLUSAGE_WOWZ_OUT

```
public static final int PROTOCOLUSAGE_WOWZ_OUT
```

Constant value: **38**

PROTOCOLUSAGE_WOWZE_IN

```
public static final int PROTOCOLUSAGE_WOWZE_IN
```

Constant value: **39**

PROTOCOLUSAGE_WOWZE_OUT

```
public static final int PROTOCOLUSAGE_WOWZE_OUT
```

Constant value: **40**

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PROTOCOLUSAGE_WOWZS_IN

```
public static final int PROTOCOLUSAGE_WOWZS_IN
```

Constant value: **41**

PROTOCOLUSAGE_WOWZS_OUT

```
public static final int PROTOCOLUSAGE_WOWZS_OUT
```

Constant value: **42**

PROTOCOLUSAGE_MC_SHOUTCAST

```
public static final int PROTOCOLUSAGE_MC_SHOUTCAST
```

Constant value: **43**

PROTOCOLUSAGE_MC_LIVEREPEATER

```
public static final int PROTOCOLUSAGE_MC_LIVEREPEATER
```

Constant value: **44**

PROTOCOLUSAGE_MC_RTP

```
public static final int PROTOCOLUSAGE_MC_RTP
```

Constant value: **45**

PROTOCOLUSAGE_RTSP_PULL_IN

```
public static final int PROTOCOLUSAGE_RTSP_PULL_IN
```

Constant value: **46**

PROTOCOLUSAGE_RTSP_PULL_OUT

```
public static final int PROTOCOLUSAGE_RTSP_PULL_OUT
```

Constant value: **47**

PROTOCOLUSAGE_WEBRTC_IN

```
public static final int PROTOCOLUSAGE_WEBRTC_IN
```

Constant value: **48**

PROTOCOLUSAGE_WEBRTC_OUT

```
public static final int PROTOCOLUSAGE_WEBRTC_OUT
```

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Constant value: **49**

PROTOCOLUSAGE_MC_CUPERTINOpublic static final int **PROTOCOLUSAGE_MC_CUPERTINO**Constant value: **50**

PROTOCOLUSAGE_MC_MPEGTSTCPpublic static final int **PROTOCOLUSAGE_MC_MPEGTSTCP**Constant value: **51**

PROTOCOLUSAGE_MC_SRTRECEIVERpublic static final int **PROTOCOLUSAGE_MC_SRTRECEIVER**Constant value: **52**

PROTOCOLUSAGE_TOTALpublic static final int **PROTOCOLUSAGE_TOTAL**Constant value: **53**

DEFAULT_APPINSTANCE_NAMEpublic static final java.lang.String **DEFAULT_APPINSTANCE_NAME**Constant value: **_definst_**

Methods

shutdownClientpublic void **shutdownClient**([IClient](#) client)

shutdown a client connection immediately

Parameters:

client - client connection

shutdownpublic void **shutdown**(boolean isServerShutdown,
boolean isAppShutdown)

shutdown applicationInstance

Parameters:

isServerShutdown - true if due to shutdown of server

isAppShutdown - true if due to shutdown of application

getApplication

```
public IApplication getApplication()
```

Get parent application

Returns:

parent application

getName

```
public String getName()
```

Get applicationInstance name

Returns:

applicationInstance name

setName

```
public void setName(String name)
```

Set applicationInstance name

Parameters:

name - applicationInstance name

getStreams

```
public MediaStreamMap getStreams()
```

Get all the mediaStream objects attached to this applicationInstance

Get Stream By StreamId

```
IClient client;  
int streamId;  
  
MediaStreamMap streams = client.getAppInstance().getStreams();  
IMediaStream stream = streams.getStream((IClient)null, streamId);
```

Returns:

collection of mediaStream objects

getVHost

```
public IVHost getVHost()
```

(continued from last page)

Get parent vHost

Returns:

parent vHost

getProperties

```
public WMSProperties getProperties()
```

Get applicationInstance properties

Returns:

applicationInstance properties

getManagerProperties

```
public WMSProperties getManagerProperties()
```

Get Application's manager's properties collection

Returns:

manager's property collection

getStreamType

```
public String getStreamType()
```

Get default streamType for application.

Returns:

streamType name

setStreamType

```
public void setStreamType(String streamType)
```

Set default stream type for application.

Parameters:

streamType - streamType name

isAcceptConnection

```
public boolean isAcceptConnection()
```

Is auto accept connection on/off

Returns:

auto accept connection

setAcceptConnection

```
public void setAcceptConnection(boolean acceptConnection)
```

Set is auto accept connection

Parameters:

acceptConnection - auto accept connection

getClientCountTotal

```
public int getClientCountTotal()
```

Get number of client connections in total that have connected to this applicationInstance

Returns:

number of client connections

incClientCountTotal

```
public void incClientCountTotal()
```

Increment the total number of connected client counter by one

getClientCount

```
public int getClientCount()
```

Get number of client connections currently connected to applicationInstance

Returns:

number of client connections

getClientById

```
public IClient getClientById(int index)
```

Get a client connection by the client Id

Parameters:

index - client Id

Returns:

client connection

getClients

```
public java.util.List getClient()
```

Get the set of clients currently connected to this application instance (replaces getClient(index))

Returns:

set of clients

getClient

```
public IClient getClient(int index)
```

Deprecated. Get the client connection at index. This method is deprecated. It is best to use getClient() to return a List objects.

Parameters:

index - index

Returns:

client connection

getSharedObjects

```
public ISharedObjects getSharedObjects()
```

Get non-persistent shared object collection

Returns:

collection of non-persistent shared objects

getSharedObjects

```
public ISharedObjects getSharedObjects(boolean isPersistent)
```

Get either persistent or non-persistent shared object collection

Parameters:

isPersistent

Returns:

collection of shared objects

addClientListener

```
public void addClientListener(IClientNotify clientListener)
```

(continued from last page)

Add client listener. Listens for connects, disconnect, accepts and reject

Add a Client Listener

```
IApplicationInstance appInstance;

class ClientListener implements IClientNotify
{
    public void onClientConnect(IClient client)
    {
        WMSLoggerFactory.getLogger(null).debug("onClientConnect: "+
            client.getClientId());
    }

    public void onClientDisconnect(IClient client)
    {
        WMSLoggerFactory.getLogger(null).debug("onClientDisconnect: "+
            client.getClientId());
    }

    public void onClientAccept(IClient client)
    {
        WMSLoggerFactory.getLogger(null).debug("onClientAccept: "+
            client.getClientId());
    }

    public void onClientReject(IClient client)
    {
        WMSLoggerFactory.getLogger(null).debug("onClientReject: "+
            client.getClientId());
    }
}

appInstance.addClientListener(new ClientListener());
```

Parameters:

clientListener - client listener

removeClientListener

```
public void removeClientListener(IClientNotify clientListener)
```

Remove client listener. Listens for connects, disconnect, accepts and reject

Parameters:

clientListener - client listener

addMediaStreamListener

```
public void addMediaStreamListener(IMediaStreamNotify mediaStreamListener)
```

Add mediaStream listener. Listens for create and destroy

Add a MediaStream Listener

```
IApplicationInstance appInstance;

class MediaStreamListener implements IMediaStreamNotify
{
    public void onMediaStreamCreate(IMediaStream stream)
    {
        WMSLoggerFactory.getLogger(null).debug("onMediaStreamCreate: "+
            stream.getSrc());
    }

    public void onMediaStreamDestroy(IMediaStream stream)
    {
        WMSLoggerFactory.getLogger(null).debug("onMediaStreamDestroy: "+
            stream.getSrc());
    }
}

appInstance.addMediaStreamListener(new MediaStreamListener());
```

Parameters:

mediaStreamListener - mediaStream listener

removeMediaStreamListener

```
public void removeMediaStreamListener(IMediaStreamNotify mediaStreamListener)
```

Remove mediaStream listener. Listens for create and destroy

Parameters:

mediaStreamListener - mediaStream listener

addSharedObjectListener

```
public void addSharedObjectListener(ISharedObjectNotify sharedObjectListener,
    boolean isPersistent)
```

(continued from last page)

Add sharedObject listener. Listens for create, destroy, clientConnect, clientDisconnect

Add SharedObject Listener

```
IApplicationInstance appInstance;

class SharedObjectListener implements ISharedObjectNotify
{
    public void onSharedObjectCreate(ISharedObject sharedObject)
    {
        WMSLoggerFactory.getLogger(null).debug("onSharedObjectCreate: "+
            sharedObject.getName());
    }

    public void onSharedObjectDestroy(ISharedObject sharedObject)
    {
        WMSLoggerFactory.getLogger(null).debug("onSharedObjectDestroy: "+
            sharedObject.getName());
    }

    public void onSharedObjectConnect(ISharedObject sharedObject, IClient client)
    {
        WMSLoggerFactory.getLogger(null).debug("onSharedObjectConnect: "+
            sharedObject.getName());
    }

    public void onSharedObjectDisconnect(ISharedObject sharedObject, IClient client)
    {
        WMSLoggerFactory.getLogger(null).debug("onSharedObjectDisconnect: "+
            sharedObject.getName());
    }
}

appInstance.addSharedObjectListener(new SharedObjectListener(), false);
```

Parameters:

sharedObjectListener - sharedObject listener
isPersistent

removeSharedObjectListener

```
public void removeSharedObjectListener(ISharedObjectNotify sharedObjectListener,
    boolean isPersistent)
```

Remove sharedObject listener. Listens for create, destroy, clientConnect, clientDisconnect

Parameters:

(continued from last page)

sharedObjectListener - sharedObject listener
isPersistent

addMediaCasterListener

```
public void addMediaCasterListener(IMediaCasterNotify mediaCasterListener)
```

Add mediaCaster listener. Listens for create, destroy, registerPlayer, unregisterPlayer, setSourceStream

Parameters:

mediaCasterListener

addMediaCasterListener

```
public void addMediaCasterListener(IMediaCasterNotify2 mediaCasterListener)
```

Add mediaCaster listener. Listens for create, destroy, registerPlayer, unregisterPlayer, setSourceStream

Parameters:

mediaCasterListener

removeMediaCasterListener

```
public void removeMediaCasterListener(IMediaCasterNotify mediaCasterListener)
```

Remove mediaCaster listener. Listens for create, destroy, registerPlayer, unregisterPlayer, setSourceStream

Parameters:

mediaCasterListener

getConnectionCounter

```
public ConnectionCounter getConnectionCounter()
```

Get the connectionCounter for applicationInstance

Returns:

connection counter

getConnectionCounter

```
public ConnectionCounterSimple getConnectionCounter(int counterIndex)
```

Get the connectionCounter for applicationInstance for a specific technology (see IVHost.COUNTER_*)

Parameters:

counterIndex - counter index

Returns:

connection counter

getDateStarted

```
public String getDateStarted()
```

Get date applicationInstance started

Returns:

(continued from last page)

date applicationInstance started

getTimeRunning

```
public String getTimeRunning()
```

Get time applicationInstance running

Returns:

time applicationInstance running

getTimeRunningSeconds

```
public double getTimeRunningSeconds()
```

Get time running in seconds

Returns:

time running in seconds

broadcastMsg

```
public void broadcastMsg(java.util.List clientList,  
String handlerName)
```

Broadcast a message to a specific list of clients connected to this application instance

Parameters:

clientList - list of client
handlerName - handler name

broadcastMsg

```
public void broadcastMsg(java.util.List clientList,  
String handlerName,  
Object[] params)
```

Broadcast a message to a specific list of clients connected to this application instance

Parameters:

clientList - list of client
handlerName - handler name
params - parameters

broadcastMsg

```
public void broadcastMsg(String handlerName,  
Object[] params)
```

(continued from last page)

Broadcast a message to all clients connected to this applicationInstance

Broadcast Message to All Clients

```
IApplicationInstance appInstance;  
appInstance.broadcastMsg("onNotify", "Hello World", 1.2345, false, new Date());
```

Parameters:

handlerName - handler name

params - variable list of arguments (Java primitive and Strings will be wrapped in AMFData objects)

getIOPerformanceCounter

```
public IOPerformanceCounter getIOPerformanceCounter()
```

Get the performance counter for applicationInstance

Returns:

io performance counter

getIOPerformanceCounter

```
public IOPerformanceCounter getIOPerformanceCounter(int counterIndex)
```

Get the performance counter for applicationInstance for a specific technology (see IVHost.COUNTER_*)

Parameters:

counterIndex - counter index (see IVHost.COUNTER_*)

Returns:

connection counter

addPlayStreamByName

```
public void addPlayStreamByName(IMediaStream stream,  
String name)
```

Add a media stream to the list of streams that are listening for a published stream

Parameters:

stream - media stream

name - stream name

removePlayStreamByName

```
public void removePlayStreamByName(IMediaStream stream)
```

Remove media stream from the list of streams that are listening for a published stream

Parameters:

(continued from last page)

stream - media stream

getPlayStreamCountsByName

```
public java.util.Map getPlayStreamCountsByName()
```

Get a map of stream names to number of Flash players playing the stream name

Returns:

map of stream names to number of Flash players playing the stream name

getPlayStreamCount

```
public int getPlayStreamCount(String streamName)
```

Get the number of Flash players playing a given stream name

Parameters:

streamName - stream name

Returns:

number of players

getPlayStreamsByName

```
public java.util.List getPlayStreamsByName(String name)
```

Get a list of media streams that are listening for published stream.

Parameters:

name - stream name

Returns:

list of streams or null if no listeners

getMediaCasterStreams

```
public MediaCasterStreamMap getMediaCasterStreams()
```

Get the media caster streams attached to this application instance

Returns:

media caster streams attached to this application instance

getStreamCount

```
public int getStreamCount()
```

Get the total number of open streams attached to this application instance

Returns:

the total number of open streams attached to this application instance

getModFunctions

```
public ModuleFunctions getModFunctions()
```

Get list of application modules

(continued from last page)

Returns:

list of application modules

addModuleListener

```
public void addModuleListener(IModuleNotify moduleListener)
```

Add module listener. Listens for onModuleLoad and onModuleUnload events. See IModuleNotify.

Parameters:

moduleListener - module listener

removeModuleListener

```
public void removeModuleListener(IModuleNotify moduleListener)
```

Remove module listener

Parameters:

moduleListener - module listener

getModuleList

```
public ModuleList getModuleList()
```

Get the list of loaded modules.

Returns:

list of loaded modules

getModuleInstance

```
public Object getModuleInstance(String name)
```

Get the instance of the module class for this application instance.

Parameters:

name - module name as defined in Application.xml

Returns:

instance of class for this application instance

getApplicationTimeout

```
public int getApplicationTimeout()
```

Get application timeout (milliseconds)

Returns:

application timeout (milliseconds)

setApplicationTimeout

```
public void setApplicationTimeout(int applicationTimeout)
```

Set application timeout (milliseconds)

(continued from last page)

Parameters:

applicationTimeout - application timeout (milliseconds)

getPingTimeout

```
public int getPingTimeout()
```

Get ping timeout (milliseconds)

Returns:

ping timeout (milliseconds)

setPingTimeout

```
public void setPingTimeout(int pingTimeout)
```

Set ping timeout (milliseconds)

Parameters:

pingTimeout - ping timeout (milliseconds)

getValidationFrequency

```
public int getValidationFrequency()
```

Get time between validation pings (milliseconds)

Returns:

time between validation pings (milliseconds)

setValidationFrequency

```
public void setValidationFrequency(int validationFrequency)
```

Set time between validation pings (milliseconds)

Parameters:

validationFrequency - time between validation pings (milliseconds)

getMaximumPendingWriteBytes

```
public int getMaximumPendingWriteBytes()
```

Get maximum number a bytes a client connection can have waiting to be sent before the connection is terminated. If set to zero this feature is turned off.

Returns:

maximum number a bytes a client connection can have waiting to be sent before the connection is terminated

setMaximumPendingWriteBytes

```
public void setMaximumPendingWriteBytes(int maximumPendingWriteBytes)
```

Set maximum number a bytes a client connection can have waiting to be sent before the connection is terminated. If set to zero this feature is turned off.

Parameters:

maximumPendingWriteBytes - maximum number a bytes a client connection can have waiting to be sent before the connection is terminated

getMaximumPendingReadBytes

```
public int getMaximumPendingReadBytes()
```

Set maximum number of bytes a client connection can have waiting to be written before the connection is terminated. If set to zero this feature is off.

Returns:

maximum number of bytes a client connection can have waiting to be written before the connection is terminated

setMaximumPendingReadBytes

```
public void setMaximumPendingReadBytes(int maximumPendingReaderBytes)
```

Get maximum number of bytes a client connection can have waiting to be written before the connection is terminated. If set to zero this feature is off.

Parameters:

maximumPendingReaderBytes - maximum number of bytes a client connection can have waiting to be written before the connection is terminated

setMaximumSetBufferTime

```
public void setMaximumSetBufferTime(int maximumSetBufferTime)
```

Set maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call. If set to zero this feature is turned off.

Parameters:

maximumSetBufferTime - maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call

getMaximumSetBufferTime

```
public int getMaximumSetBufferTime()
```

Get maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call. If set to zero this feature is turned off.

Returns:

maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call

getRepeaterOriginUrl

```
public String getRepeaterOriginUrl()
```

Get the Repeater Origin URL used by the Live Stream Repeater

Returns:

URL used by the Live Stream Repeater

setRepeaterOriginUrl

```
public void setRepeaterOriginUrl(String repeaterOriginUrl)
```

Set the Repeater Origin URL used by the Live Stream Repeater

Parameters:

repeaterOriginUrl - URL used by the Live Stream Repeater

getRepeaterQueryString

```
public String getRepeaterQueryString()
```

Get the Repeater query string that is used to connect to the origin. This value can be used to pass secure URL parameters to the origin for security validation.

Returns:

Repeater query string

setRepeaterQueryString

```
public void setRepeaterQueryString(String repeaterQueryString)
```

Set the Repeater query string that is used to connect to the origin. This value can be used to pass secure URL parameters to the origin for security validation.

Parameters:

repeaterQueryString - Repeater query string

getAllowDomains

```
public String[] getAllowDomains()
```

Get the list of domain names used to control access to this application. Upon connection, if this list is non-null the client.referrer value is checked to make sure the referrer is from a domain in this list.

Returns:

list of domain names used to control access to this application

setAllowDomains

```
public void setAllowDomains(String[] domainFilter)
```

Set the list of domain names used to control access to this application. Upon connection, if this list is non-null the client.referrer value is checked to make sure the referrer is from a domain in this list.

Parameters:

domainFilter - list of domain names used to control access to this application

parseAllowDomains

```
public void parseAllowDomains(String domainFilterStr)
```

Parse a comma delimited list of domain names used to control access to this application. Upon connection, if this list is non-null the client.referrer value is checked to make sure the referrer is from a domain in this list.

Parameters:

domainFilterStr - comma delimited list of domain names

getClientIdleFrequency

```
public int getClientIdleFrequency()
```

Get default client idle frequency (milliseconds)

Returns:

default client idle frequency (milliseconds)

setClientIdleFrequency

```
public void setClientIdleFrequency(int clientIdleFrequency)
```

Set default client idle frequency (milliseconds)

Parameters:

clientIdleFrequency - default client idle frequency (milliseconds)

getRTPIdeFrequency

```
public int getRTPIdeFrequency()
```

Set the default RTP idle frequency (milliseconds)

Returns:

default RTP idle frequency (milliseconds)

setRTPIdeFrequency

```
public void setRTPIdeFrequency(int rtspIdleFrequency)
```

Get the default RTP idle frequency (milliseconds)

Parameters:

rtspIdleFrequency - default RTP idle frequency (milliseconds)

getStreamStorageDir

```
public String getStreamStorageDir()
```

Get stream storage path

Returns:

stream storage path

setStreamStorageDir

```
public void setStreamStorageDir(String streamStorageDir)
```

Set stream storage path

Parameters:

streamStorageDir - stream storage path

getStreamKeyDir

```
public String getStreamKeyDir()
```

Get the stream key path

Returns:

stream key path

setStreamKeyDir

```
public void setStreamKeyDir(String keyStorageDir)
```

(continued from last page)

Set the stream key path

Parameters:

keyStorageDir - stream key path

getRsoStorageDir

```
public String getRsoStorageDir()
```

Get remote shared object storage path

Returns:

remote shared object storage path

setRsoStorageDir

```
public void setRsoStorageDir(String rsoStorageDir)
```

Set remote shared object storage path

Parameters:

rsoStorageDir - remote shared object storage path

getStreamKeyPath

```
public String getStreamKeyPath()
```

Get the resolved key path to the MediaStreams encryption keys

Returns:

resolved key path to the MediaStreams encryption keys

getStreamStoragePath

```
public String getStreamStoragePath()
```

Get the resolved storage path to the MediaStreams

Returns:

resolved storage path to the MediaStreams

getRsoStoragePath

```
public String getRsoStoragePath()
```

Get the resolved storage path to the shared objects

Returns:

resolved storage path to the shared objects

getStreamVideoSampleAccess

```
public String getStreamVideoSampleAccess()
```

Get the default stream video sample access

Returns:

default stream video sample access

(continued from last page)

See Also:

[IClient.getStreamVideoSampleAccess\(\)](#)

setStreamVideoSampleAccess

```
public void setStreamVideoSampleAccess(String streamVideoSampleAccess)
```

Set the default stream video sample access

Parameters:

streamVideoSampleAccess - default stream video sample access

See Also:

[IClient.setStreamVideoSampleAccess\(String\)](#)

getStreamAudioSampleAccess

```
public String getStreamAudioSampleAccess()
```

Get the default stream audio sample access

Returns:

default stream audio sample access

See Also:

[IClient.getStreamAudioSampleAccess\(\)](#)

setStreamAudioSampleAccess

```
public void setStreamAudioSampleAccess(String streamAudioSampleAccess)
```

Set the default stream audio sample access

Parameters:

streamAudioSampleAccess

See Also:

[IClient.setStreamAudioSampleAccess\(String\)](#)

getStreamReadAccess

```
public String getStreamReadAccess()
```

Get the default stream read access

Returns:

default stream read access

See Also:

[IClient.getStreamReadAccess\(\)](#)

setStreamReadAccess

```
public void setStreamReadAccess(String streamReadAccess)
```

Set the default stream read access

(continued from last page)

Parameters:

streamReadAccess - default stream read access

See Also:[IClient.setStreamReadAccess\(String\)](#)

getStreamWriteAccess

```
public String getStreamWriteAccess()
```

Get the default stream write access

Returns:

default stream write access

See Also:[IClient.getStreamWriteAccess\(\)](#)

setStreamWriteAccess

```
public void setStreamWriteAccess(String streamWriteAccess)
```

Set the default stream write access

Parameters:

streamWriteAccess - default stream write access

See Also:[IClient.setStreamWriteAccess\(String\)](#)

getSharedObjectReadAccess

```
public String getSharedObjectReadAccess()
```

Get the default shared object read access

Returns:

default shared object read access

See Also:[IClient.getSharedObjectReadAccess\(\)](#)

setSharedObjectReadAccess

```
public void setSharedObjectReadAccess(String sharedObjectReadAccess)
```

Set the default shared object read access

Parameters:

sharedObjectReadAccess - default shared object read access

See Also:[IClient.setSharedObjectReadAccess\(String\)](#)

getSharedObjectWriteAccess

```
public String getSharedObjectWriteAccess()
```

(continued from last page)

Get the default shared object write access

Returns:

default shared object write access

See Also:

[IClient.getSharedObjectWriteAccess\(\)](#)

setSharedObjectWriteAccess

```
public void setSharedObjectWriteAccess(String sharedObjectWriteAccess)
```

Set the default shared object write access

Parameters:

sharedObjectWriteAccess - default shared object write access

See Also:

[IClient.setSharedObjectWriteAccess\(String\)](#)

getRTPPublishAuthenticationMethod

```
public String getRTPPublishAuthenticationMethod()
```

Get the RTP publish authentication method (as defined in conf/Authentication.xml)

Returns:

RTP publish authentication method

setRTPPublishAuthenticationMethod

```
public void setRTPPublishAuthenticationMethod(String rtpPublishAuthenticationMethod)
```

Set the RTP publish authentication method (as defined in conf/Authentication.xml)

Parameters:

rtpPublishAuthenticationMethod - RTP publish authentication method

getRTPPlayAuthenticationMethod

```
public String getRTPPlayAuthenticationMethod()
```

Get the RTP play authentication method (as defined in conf/Authentication.xml)

Returns:

RTP play authentication method

setRTPPlayAuthenticationMethod

```
public void setRTPPlayAuthenticationMethod(String rtpPlayAuthenticationMethod)
```

Set the RTP play authentication method (as defined in conf/Authentication.xml)

Parameters:

rtpPlayAuthenticationMethod - RTP play authentication method

(continued from last page)

getRTPAVSyncMethod

```
public int getRTPAVSyncMethod()
```

Get RTP audio/video sync method (RTPStream.AVSYNCMETHODS_SENDERREPORT, RTPStream.AVSYNCMETHODS_SYSTEMCLOCK, RTPStream.AVSYNCMETHODS_RTPTIMECODE)

Returns:

RTP audio/video sync method

setRTPAVSyncMethod

```
public void setRTPAVSyncMethod(int rtpAVSyncMethod)
```

Set RTP audio/video sync method (RTPStream.AVSYNCMETHODS_SENDERREPORT, RTPStream.AVSYNCMETHODS_SYSTEMCLOCK, RTPStream.AVSYNCMETHODS_RTPTIMECODE)

Parameters:

rtpAVSyncMethod - RTP audio/video sync method

getRTPMaxRTCPWaitTime

```
public int getRTPMaxRTCPWaitTime()
```

Get the maximum time to wait for RTCP packets (milliseconds)

Returns:

maximum time to wait for RTCP packets (milliseconds)

setRTPMaxRTCPWaitTime

```
public void setRTPMaxRTCPWaitTime(int rtpMaxRTCPWaitTime)
```

Set the maximum time to wait for RTCP packets (milliseconds)

Parameters:

rtpMaxRTCPWaitTime - maximum time to wait for RTCP packets (milliseconds)

getRTPSessions

```
public java.util.List getRTPSessions(String streamName)
```

Get a list of RTP sessions running under this application instance playing a given stream name

Parameters:

streamName - stream name

Returns:

list of RTP sessions running under this application instance playing a given stream name

getRTPSessions

```
public java.util.List getRTPSessions()
```

Get a list of RTP sessions running under this application instance

Returns:

list of RTP sessions running under this application instance

getRTPSessionCountsByName

```
public java.util.Map getRTPSessionCountsByName()
```

Get a map of stream names and session counts of RTP sessions

Returns:

map of stream names and session counts

getRTPSessionCount

```
public int getRTPSessionCount(String streamName)
```

Get the number of RTP player streams playing a given stream name

Parameters:

streamName - stream name

Returns:

the number of RTP sessions

getRTPSessionCount

```
public int getRTPSessionCount()
```

Get the number of RTP sessions running under this application instance

Returns:

the number of RTP sessions running under this application instance

addRTPSession

```
public void addRTPSession(RTPSession rtpSession)
```

Add an RTP session to this application instance

Parameters:

rtpSession - RTP session to add

registerPlayRTPSession

```
public void registerPlayRTPSession(RTPSession rtpSession)
```

Register an RTP session as a play session

Parameters:

rtpSession - RTP session to register

removeRTPSession

```
public void removeRTPSession(RTPSession rtpSession)
```

Remove an RTP session from this application instance

Parameters:

rtpSession - RTP session to remove

getClientsLockObj

```
public edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock  
getClientsLockObj()
```

Get the read/write lock for this application instance

Returns:

read/write lock for this application instance

getStreamProperties

```
public WMSProperties getStreamProperties()
```

Get the property collection of stream settings that are specific to this application instance

Returns:

property collection of stream settings

getMediaCasterProperties

```
public WMSProperties getMediaCasterProperties()
```

Get the property collection of media caster settings that are specific to this application instance

Returns:

property collection of media caster settings

getMediaReaderProperties

```
public WMSProperties getMediaReaderProperties()
```

Get the property collection of media reader settings that are specific to this application instance

Returns:

property collection of media reader settings

getMediaWriterProperties

```
public WMSProperties getMediaWriterProperties()
```

Get the property collection of media reader settings that are specific to this application instance

Returns:

property collection of media reader settings

getRTPProperties

```
public WMSProperties getRTPProperties()
```

Get the property collection of RTP settings that are specific to this application instance

Returns:

property collection of RTP settings

(continued from last page)

getLiveStreamPacketizerProperties

```
public WMSProperties getLiveStreamPacketizerProperties()
```

Get the property collection of LiveStreamPacketizer settings that are specific to this application instance

Returns:

property collection of LiveStreamPacketizer settings

getTranscoderProperties

```
public WMSProperties getTranscoderProperties()
```

Get the property collection of Transcoder settings that are specific to this application instance

Returns:

property collection of Transcoder settings

getHTTPStreamerProperties

```
public WMSProperties getHTTPStreamerProperties()
```

Get the property collection of HTTPStreamer settings that are specific to this application instance

Returns:

property collection of HTTPStreamer settings

getMaxStorageDirDepth

```
public int getMaxStorageDirDepth()
```

Maximum folder depth allowed for the StreamStorageDir and SharedObjectStorageDir paths

Returns:

folder depth

setMaxStorageDirDepth

```
public void setMaxStorageDirDepth(int maxStorageDirDepth)
```

Maximum folder depth allowed for the StreamStorageDir and SharedObjectStorageDir paths

Parameters:

maxStorageDirDepth - folder depth

getStreamFileMapper

```
public IMediaStreamFileMapper getStreamFileMapper()
```

Get the stream file mapper. See IMediaStreamFileMapper

Returns:

streamFileMapper stream file mapper

setStreamFileMapper

```
public void setStreamFileMapper(IMediaStreamFileMapper streamFileMapper)
```

(continued from last page)

Set the stream file mapper. See IMediaStreamFileMapper

Parameters:

streamFileMapper - stream file mapper

decodeStorageDir

```
public String decodeStorageDir(String storageDir)
```

This function will take a storage path that uses variables and expand the variables based on the context. It supports the following variables (as well as any system variables): `${com.wowza.wms.AppHome}`: Application home directory `${com.wowza.wms.ConfigHome}`: Configuration home directory `${com.wowza.wms.context.VHostConfigHome}`: Virtual configuration path `${com.wowza.wms.context.VHost}`: Virtual host name `${com.wowza.wms.context.Application}`: Application name `${com.wowza.wms.context.ApplicationInstance}`: Application instance name

getLiveStreamPacketizerList

```
public String getLiveStreamPacketizerList()
```

Get the comma separated list of LiveStreamPacketizers names being used by this application (see conf/LiveStreamPacketizers.xml)

Returns:

comma separated list of LiveStreamPacketizers names

getHTTPStreamerList

```
public String getHTTPStreamerList()
```

Get the comma separated list of HTTPStreamers names being used by this application (see conf/HTTPStreamers.xml)

Returns:

comma separated list of HTTPStreamers names

setLiveStreamPacketizerList

```
public void setLiveStreamPacketizerList(String liveStreamPacketizerList)
```

Set the comma separated list of LiveStreamPacketizers names being used by this application (see conf/LiveStreamPacketizers.xml)

Parameters:

liveStreamPacketizerList - comma separated list of LiveStreamPacketizers names

setHTTPStreamerList

```
public void setHTTPStreamerList(String httpStreamerList)
```

Set the comma separated list of HTTPStreamer names being used by this application (see conf/HTTPStreamers.xml)

Parameters:

httpStreamerList - comma separated list of HTTPStreamer names

containsHTTPStreamer

```
public boolean containsHTTPStreamer(String httpStreamer)
```

Does this application instance allow streaming of a given HTTPStreamer

Parameters:

(continued from last page)

httpStreamer - HTTP Streamer name

Returns:

true is this type of streaming is allowed

containsLiveStreamPacketizer

```
public boolean containsLiveStreamPacketizer(String liveStreamPacketizer)
```

Does this application instance contain a references to this live stream packetizer. If it is true we consider this a live stream source for the HTTP streamer. If false then we consider this a video on demand source.

Parameters:

liveStreamPacketizer - live stream packetizer name

Returns:

true if contains reference to it

containsDvrRecorder

```
public boolean containsDvrRecorder(String dvrRecorder)
```

Does this application instance contain a references to this DVR recorder. If it is true we consider this a DVR source for the HTTP streamer.

Parameters:

dvrRecorder - DVR recorder name

Returns:

true if contains reference to it

getVODTimedTextProviderList

```
public String getVODTimedTextProviderList()
```

Get the comma separated list of VODTimedTextProvider names being used by this application (see conf/TimedTextProviders.xml)

Returns:

comma separated list of VODTimedTextProvider names

setVODTimedTextProviderList

```
public void setVODTimedTextProviderList(String timedTextProviderList)
```

Set the comma separated list of VODTimedTextProvider names being used by this application (see conf/TimedTextProviders.xml)

Parameters:

timedTextProviderList - comma separated list of VODTimedTextProvider names

getVODTimedTextProviderSet

```
public java.util.List getVODTimedTextProviderSet()
```

(continued from last page)

getTimedTextProperties

```
public WMSProperties getTimedTextProperties()
```

Get the property collection of timed text settings that are specific to this application instance. These are defined in Application/TimedText/Properties tag in Application.xml

Returns:

property collection of Timed Text settings

getStreamNameAliasProvider

```
public IMediaStreamNameAliasProvider getStreamNameAliasProvider()
```

Get the stream name alias provider

Returns:

stream name alias provider

setStreamNameAliasProvider

```
public void setStreamNameAliasProvider(IMediaStreamNameAliasProvider  
streamNameAliasProvider)
```

Set the stream name alias provider

Parameters:

streamNameAliasProvider - stream name alias provider

getPublishers

```
public java.util.List getPublishers()
```

Get the set of server side publishers

Returns:

set of server side publishers

getPublisherCount

```
public int getPublisherCount()
```

Get the current number of server side publishers

Returns:

number of server side publishers

addPublisher

```
public void addPublisher(Publisher publisher)
```

Add a server side publisher to this application instance

Parameters:

publisher - server side publisher

(continued from last page)

removePublisher

```
public void removePublisher(Publisher publisher)
```

Remove a server side publisher from this application instance

Parameters:

publisher - server side publisher

getHTTPStreamerSessions

```
public java.util.List getHTTPStreamerSessions(int protocol,  
String streamName)
```

Get the HTTPStreamerSessions associated with this application instance for a stream name by protocol. See (IHTTPStreamerSession.SESSIONPROTOCOL_*) for protocols

Parameters:

protocol - streaming protocol (IHTTPStreamerSession.SESSIONPROTOCOL_*)
streamName - stream name

Returns:

HTTPStreamerSessions associated with this application instance

getHTTPStreamerSessions

```
public java.util.List getHTTPStreamerSessions(String streamName)
```

Get the HTTPStreamerSessions associated with this application instance for a stream name

Parameters:

streamName - stream name

Returns:

HTTPStreamerSessions associated with this application instance

getHTTPStreamerSessionCountsByName

```
public java.util.Map getHTTPStreamerSessionCountsByName(int protocol)
```

Get a map of session counts by name for a given protocol

Parameters:

protocol - streaming protocol (IHTTPStreamerSession.SESSIONPROTOCOL_*)

Returns:

map of session counts by name

getHTTPStreamerSessionCount

```
public int getHTTPStreamerSessionCount(String streamName)
```

Get the current number of HTTPStreamerSessions associated with this application instance and stream name

Parameters:

streamName - stream name

Returns:

number of HTTPStreamerSessions associated with this application instance

getHTTPStreamerSessionCount

```
public int getHTTPStreamerSessionCount(int protocol,  
    String streamName)
```

Get the current number of HTTPStreamerSessions associated with this application instance and stream name by protocol . See (HTTPStreamerSession.SESSIONPROTOCOL_*) for protocols

Parameters:

protocol - streaming protocol (HTTPStreamerSession.SESSIONPROTOCOL_*)
streamName - stream name

Returns:

HTTPStreamerSessions associated with this application instance

getHTTPStreamerSessions

```
public java.util.List getHTTPStreamerSessions()
```

Get the HTTPStreamerSessions associated with this application instance

Returns:

HTTPStreamerSessions associated with this application instance

getHTTPStreamerSessions

```
public java.util.List getHTTPStreamerSessions(int protocol)
```

Get the HTTPStreamerSessions associated with this application instance by protocol. See (HTTPStreamerSession.SESSIONPROTOCOL_*) for protocols

Parameters:

protocol - streaming protocol (HTTPStreamerSession.SESSIONPROTOCOL_*)

Returns:

HTTPStreamerSessions associated with this application instance

getHTTPStreamerSessionCount

```
public int getHTTPStreamerSessionCount()
```

Get the current number of HTTPStreamerSessions associated with this application instance

Returns:

current number of HTTPStreamerSessions associated with this application instance

getHTTPStreamerSessionCount

```
public int getHTTPStreamerSessionCount(int protocol)
```

Get the current number of HTTPStreamerSessions associated with this application instance by protocol. See (HTTPStreamerSession.SESSIONPROTOCOL_*) for protocols

Parameters:

protocol - streaming protocol (HTTPStreamerSession.SESSIONPROTOCOL_*)

Returns:

current number of HTTPStreamerSessions associated with this application instance

addHTTPStreamerSession

```
public void addHTTPStreamerSession(IHTTPStreamerSession httpStreamerSession)
```

Add a HTTPStreamerSession to this application instance

Parameters:

httpStreamerSession - HTTPStreamerSession

removeHTTPStreamerSession

```
public void removeHTTPStreamerSession(IHTTPStreamerSession httpStreamerSession)
```

Remove a HTTPStreamerSession from this application instance

Parameters:

httpStreamerSession - HTTPStreamerSession

getHTTPStreamerApplicationContext

```
public IHTTPStreamerApplicationContext getHTTPStreamerApplicationContext(String  
httpStreamName,  
boolean doCreate)
```

Get the HTTPStreamer application context for a given HTTPStreamer adapter

Parameters:

httpStreamName - HTTPStreamer adapter name
doCreate - create if it does not exist

Returns:

HTTPStreamer application context

addRTPIncomingDatagramPortRange

```
public void addRTPIncomingDatagramPortRange(int startPort,  
int endPort)
```

Add a port range to the list of valid incoming RTP UDP ports

Parameters:

startPort - starting port number
endPort - end port number

addRTPIncomingDatagramPortAll

```
public void addRTPIncomingDatagramPortAll()
```

Allow all incoming RTP UDP ports for this application instance

isRTPIncomingDatagramPortValid

```
public boolean isRTPIncomingDatagramPortValid(int port)
```

Check a port number to be sure it is a valid RTP UDP port for this application instance

Parameters:

port - port number

(continued from last page)

Returns:

true if the port is valid

readAppInstConfig

```
public String readAppInstConfig(String sName)
```

Method to read xml config file..

writeAppInstConfig

```
public boolean writeAppInstConfig(String sName,  
    String data)
```

Method to write xml config file..

getLiveStreamPacketizerControl

```
public ILiveStreamPacketizerControl getLiveStreamPacketizerControl()
```

Get the Live Stream Packetizer Controller. This class will get called each time a stream is to be packetized using the LiveStreamPacketizer mechanism.

Returns:

Live Stream Packetizer Controller

setLiveStreamPacketizerControl

```
public void setLiveStreamPacketizerControl(ILiveStreamPacketizerControl  
    liveStreamPacketizerControl)
```

Set the Live Stream Packetizer Controller. This class will get called each time a stream is to be packetized using the LiveStreamPacketizer mechanism.

Parameters:

liveStreamPacketizerControl - Live Stream Packetizer Controller

resetMediaCasterStream

```
public boolean resetMediaCasterStream(String streamName)
```

Reset a media caster stream

Parameters:

streamName - stream name

Returns:

true if successful

resetMediaCasterStream

```
public boolean resetMediaCasterStream(String streamName,  
    String streamExt)
```

Reset a media caster stream

Parameters:

streamName - stream name

(continued from last page)

streamExt - stream extension

Returns:

true if successful

startMediaCasterStream

```
public boolean startMediaCasterStream(String streamName,  
    String streamExt,  
    String mediaCasterType)
```

Start a media caster stream

Parameters:

streamName - stream name

streamExt - stream extension

mediaCasterType - media caster stream type

Returns:

true if successful

startMediaCasterStream

```
public boolean startMediaCasterStream(String streamName,  
    String mediaCasterType)
```

Start a media caster stream

Parameters:

streamName - stream name

mediaCasterType - media caster stream type

Returns:

true if successful

stopMediaCasterStream

```
public void stopMediaCasterStream(String streamName)
```

Stop a media caster stream

Parameters:

streamName - stream name

getContextStr

```
public String getContextStr()
```

Returns the application context string in the form [application]/[appInstance].

Returns:

application context string

getPublishStreamNames

```
public java.util.List getPublishStreamNames()
```

Get the list of live stream names currently being published.

(continued from last page)

Returns:

list of live stream names currently being published

addMediaWriterListener

```
public void addMediaWriterListener(IMediaWriterActionNotify listener)
```

Add a MediaWriter listener class. See [IMediaWriterActionNotify](#)**Parameters:**

listener - MediaWriter listener class

removeMediaWriterListener

```
public void removeMediaWriterListener(IMediaWriterActionNotify listener)
```

remove MediaWriter listener class. See [IMediaWriterActionNotify](#)**Parameters:**

listener - MediaWriter listener class

notifyMediaWriterOnWriteComplete

```
public void notifyMediaWriterOnWriteComplete(IMediaStream stream,  
java.io.File file)
```

Notify all MediaWriter listeners of onWriteComplete

Parameters:

stream - media stream

file - file that was written

notifyMediaWriterOnFLVAddMetadata

```
public void notifyMediaWriterOnFLVAddMetadata(IMediaStream stream,  
java.util.Map extraMetadata)
```

Notify all MediaWriter listeners of onFLVAddMetadata

Parameters:

stream - media stream

extraMetadata - meta to add to the file

getMediaCasterValidator

```
public IMediaCasterValidateMediaCaster getMediaCasterValidator()
```

Get the MediaCaster validator interface for this application instance

Returns:

MediaCaster validator interface

setMediaCasterValidator

```
public void setMediaCasterValidator(IMediaCasterValidateMediaCaster  
mediaCasterValidator)
```

Set the MediaCaster validator interface for this application instance

(continued from last page)

Parameters:

mediaCasterValidator - MediaCaster validator interface

touch

```
public void touch()
```

Touch the application instance so that it stays loaded for at least applicationInstanceTouchTimeout

getLastTouchTime

```
public long getLastTouchTime()
```

Get the last time the instance was touched (milliseconds)

Returns:

last time the instance was touched (milliseconds)

getApplicationInstanceTouchTimeout

```
public int getApplicationInstanceTouchTimeout()
```

Get the application instance touch timeout (milliseconds). Default is 5000.

Returns:

application instance touch timeout (milliseconds)

setApplicationInstanceTouchTimeout

```
public void setApplicationInstanceTouchTimeout(int applicationInstanceTouchTimeout)
```

Set the application instance touch timeout (milliseconds). Default is 5000.

Parameters:

applicationInstanceTouchTimeout - application instance touch timeout (milliseconds)

getRTSPSessionTimeout

```
public int getRTSPSessionTimeout()
```

Get the RTSP session timeout (milliseconds)

Returns:

RTSP session timeout (milliseconds)

setRTSPSessionTimeout

```
public void setRTSPSessionTimeout(int rtspSessionTimeout)
```

Set the RTSP session timeout (milliseconds)

Parameters:

rtspSessionTimeout - RTSP session timeout (milliseconds)

getRTSPMaximumPendingWriteBytes

```
public int getRTSPMaximumPendingWriteBytes()
```

(continued from last page)

Get the maximum number of pending write bytes for an RTSP session

Returns:

maximum number of pending write bytes for an RTSP session

setRTSPMaximumPendingWriteBytes

```
public void setRTSPMaximumPendingWriteBytes(int rtspMaximumPendingWriteBytes)
```

Set the maximum number of pending write bytes for an RTSP session

Parameters:

rtspMaximumPendingWriteBytes - maximum number of pending write bytes for an RTSP session

addMediaReaderListener

```
public void addMediaReaderListener(IMediaReaderActionNotify mediaReaderListener)
```

Add media reader listener. see [IMediaReaderActionNotify](#)

Parameters:

mediaReaderListener - media reader listener

removeMediaReaderListener

```
public void removeMediaReaderListener(IMediaReaderActionNotify mediaReaderListener)
```

Remove media reader listener. see [IMediaReaderActionNotify](#)

Parameters:

mediaReaderListener - media reader listener

notifyMediaReaderCreate

```
public void notifyMediaReaderCreate(IMediaReader mediaReader)
```

Notify media reader notifyMediaReaderCreate

Parameters:

mediaReader - media reader

notifyMediaReaderInit

```
public void notifyMediaReaderInit(IMediaReader mediaReader,  
IMediaStream stream)
```

Notify media reader notifyMediaReaderInit

Parameters:

mediaReader - media reader

stream - media stream

notifyMediaReaderOpen

```
public void notifyMediaReaderOpen(IMediaReader mediaReader,  
IMediaStream stream)
```

Notify media reader notifyMediaReaderOpen

(continued from last page)

Parameters:

mediaReader - media reader
stream - media stream

notifyMediaReaderExtractMetaData

```
public void notifyMediaReaderExtractMetaData(IMediaReader mediaReader,  
IMediaStream stream)
```

Notify media reader notifyMediaReaderExtractMetaData

Parameters:

mediaReader - media reader
stream - media stream

notifyMediaReaderClose

```
public void notifyMediaReaderClose(IMediaReader mediaReader,  
IMediaStream stream)
```

Notify media reader notifyMediaReaderClose

Parameters:

mediaReader - media reader
stream - media stream

getRTSPBindIpAddress

```
public String getRTSPBindIpAddress()
```

Set the IP address to which UDP ports will be bound for RTSP/RTP sessions

Returns:

IP address to which UDP ports will be bound for RTSP/RTP sessions

setRTSPBindIpAddress

```
public void setRTSPBindIpAddress(String rtspBindIpAddress)
```

Get the IP address to which UDP ports will be bound for RTSP/RTP sessions

Parameters:

rtspBindIpAddress - IP address to which UDP ports will be bound for RTSP/RTP sessions

getRTSPConnectionIpAddress

```
public String getRTSPConnectionIpAddress()
```

Get the connection IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session

Returns:

connection IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session

setRTSPConnectionIpAddress

```
public void setRTSPConnectionIpAddress(String rtspConnectionIpAddress)
```

Set the connection IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session

(continued from last page)

Parameters:

rtspConnectionIpAddress - connection IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session

getRTSPConnectionAddressType

```
public String getRTSPConnectionAddressType()
```

Get the connection IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session

Returns:

the connection IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session

setRTSPConnectionAddressType

```
public void setRTSPConnectionAddressType(String rtspConnectionAddressType)
```

Set the connection IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session

Parameters:

rtspConnectionAddressType

getRTSPOriginIpAddress

```
public String getRTSPOriginIpAddress()
```

Get the origin IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session

Returns:

origin IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session

setRTSPOriginIpAddress

```
public void setRTSPOriginIpAddress(String rtspOriginIpAddress)
```

Set the origin IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session

Parameters:

rtspOriginIpAddress - origin IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session

getRTSPOriginAddressType

```
public String getRTSPOriginAddressType()
```

Get the origin IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session

Returns:

origin IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session

setRTSPOriginAddressType

```
public void setRTSPOriginAddressType(String rtspOriginAddressType)
```

Set the origin IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session

Parameters:

(continued from last page)

rtspOriginAddressType - origin IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session

addLiveStreamPacketizerListener

```
public void addLiveStreamPacketizerListener( ILiveStreamPacketizerActionNotify
liveStreamPacketizerListener )
```

Add a Live Stream Packetizer listener (see: [ILiveStreamPacketizerActionNotify](#))

Parameters:

liveStreamPacketizerListener - Live Stream Packetizer listener

removeLiveStreamPacketizerListener

```
public void removeLiveStreamPacketizerListener( ILiveStreamPacketizerActionNotify
liveStreamPacketizerListener )
```

Remove a Live Stream Packetizer listener (see: [ILiveStreamPacketizerActionNotify](#))

Parameters:

liveStreamPacketizerListener - Live Stream Packetizer listener

notifyLiveStreamPacketizerCreate

```
public void notifyLiveStreamPacketizerCreate( ILiveStreamPacketizer
liveStreamPacketizer,
String streamName )
```

Notify Live Stream Packetizer Create

Parameters:

liveStreamPacketizer - Live Stream Packetizer listener

notifyLiveStreamPacketizerDestroy

```
public void notifyLiveStreamPacketizerDestroy( ILiveStreamPacketizer
liveStreamPacketizer )
```

Notify Live Stream Packetizer Destroy

Parameters:

liveStreamPacketizer - Live Stream Packetizer listener

notifyLiveStreamPacketizerInit

```
public void notifyLiveStreamPacketizerInit( ILiveStreamPacketizer liveStreamPacketizer,
String streamName )
```

Notify Live Stream Packetizer Init

Parameters:

liveStreamPacketizer - Live Stream Packetizer listener

isValidFMLEConnections

```
public boolean isValidFMLEConnections( )
```

Returns true if validating FMLE connection (default is false)

(continued from last page)

Returns:

true if validating FMLE connection

setValidateFMLEConnections

```
public void setValidateFMLEConnections(boolean validateFMLEConnections)
```

Returns true if validating FMLE connection (default is false)

Parameters:

validateFMLEConnections - true if validating FMLE connection

addLiveStreamTranscoderListener

```
public void addLiveStreamTranscoderListener(ILiveStreamTranscoderNotify  
liveStreamTranscoderListener)
```

Add a live stream transcoder listener

Parameters:

liveStreamTranscoderListener - live stream transcoder listener

removeLiveStreamTranscoderListener

```
public void removeLiveStreamTranscoderListener(ILiveStreamTranscoderNotify  
liveStreamTranscoderListener)
```

Remove a live stream transcoder listener

Parameters:

liveStreamTranscoderListener - live stream transcoder listener

notifyLiveStreamTranscoderCreate

```
public void notifyLiveStreamTranscoderCreate(ILiveStreamTranscoder  
liveStreamTranscoder,  
IMediaStream stream)
```

Notify live stream transcoder create

Parameters:liveStreamTranscoder - live stream transcoder
stream - stream

notifyLiveStreamTranscoderDestroy

```
public void notifyLiveStreamTranscoderDestroy(ILiveStreamTranscoder  
liveStreamTranscoder,  
IMediaStream stream)
```

Notify live stream transcoder destroy

Parameters:liveStreamTranscoder - live stream transcoder
stream - stream

(continued from last page)

notifyLiveStreamTranscoderInit

```
public void notifyLiveStreamTranscoderInit(ILiveStreamTranscoder liveStreamTranscoder,  
IMediaStream stream)
```

Notify live stream transcoder init

Parameters:

liveStreamTranscoder - live stream transcoder

stream - stream

containsLiveStreamTranscoder

```
public boolean containsLiveStreamTranscoder(String liveStreamTranscoder)
```

Return true if this application instance contains the transcoder name

Parameters:

liveStreamTranscoder - transcoder name

Returns:

true if this application instance contains the transcoder name

getLiveStreamTranscoderList

```
public String getLiveStreamTranscoderList()
```

Get comma separated list of transcoders to use for this application instance

Returns:

comma separated list of transcoders

setLiveStreamTranscoderList

```
public void setLiveStreamTranscoderList(String liveStreamTranscoderList)
```

Set comma separated list of transcoders to use for this application instance

Parameters:

liveStreamTranscoderList - comma separated list of transcoders

getLiveStreamTranscoderControl

```
public ILiveStreamTranscoderControl getLiveStreamTranscoderControl()
```

Get the Live Stream Transcoder Contoller. This class will get called each time a stream is to be transcoded using the LiveStreamTranscoder mechanism.

Returns:

Live Stream Transcoder Contoller

setLiveStreamTranscoderControl

```
public void setLiveStreamTranscoderControl(ILiveStreamTranscoderControl  
liveStreamTranscoderControl)
```

Set the Live Stream Transcoder Contoller. This class will get called each time a stream is to be transcoded using the LiveStreamTranscoder mechanism.

(continued from last page)

Parameters:

liveStreamTranscoderControl - Live Stream Transcoder Controller

getTranscoderApplicationContext

```
public LiveStreamTranscoderApplicationContext getTranscoderApplicationContext()
```

Get live stream transcoder application context

Returns:

live stream transcoder application context

getDvrProperties

```
public WMSProperties getDvrProperties()
```

Get the property collection of DVR settings that are specific to this application instance. These are defined in Application/DVR/Properties tag in Application.xml

Returns:

property collection of DVR settings

getDvrApplicationContext

```
public DvrApplicationContext getDvrApplicationContext()
```

Get live stream dvr application context

Returns:

live stream dvr application context

getDvrConverter

```
public DvrApplicationConverterContext getDvrConverter()
```

Get dvr application converter context

Returns:

dvr application converter context

getLiveStreamDvrRecorderControl

```
public ILiveStreamDvrRecorderControl getLiveStreamDvrRecorderControl()
```

Get the Live Stream DVR Recorder Controller. This class will get called each time a stream is to be DVR-ed.

Returns:

Live Stream DVR Controller

setLiveStreamDvrRecorderControl

```
public void setLiveStreamDvrRecorderControl(ILiveStreamDvrRecorderControl controller)
```

Set the Live Stream DVR Controller.

Parameters:

controller - Live Stream DVR Controller

getDvrRecorderList

```
public String getDvrRecorderList()
```

Get the comma separated list of Dvr Recorder names being used by this application (see conf/Dvr.xml)

Returns:

comma separated list of Dvr Recorder names

setDvrRecorderList

```
public void setDvrRecorderList(String recorderList)
```

Set the comma separated list of Dvr Recorder names being used by this application (see conf/Dvr.xml)

Parameters:

recorderList - comma separated list of Dvr Recorder names

addDvrRecorderListener

```
public void addDvrRecorderListener(ILiveStreamDvrRecorderActionNotify listener)
```

Add a Dvr Recorder listener (see: [ILiveStreamDvrRecorderActionNotify](#))

Parameters:

listener - Dvr Recorder listener

removeDvrRecorderListener

```
public void removeDvrRecorderListener(ILiveStreamDvrRecorderActionNotify listener)
```

Remove a Dvr Recorder listener (see: [ILiveStreamDvrRecorderActionNotify](#))

Parameters:

listener - Dvr Recorder listener

notifyLiveStreamDvrRecorderCreate

```
public void notifyLiveStreamDvrRecorderCreate(ILiveStreamDvrRecorder dvr,  
String streamName)
```

Notify Dvr Recorder Create

Parameters:

dvr - DVR Recorder listener
streamName - stream Name

notifyLiveStreamDvrRecorderInit

```
public void notifyLiveStreamDvrRecorderInit(ILiveStreamDvrRecorder dvr,  
String streamName)
```

Notify DVR Recorder has been initialized.

Parameters:

dvr - DVR Recorder listener * @param streamName stream Name

(continued from last page)

notifyLiveStreamDvrRecorderDestroy

```
public void notifyLiveStreamDvrRecorderDestroy(ILiveStreamDvrRecorder dvr)
```

Notify DVR Recorder has been destroyed.

Parameters:

dvr - DVR Recorder listener

addDvrStreamManagerListener

```
public void addDvrStreamManagerListener(IDvrStreamManagerActionNotify listener)
```

Add a Dvr Application Store Manager listener (see: IDvrStoreActionNotify)

Parameters:

listener - Dvr Application Store Manager listener

removeDvrStreamManagerListener

```
public void removeDvrStreamManagerListener(IDvrStreamManagerActionNotify listener)
```

Remove a Dvr Application Store Manager listener (see: IDvrStoreActionNotify)

Parameters:

listener - Dvr Application Store Manager listener

notifyDvrStreamManagerCreate

```
public void notifyDvrStreamManagerCreate(IDvrStreamManager dvrStoreManager,  
String streamName)
```

Notify listeners that Dvr Application Store Manager has been created.

Parameters:

dvrStoreManager - Dvr Application Store Manager
streamName

notifyDvrStreamManagerInit

```
public void notifyDvrStreamManagerInit(IDvrStreamManager dvrStoreManager)
```

Notify listeners that Dvr Application Store Manager has been initialized.

Parameters:

dvrStoreManager - Dvr Application Store Manager

notifyDvrStreamManagerDestroy

```
public void notifyDvrStreamManagerDestroy(IDvrStreamManager dvrManager)
```

Notify listeners that Dvr Application Store Manager has been destroyed.

Parameters:

dvrManager - Dvr Application Store Manager

(continued from last page)

getMediaReaderContentType

```
public int getMediaReaderContentType(String mediaType)
```

Get the content type of a media stream name prefix (see `IMediaReader.CONTENTTYPE_*`)

Parameters:

mediaType - mediaType (such as flv or smil)

Returns:

content type (see `IMediaReader.CONTENTTYPE_*`)

getMediaListProvider

```
public IMediaListProvider getMediaListProvider()
```

Get the current media list provider. The media list provider is used to resolve amlst:streamname requests to a media list (equivalent to a SMIL file).

Returns:

media list provider

setMediaListProvider

```
public void setMediaListProvider(IMediaListProvider mediaListProvider)
```

Set the current media list provider. The media list provider is used to resolve amlst:streamname requests to a media list (equivalent to a SMIL file).

Parameters:

mediaListProvider - media list provider

getMediacasterRTPRTSPRTPTransportMode

```
public int getMediacasterRTPRTSPRTPTransportMode()
```

RTP MediaCaster RTSP/RTP transport mode. See `RTPMediaCaster.RTSPTRANSPORTMODE_*`

Returns:

RTP MediaCaster RTSP/RTP transport mode

setMediacasterRTPRTSPRTPTransportMode

```
public void setMediacasterRTPRTSPRTPTransportMode(int  
mediacasterRTPRTSPRTPTransportMode)
```

RTP MediaCaster RTSP/RTP transport mode. See `RTPMediaCaster.RTSPTRANSPORTMODE_*`

Parameters:

mediacasterRTPRTSPRTPTransportMode - RTP MediaCaster RTSP/RTP transport mode

getProtocolUsage

```
public boolean[] getProtocolUsage()
```

Get the protocols in use by this application instance (see `IApplicationInstance.PROTOCOLUSAGE_*`)

Returns:

protocols in use by this application instance (see `IApplicationInstance.PROTOCOLUSAGE_*`)

getProtocolUsage

```
public void getProtocolUsage(boolean[] protocolsInUse)
```

Get the protocols in use by this application instance (see IApplicationInstance.PROTOCOLUSAGE_*)

isDebugAppTimeout

```
public boolean isDebugAppTimeout()
```

If true appTimeout processing will be logged.

Returns:

true appTimeout processing will be logged

setDebugAppTimeout

```
public void setDebugAppTimeout(boolean debugAppTimeout)
```

If true appTimeout processing will be logged.

Parameters:

debugAppTimeout - true appTimeout processing will be logged

addRTPListener

```
public void addRTPListener(IRTPSessionNotify rtpListener)
```

Add listener to be notified of RTPSession create and destroy.

Parameters:

rtpListener - RTP listener

removeRTPListener

```
public void removeRTPListener(IRTPSessionNotify rtpListener)
```

Remove listener to be notified of RTPSession create and destroy.

Parameters:

rtpListener - RTP listener

notifyRTPSessionCreate

```
public void notifyRTPSessionCreate(RTPSession rtpSession)
```

Notify RTP session create

Parameters:

rtpSession - rtp session

notifyRTPSessionDestroy

```
public void notifyRTPSessionDestroy(RTPSession rtpSession)
```

Notify RTP session destroy

(continued from last page)

Parameters:

rtpSession - rtp session

addHTTPListener

```
public void addHTTPListener(IHTTPSessionNotify httpListener)
```

Add listener to be notified of HTTPSession create and destroy.

Parameters:

httpListener - http listener

removeHTTPListener

```
public void removeHTTPListener(IHTTPSessionNotify httpListener)
```

Remove listener to be notified of HTTPSession create and destroy.

Parameters:

httpListener - http listener

notifyHTTPSessionCreate

```
public void notifyHTTPSessionCreate(IHTTPStreamerSession httpSession)
```

Notify HTTP session create

Parameters:

httpSession - HTTP session

notifyHTTPSessionDestroy

```
public void notifyHTTPSessionDestroy(IHTTPStreamerSession httpSession)
```

Notify HTTP session destroy

Parameters:

httpSession - HTTP session

getMediaCacheFilters

```
public java.util.List getMediaCacheFilters()
```

Get the list of allowed MediaCache sources.

Returns:

list of allowed MediaCache sources

isMediaCacheSourceAllowed

```
public boolean isMediaCacheSourceAllowed(String sourceName)
```

Test to see if a MediaCache source name is allowed

Parameters:

sourceName - MediaCache source name

Returns:

(continued from last page)

true if allowed

getPushPublishSessions

```
public java.util.List getPushPublishSessions(IMediaStream stream)
```

Get the current push publish sessions for a given IMediaStream

Parameters:

stream - stream

Returns:

push publish sessions

getPushPublishSessions

```
public java.util.List getPushPublishSessions()
```

Get all active push publish sessions

Returns:

all active push publish sessions

addPushPublishSession

```
public void addPushPublishSession(IMediaStream stream,  
    IPushPublishSession pushPublishSession)
```

Add a push publish session to the list of active push publish sessions

Parameters:

stream - stream

pushPublishSession - push publish session

removePushPublishSession

```
public void removePushPublishSession(IMediaStream stream,  
    IPushPublishSession pushPublishSession)
```

Remove a push publish session

Parameters:

stream - stream

pushPublishSession - push publish session

removePushPublishSessions

```
public void removePushPublishSessions(IMediaStream stream)
```

Remove all push publish sessions for a give stream

Parameters:

stream - stream

addPushPublishSessionListener

```
public void addPushPublishSessionListener(IPushPublishSessionNotify  
    pushPublishSessionListener)
```

(continued from last page)

Add a push publish session listener (see [IPushPublishSessionNotify](#))

Parameters:

`pushPublishSessionListener` - push publish session

removePushPublishSessionListener

```
public void removePushPublishSessionListener(IPushPublishSessionNotify
pushPublishSessionListener)
```

Remove a push publish session listener (see [IPushPublishSessionNotify](#))

Parameters:

`pushPublishSessionListener` - push publish session

notifyPushPublishSessionCreate

```
public void notifyPushPublishSessionCreate(String streamName,
IMediaStream stream,
IPushPublishSession pushPublishSession)
```

Notify push publish session create

Parameters:

`streamName` - stream name
`stream` - stream
`pushPublishSession` - push publish session

notifyPushPublishSessionDestroy

```
public void notifyPushPublishSessionDestroy(String streamName,
IMediaStream stream,
IPushPublishSession pushPublishSession)
```

Notify push publish session destroy

Parameters:

`streamName` - stream name
`stream` - stream
`pushPublishSession` - push publish session

getPushPublishSessionCount

```
public int getPushPublishSessionCount()
```

Get the number of push publishing sessions.

Returns:

number of push publishing sessions

getStreamRecorderProperties

```
public WMSProperties getStreamRecorderProperties()
```

Get the property collection of StreamRecorder settings that are specific to this application instance

Returns:

property collection of StreamRecorder settings

isLive

```
public boolean isLive()
```

Returns true if the application stream type of the application instance is live

Returns:

true if the application stream type is live

getSourceControlSession

```
public ISourceControlSession getSourceControlSession(String streamName)
```

Get the source control session for the given stream name

Parameters:

streamName - the stream name

Returns:

an ISourceControlSession for the stream provided or null if it doesn't exist

getSourceControlSessions

```
public java.util.List getSourceControlSessions()
```

Get all active source control sessions

Returns:

List all active source control sessions

addSourceControlSession

```
public void addSourceControlSession(String streamName,  
    ISourceControlSession sourceControlSession)
```

Add a source control session to the list of active source control sessions associated with the given stream name

Parameters:

streamName - the stream name

sourceControlSession - the source control session

removeSourceControlSession

```
public void removeSourceControlSession(String streamName)
```

Remove the source control session for the given stream name from the application instance

Parameters:

streamName - the stream name

addSourceControlSessionListener

```
public void addSourceControlSessionListener(ISourceControlSessionNotify  
sourceControlSessionListener)
```

Add a source control session listener (see ISourceControlSessionNotify)

Parameters:

(continued from last page)

sourceControlSessionListener - source control session listener

removeSourceControlSessionListener

```
public void removeSourceControlSessionListener(ISourceControlSessionNotify
sourceControlSessionListener)
```

Remove the provided source control session listener from the list of source control session listeners (see [ISourceControlSessionNotify](#))

Parameters:

sourceControlSessionListener - source control session listener

notifySourceControlSessionCreate

```
public void notifySourceControlSessionCreate(String streamName,
ISourceControlSession sourceControlSession)
```

Notify source control session create

Parameters:

streamName - stream name

sourceControlSession - the source control session that was just created

notifySourceControlSessionDestroy

```
public void notifySourceControlSessionDestroy(String streamName,
ISourceControlSession sourceControlSession)
```

Notify source control session destroy

Parameters:

streamName - stream name

sourceControlSession - the source control session that is being destroyed

getSourceControlSessionCount

```
public int getSourceControlSessionCount()
```

Get the number of source control sessions.

Returns:

number of source control sessions

getWebRTCApplicationContext

```
public com.wowza.wms.webrtc.model.WebRTCApplicationContext
getWebRTCApplicationContext()
```

Get the WebRTC application level context

Returns:

WebRTC application level context

getWebRTCSessions

```
public java.util.List getWebRTCSessions()
```

Get list of WebRTC sessions

(continued from last page)

Returns:

list of WebRTC sessions

getWebRTCSessions

```
public java.util.List getWebRTCSessions(String streamName)
```

Get list of WebRTC sessions by stream name

Parameters:

streamName - stream name

Returns:

list of WebRTC sessions by stream name

getWebRTCSessionCount

```
public int getWebRTCSessionCount()
```

Get count of WebRTC sessions

Returns:

count of WebRTC sessions

getWebRTCSessionCount

```
public int getWebRTCSessionCount(String streamName)
```

Get count of WebRTC sessions by stream name

Parameters:

streamName - stream name

Returns:

count of WebRTC sessions by stream name

getWebRTCSessionCountsByName

```
public java.util.Map getWebRTCSessionCountsByName()
```

Get a map of WebRTC sessions by stream name

Returns:

map of WebRTC sessions by stream name

com.wowza.wms.application Interface IApplicationInstanceNotify

All Known Implementing Classes:

[ServerListenerStreamDemoPublisher](#)

public interface **IApplicationInstanceNotify**
extends

IApplicationInstanceNotify: listener interface used by IApplication addApplicationInstanceListener

Method Summary

void	onApplicationInstanceCreate (IApplicationInstance applicationInstance) Triggered when applicationInstance created
void	onApplicationInstanceDestroy (IApplicationInstance applicationInstance) Triggered when applicationInstance destroyed

Methods

onApplicationInstanceCreate

public void **onApplicationInstanceCreate**([IApplicationInstance](#) applicationInstance)

Triggered when applicationInstance created

Parameters:

applicationInstance - applicationInstance

onApplicationInstanceDestroy

public void **onApplicationInstanceDestroy**([IApplicationInstance](#) applicationInstance)

Triggered when applicationInstance destroyed

Parameters:

applicationInstance - applicationInstance

com.wowza.wms.application Interface IApplicationNotify

All Known Implementing Classes:

[ServerListenerStreamDemoPublisher](#)

public interface **IApplicationNotify**
extends

IApplicationNotify: listener interface used by IVHost addApplicationListener

Method Summary

void	onApplicationCreate (IApplication application) Triggered when application created
void	onApplicationDestroy (IApplication application) Triggered when application destroyed

Methods

onApplicationCreate

public void **onApplicationCreate**([IApplication](#) application)

Triggered when application created

Parameters:

application - application

onApplicationDestroy

public void **onApplicationDestroy**([IApplication](#) application)

Triggered when application destroyed

Parameters:

application - application

com.wowza.wms.application Class WMSProperties

```

java.lang.Object
  |-- java.util.AbstractMap
        |-- java.util.HashMap
              |-- com.wowza.wms.application.WMSProperties
  
```

All Implemented Interfaces:

java.util.Map, java.io.Serializable, Cloneable, java.util.Map

```

public class WMSProperties
extends java.util.HashMap
  
```

WMSProperties: generic properties container used by many class to store extended property information. Acts like a simple Map with some simple utilities for performing type conversion.

Constructor Summary

public	WMSProperties()
--------	---------------------------------

Method Summary

static void	cloneProperties (WMSProperties from, WMSProperties to) Copy all properties from "from" properties object to "to" properties object.
String[]	getAllAsStrings () Return all properties as String[].
Object	getProperty (String name) Get property value as generic object.
boolean	getPropertyBoolean (String name, boolean defaultVal) Get property as boolean, return default value if does not exist.
double	getPropertyDouble (String name, double defaultVal) Get property as double, return default value if does not exist.
int	getPropertyInt (String name, int defaultVal) Get property as int, return default value if does not exist.
long	getPropertyLong (String name, long defaultVal) Get property as long, return default value if does not exist.
String	getPropertyStr (String name) Get property as String
String	getPropertyStr (String name, String defaultVal) Get property as String, return default value if does not exist.
void	putAll (java.util.Map m)

void	setProperty (String name, Object value) Set property to generic object.
String	toString ()

Methods inherited from class java.util.HashMap

clear, clone, containsKey, containsValue, entrySet, get, isEmpty, keySet, put, putAll, remove, size, values

Methods inherited from class java.util.AbstractMap

clear, clone, containsKey, containsValue, entrySet, equals, get, hashCode, isEmpty, keySet, put, putAll, remove, size, toString, values

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.util.Map

clear, containsKey, containsValue, entrySet, equals, get, hashCode, isEmpty, keySet, put, putAll, remove, size, values

Methods inherited from interface java.util.Map

clear, containsKey, containsValue, entrySet, equals, get, hashCode, isEmpty, keySet, put, putAll, remove, size, values

Constructors

WMSProperties

```
public WMSProperties()
```

Methods

cloneProperties

```
public static void cloneProperties(WMSProperties from,
WMSProperties to)
```

Copy all properties from "from" properties object to "to" properties object.

Parameters:

from - source properties
to - destination properties

setProperty

```
public void setProperty(String name,
Object value)
```

(continued from last page)

Set property to generic object.

Parameters:

name - property name
value - value

getProperty

```
public Object getProperty(String name)
```

Get property value as generic object.

Parameters:

name - property name

Returns:

value, null if does not exist

getPropertyStr

```
public String getPropertyStr(String name)
```

Get property as String

Parameters:

name - property name

Returns:

value as String, null if does not exist

getPropertyStr

```
public String getPropertyStr(String name,  
String defaultVal)
```

Get property as String, return default value if does not exist.

Parameters:

name - property name
defaultVal - default value

Returns:

value as String, defaultVal if does not exist

getPropertyBoolean

```
public boolean getPropertyBoolean(String name,  
boolean defaultVal)
```

Get property as boolean, return default value if does not exist.

Parameters:

name - property name
defaultVal - default value

Returns:

value as boolean, defaultVal if does not exist

getPropertyInt

```
public int getPropertyInt(String name,  
    int defaultVal)
```

Get property as int, return default value if does not exist.

Parameters:

name - property name
defaultVal - default value

Returns:

value as boolean, defaultVal if does not exist

getPropertyLong

```
public long getPropertyLong(String name,  
    long defaultVal)
```

Get property as long, return default value if does not exist.

Parameters:

name - property name
defaultVal - default value

Returns:

value as long, defaultVal if does not exist

getPropertyDouble

```
public double getPropertyDouble(String name,  
    double defaultVal)
```

Get property as double, return default value if does not exist.

Parameters:

name - property name
defaultVal - default value

Returns:

value as double, defaultVal if does not exist

getAllAsStrings

```
public String[] getAllAsStrings()
```

Return all properties as String[]. Format is "key=value".

Returns:

all properties as String[]

toString

```
public String toString()
```

(continued from last page)

putAll

```
public void putAll(java.util.Map m)
```

Package

com.wowza.wms.authentication

com.wowza.wms.authentication

Class AuthenticateUsernamePasswordProviderBase

java.lang.Object

└-com.wowza.wms.authentication.AuthenticateUsernamePasswordProviderBase

All Implemented Interfaces:

[IAuthenticateUsernamePasswordProvider](#)

public abstract class **AuthenticateUsernamePasswordProviderBase**
 extends Object
 implements [IAuthenticateUsernamePasswordProvider](#)

Base class for implementing HTTP and RTSP based custom authentication class.

Field Summary

protected	client
protected	rtpSession
protected	vhost

Constructor Summary

public	AuthenticateUsernamePasswordProviderBase()
--------	--

Method Summary

IClient	getClient() Get client
RTPSession	getRTPSession() Get RTP Session
IVHost	getVHost() Get vhost
void	setClient(IClient client) Set client
void	setRTPSession(RTPSession rtpSession) Set RTP Session
void	setVHost(IVHost vhost) Set vhost

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface[com.wowza.wms.authentication.IAuthenticateUsernamePasswordProvider](#)[getClient](#), [getPassword](#), [getRTPSession](#), [getVHost](#), [setClient](#), [setRTPSession](#), [setVHost](#), [userExists](#)

Fields

vhostprotected com.wowza.wms.vhost.IVHost **vhost****client**protected com.wowza.wms.client.IClient **client****rtpSession**protected com.wowza.wms.rtp.model.RTPSession **rtpSession**

Constructors

AuthenticateUsernamePasswordProviderBasepublic **AuthenticateUsernamePasswordProviderBase**()

Methods

getVHostpublic [IVHost](#) **getVHost**()

Get vhost

Returns:

vhost

setVHostpublic void **setVHost**([IVHost](#) vhost)

Set vhost

Parameters:

vhost - vhost

(continued from last page)

getRTPSession

```
public RTPSession getRTPSession()
```

Get RTP Session

Returns:

RTP Session

setRTPSession

```
public void setRTPSession(RTPSession rtpSession)
```

Set RTP Session

Parameters:

rtpSession - RTP Session

getClient

```
public IClient getClient()
```

Get client

Returns:

client

setClient

```
public void setClient(IClient client)
```

Set client

Parameters:

client - client

com.wowza.wms.authentication Interface IAuthenticate

public interface **IAuthenticate**
extends

IAuthenticate: HTTP and RTSP authentication interface

Field Summary

public static final	PASSWORDFILEFORMAT_CLEAR Value: 1
public static final	PASSWORDFILEFORMAT_UNKNOWN Value: 0

Method Summary

void	init (IApplicationInstance appInstance, AuthenticationItem authenticationItem) Initialize authentication class when instantiated as part of an application instance
void	init (IVHost vhost, AuthenticationItem authenticationItem) Initialize authentication class when instantiated as part of a vhost

Fields

PASSWORDFILEFORMAT_UNKNOWN

public static final int **PASSWORDFILEFORMAT_UNKNOWN**

Constant value: **0**

PASSWORDFILEFORMAT_CLEAR

public static final int **PASSWORDFILEFORMAT_CLEAR**

Constant value: **1**

Methods

init

public void **init**([IApplicationInstance](#) appInstance,
AuthenticationItem authenticationItem)

Initialize authentication class when instantiated as part of an application instance

(continued from last page)

Parameters:

appInstance - application instance
authenticationItem - authentication item

init

```
public void init(IVHost vhost,  
                AuthenticationItem authenticationItem)
```

Initialize authentication class when instantiated as part of a vhost

Parameters:

vhost - vhost
authenticationItem - authentication item

com.wowza.wms.authentication Interface IAuthenticate2

public interface **IAuthenticate2**
extends

IAuthenticate: HTTP and RTSP authentication interface

Field Summary

public static final	PASSWORDFILEFORMAT_CLEAR Value: 1
public static final	PASSWORDFILEFORMAT_UNKNOWN Value: 0

Method Summary

AuthenticationItem	getAuthenticationItem() Return the authentication item object
void	init(IApplicationInstance appInstance, AuthenticationItem authenticationItem) Initialize authentication class when instantiated as part of an application instance
void	init(IVHost vhost, AuthenticationItem authenticationItem) Initialize authentication class when instantiated as part of a vhost

Fields

PASSWORDFILEFORMAT_UNKNOWN

public static final int **PASSWORDFILEFORMAT_UNKNOWN**

Constant value: **0**

PASSWORDFILEFORMAT_CLEAR

public static final int **PASSWORDFILEFORMAT_CLEAR**

Constant value: **1**

Methods

init

public void **init**([IApplicationInstance](#) appInstance, AuthenticationItem authenticationItem)

(continued from last page)

Initialize authentication class when instantiated as part of an application instance

Parameters:

appInstance - application instance
authenticationItem - authentication item

init

```
public void init(IVHost vhost,  
    AuthenticationItem authenticationItem)
```

Initialize authentication class when instantiated as part of a vhost

Parameters:

vhost - vhost
authenticationItem - authentication item

getAuthenticationItem

```
public AuthenticationItem getAuthenticationItem()
```

Return the authentication item object

Returns:

authentication item

com.wowza.wms.authentication Interface IAuthenticate3

public interface **IAuthenticate3**
extends

IAuthenticate: HTTP and RTSP authentication interface

Field Summary

public static final	PASSWORDFILEFORMAT_CLEAR Value: 1
public static final	PASSWORDFILEFORMAT_UNKNOWN Value: 0

Method Summary

AuthenticationItem	getAuthenticationItem() Return the authentication item object
String	getAuthenticationMethod() Return the authentication method invoked - play or publish
void	init(IApplicationInstance appInstance, AuthenticationItem authenticationItem) Initialize authentication class when instantiated as part of an application instance
void	init(IVHost vhost, AuthenticationItem authenticationItem) Initialize authentication class when instantiated as part of a vhost
void	setAuthenticationMethod(String method) Set the authentication method invoked - play or publish

Fields

PASSWORDFILEFORMAT_UNKNOWN

public static final int **PASSWORDFILEFORMAT_UNKNOWN**

Constant value: **0**

PASSWORDFILEFORMAT_CLEAR

public static final int **PASSWORDFILEFORMAT_CLEAR**

Constant value: **1**

(continued from last page)

Methods

init

```
public void init(IApplicationInstance appInstance,  
                AuthenticationItem authenticationItem)
```

Initialize authentication class when instantiated as part of an application instance

Parameters:

appInstance - application instance
authenticationItem - authentication item

init

```
public void init(IVHost vhost,  
                AuthenticationItem authenticationItem)
```

Initialize authentication class when instantiated as part of a vhost

Parameters:

vhost - vhost
authenticationItem - authentication item

getAuthenticationItem

```
public AuthenticationItem getAuthenticationItem()
```

Return the authentication item object

Returns:

authentication item

setAuthenticationMethod

```
public void setAuthenticationMethod(String method)
```

Set the authentication method invoked - play or publish

getAuthenticationMethod

```
public String getAuthenticationMethod()
```

Return the authentication method invoked - play or publish

Returns:

authentication item

com.wowza.wms.authentication Interface IAuthenticateHTTPProvider

public interface **IAuthenticateHTTPProvider**
extends

IAuthenticateHTTPProvider: HTTP authentication provider

Method Summary

boolean	authenticateHTTPProvider (IVHost vhost, IHTTPRequest req, IHTTPResponse resp) Called for each HTTP authentication
---------	---

Methods

authenticateHTTPProvider

public boolean **authenticateHTTPProvider**([IVHost](#) vhost, [IHTTPRequest](#) req, [IHTTPResponse](#) resp)

Called for each HTTP authentication

Parameters:

vhost - virtual host
req - HTTP request
resp - HTTP response

Returns:

true if authentication was successful

com.wowza.wms.authentication Interface IAuthenticateIPAccessList

public interface **IAuthenticateIPAccessList**
extends

Method Summary

boolean	isBlackListSet()
boolean	isInPublishBlackList (String clientIP)
boolean	isInPublishWhiteList (String clientIP)
boolean	isWhiteListSet()
void	setIPBlackList (String ipBlackList)
void	setIPWhiteList (String ipWhiteList)
	IAuthenticateIPAccessList: Access list provider

Methods

setIPWhiteList

public void **setIPWhiteList**(String ipWhiteList)

IAuthenticateIPAccessList: Access list provider

setIPBlackList

public void **setIPBlackList**(String ipBlackList)

isWhiteListSet

public boolean **isWhiteListSet**()

isBlackListSet

public boolean **isBlackListSet**()

isInPublishWhiteList

```
public boolean isInPublishWhiteList(String clientIP)
```

isInPublishBlackList

```
public boolean isInPublishBlackList(String clientIP)
```

com.wowza.wms.authentication Interface IAuthenticateRTSP

public interface **IAuthenticateRTSP**
extends

IAuthenticateRTSP: RTSP authentication provider

Method Summary

boolean	<code>authenticateRTSP(RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)</code> Called for each RTSP authentication
---------	---

Methods

authenticateRTSP

```
public boolean authenticateRTSP(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Called for each RTSP authentication

Parameters:

`rtspSession` - RTP session
`req` - RTSP request
`resp` - RTSP response

Returns:

true if authentication was successful

com.wowza.wms.authentication Interface IAuthenticateSIP

public interface **IAuthenticateSIP**
extends

IAuthenticateRTSP: RTSP authentication provider

Method Summary

boolean	<code>authenticateSIP(RTPSession rtspSession, com.wowza.wms.sip.SIPRequestMessage req, com.wowza.wms.sip.SIPResponseMessages resp)</code> Called for each RTSP authentication
---------	--

Methods

authenticateSIP

```
public boolean authenticateSIP(RTPSession rtspSession,  
    com.wowza.wms.sip.SIPRequestMessage req,  
    com.wowza.wms.sip.SIPResponseMessages resp)
```

Called for each RTSP authentication

Parameters:

rtspSession - RTP session
req - RTSP request
resp - RTSP response

Returns:

true if authentication was successful

com.wowza.wms.authentication Interface IAuthenticateUsernamePasswordProvider

All Known Implementing Classes:

[AuthenticateUsernamePasswordProviderBase](#)

public interface **IAuthenticateUsernamePasswordProvider**
extends

IAuthenticateUsernamePasswordProvider: HTTP and RTSP username/password validator interface

Method Summary

IClient	getClient() Get client
String	getPassword(String username) Get password for a given user
RTPSession	getRTPSession() Get RTP session
IVHost	getVHost() Get vhost
void	setClient(IClient client) Set client
void	setRTPSession(RTPSession rtpSession) Set RTP session
void	setVHost(IVHost vhost) Set vhost
boolean	userExists(String username) Return true if user exists

Methods

userExists

public boolean **userExists**(String username)

Return true if user exists

Parameters:

username - username

Returns:

true if user exists

(continued from last page)

getPassword

```
public String getPassword(String username)
```

Get password for a given user

Parameters:

username - username

Returns:

password

getVHost

```
public IVHost getVHost()
```

Get vhost

Returns:

vhost

setVHost

```
public void setVHost(IVHost vhost)
```

Set vhost

Parameters:

vhost - vhost

getClient

```
public IClient getClient()
```

Get client

Returns:

client

setClient

```
public void setClient(IClient client)
```

Set client

Parameters:

client - client

getRTPSession

```
public RTPSession getRTPSession()
```

Get RTP session

Returns:

RTP session

(continued from last page)

setRTPSession

```
public void setRTPSession(RTPSession rtpSession)
```

Set RTP session

Parameters:

`rtpSession` - RTP session

Package

com.wowza.wms.client

com.wowza.wms.client Class ConnectionCounter

```
java.lang.Object
  |
  +--com.wowza.wms.client.ConnectionCounterBase
      |
      +--com.wowza.wms.client.ConnectionCounter
```

```
public class ConnectionCounter
extends ConnectionCounterBase
```

Fields inherited from class com.wowza.wms.client.ConnectionCounterBase

DATEFORMATSTR, NEVERSTR, REJECTREASON_APPLICATION, REJECTREASON_COUNT, REJECTREASON_LICENSE

Constructor Summary

public	ConnectionCounter() Create empty ConnectionCounter
--------	---

Method Summary

void	acceptConnection (ConnectionHolder connectionHolder, byte[] license) Accept a new connection.
void	addConnectionListener (IConnectionNotify connectionNotify) Add a connection listener.
void	decrement (ConnectionHolder connectionHolder, boolean isValid, java.util.Date date, long stamp, byte[] license) Decrement connection counters.
void	disconnect (ConnectionHolder connectionHolder, byte[] license) Disconnect connection.
long	getCurrent () Get total number of client currently conected to this object.
long	getLastConnectAcceptedStamp () Get time (milliseconds) of the last conenction to this object.
String	getLastConnectAcceptedStampString () Get time (milliseconds) of the last conenction to this object as formatted string.
java.util.Date	getLastConnectAcceptedTime () Get time (milliseconds) of the last accepted conenction to this object.
String	getLastConnectAcceptedTimeString () Get time (milliseconds) of the last accepted conenction to this object as formatted string.
long	getLastConnectRejectedByReasonStamp (int reason) Get time (milliseconds) of the last rejected conenction by reason to this object.

String	getLastConnectRejectedByReasonStampString (int reason) Get time (milliseconds) of the last rejected connection by reason to this object as formatted string.
java.util.Date	getLastConnectRejectedByReasonTime (int reason) Get date and time of last rejected connection by reason to this object as Date object.
String	getLastConnectRejectedByReasonTimeString (int reason) Get date and time of last rejected connection by reason to this object as formatted string.
long	getLastConnectRejectedStamp () Get time (milliseconds) of the last rejected connection to this object.
String	getLastConnectRejectedStampString () Get time (milliseconds) of the last rejected connection to this object as formatted string.
java.util.Date	getLastConnectRejectedTime () Get date and time of last rejected connection to this object as Date object.
String	getLastConnectRejectedTimeString () Get date and time of last rejected connection to this object as formatted string.
long	getLastDisconnectStamp () Get time (milliseconds) of the last disconnected connection to this object.
String	getLastDisconnectStampString () Get time (milliseconds) of the last disconnected connection to this object as formatted string.
java.util.Date	getLastDisconnectTime () Get date and time of last disconnected connection to this object as Date object.
String	getLastDisconnectTimeString () Get date and time of last disconnected connection to this object as Date object as formatted string.
long	getTotal () Get total number of connection attempts to this object.
long	getTotalAccepted () Get total number of accepted connections to this object.
long	getTotalRejected () Get total number of rejected connections to this object.
void	incrementAccept (ConnectionHolder connectionHolder, java.util.Date date, long stamp, byte[] license) Increment accepted connections.
void	incrementReject (ConnectionHolder connectionHolder, int reason, java.util.Date date, long stamp, byte[] license) Increment reject connection.
void	rejectConnection (ConnectionHolder connectionHolder, int reason, byte[] license) Reject connection.
void	removeConnectionListener (IConnectionNotify connectionNotify) Remove connection listener
void	setConnectionValidator (IConnectionValidator connectionValidator) Set the connection validator.

boolean	validateNewConnection (ConnectionHolder connectionHolder, byte[] license) Validate a new connection.
---------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ConnectionCounter

```
public ConnectionCounter()
```

Create empty ConnectionCounter

Methods

addConnectionListener

```
public void addConnectionListener(IConnectionNotify connectionNotify)
```

Add a connection listener. Receives following events: onClientConnect, onClientDisconnect, onClientAccept and onClientReject.

Parameters:

connectionNotify - connection listener

removeConnectionListener

```
public void removeConnectionListener(IConnectionNotify connectionNotify)
```

Remove connection listener

Parameters:

connectionNotify - connection listener

setConnectionValidator

```
public void setConnectionValidator(IConnectionValidator connectionValidator)
```

Set the connection validator.

Parameters:

connectionValidator - connection validator

validateNewConnection

```
public boolean validateNewConnection(ConnectionHolder connectionHolder,  
byte[] license)
```

Validate a new connection.

NOTE: This is a private internal call. Server will not work properly if this method is not called properly using internal security mechanism.

(continued from last page)

Parameters:

connectionHolder - connection holder
license - security data

Returns:

true if connection is accepted

acceptConnection

```
public void acceptConnection(ConnectionHolder connectionHolder,  
    byte[] license)
```

Accept a new connection.

NOTE: This is a private internal call. Server will not work properly if this method is not called properly using internal security mechanism.

Parameters:

connectionHolder - connection holder
license - security data

incrementAccept

```
public void incrementAccept(ConnectionHolder connectionHolder,  
    java.util.Date date,  
    long stamp,  
    byte[] license)
```

Increment accepted connections.

NOTE: This is a private internal call. Server will not work properly if this method is not called properly using internal security mechanism.

Parameters:

connectionHolder - connection holder
date - date the connection occurred
stamp - time stamp connection occurred (milliseconds)
license - security data

rejectConnection

```
public void rejectConnection(ConnectionHolder connectionHolder,  
    int reason,  
    byte[] license)
```

Reject connection.

NOTE: This is a private internal call. Server will not work properly if this method is not called properly using internal security mechanism.

Parameters:

connectionHolder - connection holder
reason - reason the connection was refused. See REJECTREASON_*
license - security data

(continued from last page)

incrementReject

```
public void incrementReject(ConnectionHolder connectionHolder,  
    int reason,  
    java.util.Date date,  
    long stamp,  
    byte[] license)
```

Increment reject connection.

NOTE: This is a private internal call. Server will not work properly if this method is not called properly using internal security mechanism.

Parameters:

connectionHolder - connection holder
reason - reason the connection was refused. See REJECTREASON_*
date - date the connection occurred
stamp - time stamp connection occurred (milliseconds)
license - security data

disconnect

```
public void disconnect(ConnectionHolder connectionHolder,  
    byte[] license)
```

Disconnect connection.

NOTE: This is a private internal call. Server will not work properly if this method is not called properly using internal security mechanism.

Parameters:

connectionHolder - connection holder
license - security data

decrement

```
public void decrement(ConnectionHolder connectionHolder,  
    boolean isValid,  
    java.util.Date date,  
    long stamp,  
    byte[] license)
```

Decrement connection counters.

NOTE: This is a private internal call. Server will not work properly if this method is not called properly using internal security mechanism.

Parameters:

connectionHolder - connection holder
isValid - is a valid connection
date - date the connection occurred
stamp - time stamp connection occurred (milliseconds)
license - security data

getCurrent

```
public long getCurrent()
```

Get total number of client currently connected to this object.

Returns:

total number of client currently connected to this object

getLastConnectAcceptedStamp

```
public long getLastConnectAcceptedStamp()
```

Get time (milliseconds) of the last connection to this object.

Returns:

time (milliseconds) of the last connection to this object

getLastConnectAcceptedStampString

```
public String getLastConnectAcceptedStampString()
```

Get time (milliseconds) of the last connection to this object as formatted string.

Returns:

time (milliseconds) of the last connection to this object as formatted string

getLastConnectAcceptedTime

```
public java.util.Date getLastConnectAcceptedTime()
```

Get time (milliseconds) of the last accepted connection to this object.

Returns:

time (milliseconds) of the last accepted connection to this object

getLastConnectAcceptedTimeString

```
public String getLastConnectAcceptedTimeString()
```

Get time (milliseconds) of the last accepted connection to this object as formatted string.

Returns:

time (milliseconds) of the last accepted connection to this object as formatted string

getLastConnectRejectedStamp

```
public long getLastConnectRejectedStamp()
```

Get time (milliseconds) of the last rejected connection to this object.

Returns:

time (milliseconds) of the last rejected connection to this object

getLastConnectRejectedStampString

```
public String getLastConnectRejectedStampString()
```

Get time (milliseconds) of the last rejected connection to this object as formatted string.

Returns:

time (milliseconds) of the last rejected connection to this object as formatted string

getLastConnectRejectedTime

```
public java.util.Date getLastConnectRejectedTime()
```

(continued from last page)

Get date and time of last rejected connection to this object as Date object.

Returns:

date and time of last reject connection to this object as Date object

getLastConnectRejectedTimeString

```
public String getLastConnectRejectedTimeString()
```

Get date and time of last rejected connection to this object as formatted string.

Returns:

date and time of last reject connection to this object as formatted string

getLastConnectRejectedByReasonStampString

```
public String getLastConnectRejectedByReasonStampString(int reason)
```

Get time (milliseconds) of the last rejected connection by reason to this object as formatted string.

Parameters:

reason - reason, see REJECTREASON_*

Returns:

time (milliseconds) of the last rejected connection by reason to this object as formatted string

getLastConnectRejectedByReasonStamp

```
public long getLastConnectRejectedByReasonStamp(int reason)
```

Get time (milliseconds) of the last rejected connection by reason to this object.

Parameters:

reason - reason, see REJECTREASON_*

Returns:

time (milliseconds) of the last rejected connection by reason to this object

getLastConnectRejectedByReasonTime

```
public java.util.Date getLastConnectRejectedByReasonTime(int reason)
```

Get date and time of last rejected connection by reason to this object as Date object.

Parameters:

reason - reason, see REJECTREASON_*

Returns:

date and time of last reject connection by reason to this object as Date object

getLastConnectRejectedByReasonTimeString

```
public String getLastConnectRejectedByReasonTimeString(int reason)
```

Get date and time of last rejected connection by reason to this object as formatted string.

Parameters:

reason - reason, see REJECTREASON_*

(continued from last page)

Returns:

date and time of last rejected connection by reason to this object as formatted string

getLastDisconnectStampString

```
public String getLastDisconnectStampString()
```

Get time (milliseconds) of the last disconnected connection to this object as formatted string.

Returns:

time (milliseconds) of the last disconnected connection to this object as formatted string

getLastDisconnectStamp

```
public long getLastDisconnectStamp()
```

Get time (milliseconds) of the last disconnected connection to this object.

Returns:

time (milliseconds) of the last disconnected connection to this object

getLastDisconnectTime

```
public java.util.Date getLastDisconnectTime()
```

Get date and time of last disconnected connection to this object as Date object.

Returns:

date and time of last disconnected connection to this object as Date object

getLastDisconnectTimeString

```
public String getLastDisconnectTimeString()
```

Get date and time of last disconnected connection to this object as Date object as formatted string.

Returns:

date and time of last disconnected connection to this object as Date object as formatted string

getTotal

```
public long getTotal()
```

Get total number of connection attempts to this object.

Returns:

total number of connection attempts to this object

getTotalAccepted

```
public long getTotalAccepted()
```

Get total number of accepted connections to this object.

Returns:

total number of accepted connections to this object

getTotalRejected

```
public long getTotalRejected()
```

Get total number of rejected connections to this object.

Returns:

total number of rejected connections to this object

com.wowza.wms.client Interface IClient

public interface **IClient**
extends

IClient: public interface to Client object.

Field Summary

public static final	AUDIOSAMPLE_ACCESS_ALL Value: *
public static final	AUDIOSAMPLE_ACCESS_NONE Value:
public static final	READ_ACCESS_ALL Value: *
public static final	READ_ACCESS_NONE Value:
public static final	VIDEOSAMPLE_ACCESS_ALL Value: *
public static final	VIDEOSAMPLE_ACCESS_NONE Value:
public static final	WRITE_ACCESS_ALL Value: *
public static final	WRITE_ACCESS_NONE Value:

Method Summary

void	acceptConnection() Accept connection
void	acceptConnection(AMFData successObj) Accept connection
void	acceptConnection(String successStr) Accept connection
void	addAcceptConnectionAttribute(String key, AMFDataObj item) Add and attribute to the resultObj that gets passed back to the client on successful connection

void	addAcceptConnectionAttribute (String key, String item) Add and attribute to the resultObj that gets passed back to the client on successful connection
void	call (String handlerName) Simplified call client method/handler call.
void	call (String handlerName, IModuleCallResult resultObj, Object[] params) Call client method/handler.
void	clearFastPlaySettings () Force clear the fastPlay settings
void	fcSubscribe (String streamName) Subscribe to a live stream (for live stream repeater to start start from edge to origin)
void	fcSubscribe (String streamName, String mediaCasterType) Subscribe to a live stream (use a particular mediaCasterType)
void	fcUnSubscribe (String streamName) UnSubscribe from a stream
void	fcUnSubscribeAll () UnSubscribe to all streams that this client is current subscribed to
IApplicationInstance	getAppInstance () Get parent applicationInstance.
IApplication	getApplication () Get parent application.
int	getBufferTime () Get default buffer time for newly created mediaStream objects
int	getClientId () Get client id.
long	getConnectTime () Get time in milliseconds the client connected to the server.
String	getDateStarted () Get date and time of client connection
ElapsedTimer	getElapsedTime () Get elapsed time client has been connected.
FastPlaySettings	getFastPlaySettings () Get the current fastPlay settings.
String	getFlashVer () Get client flash version
int	getIdleFrequency () Get client idle frequency (milliseconds)
String	getIp () Client ip address
long	getLastValidateTime () Get last time (millisecond) the connection was validated with a ping

int	getLiveRepeaterCapabilities() Get the live repeater capabilities of this connection
String	getLiveStreamPacketizerList() Get the comma separated list of LiveStreamPacketizers names being used by this client (see conf/LiveStreamPacketizers.xml)
String	getLiveStreamTranscoderList() Get the comma separated list of LiveStreamTranscoders names being used by this client (see conf/LiveStreamTranscoders.xml)
int	getMaximumPendingWriteBytes() Get maximum number a bytes a client connection can have waiting to be sent before the connection is terminated.
int	getMaximumSetBufferTime() Get maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call.
IOPerformanceCounter	getMediaIOPerformanceCounter() Get performance counter for media bytes transferred to this client.
int	getObjectEncoding() Get the object encoding level
String	getPageUrl() Get the pageUrl for this connection.
long	getPingRoundTripTime() Get turn around time (milliseconds) of last ping request
int	getPingTimeout() Get the ping timeout (milliseconds)
int	getPlayStreamCount() Get the number of play streams
java.util.List	getPlayStreams() Get a collection of all play streams.
WMSProperties	getProperties() Get client properties
int	getProtocol() Get connection protocol (1 = RTMP, 3 = RTMPT)
int	getPublishStreamCount() Get the number of publish streams
java.util.List	getPublishStreams() Get a collection of publish streams.
String	getQueryStr() Get the query string part of the connection string.
String	getReferrer() Get the referrer data for this connection.
String	getRepeaterOriginUrl() Get the origin URL used by the Live Stream Repeater

AMFObj	getRespAMFAudioObj (IMediaStream stream) Get the audio response AMFObj for a given mediaStream
AMFObj	getRespAMFDataObj (IMediaStream stream) Get the data response AMFObj for a given mediaStream
AMFObj	getRespAMFVideoObj (IMediaStream stream) Get the video response AMFObj for a given mediaStream
ResponseFunctions	getRespFunctions () Get client responseFunctions object.
AMFObj	getResponseAMFObj (int index) Get the response channel AMFObj for channel index.
RTPStream	getRTPStream () If this client was created due to an RTP connection to the server return the underlying RTPStream object
HostPort	getServerHostPort () Get the hostPort object for the connection that is servicing this client
String	getSharedObjectReadAccess () Get the shared object read access value.
String	getSharedObjectWriteAccess () Get the shared object write access value.
String	getStreamAudioSampleAccess () Get the audio sample access value.
java.io.File	getStreamFile (String streamName) Get File object for stream with given name.
java.io.File	getStreamFile (String streamName, String streamExt) Get File object for stream with given name and extension.
java.io.File	getStreamFile (String streamName, String streamExt, boolean doCreateFolder) Get File object for stream with given name and extension.
String	getStreamReadAccess () Get the stream read access value.
String	getStreamType () Get default streamType
String	getStreamVideoSampleAccess () Get the video sample access value.
String	getStreamWriteAccess () Get the stream write access value.
String	getTimeRunning () Get elapsed time of connection
double	getTimeRunningSeconds () Get time running in seconds

IOPerformanceCounter	getTotalIOPerformanceCounter() Get performance counter for all bytes transferred to this client.
String	getUri() Get the full URI of the connection string
IVHost	getVHost() Get parent vHost
com.wowza.wms.protocol.wowz.WOWZSession	getWowzSession()
ClientWriteListener	getWriteListener() Object that tracks write operations
boolean	isAcceptConnection() Is auto accept connection
boolean	isAcceptConnectionSendClientId() Include the client id in the accept connection response
boolean	isConnected() Is this client connected
boolean	isEncrypted() Is this connection encrypted (RTMPE or RTMPTE)
boolean	isFlashMediaLiveEncoder() Returns true if this connection is the Flash Media Live Encoder
boolean	isFlashVersion10() Returns true if the Flash version is equal or greater than 10.x.x.x
boolean	isFlashVersion90115() Returns true if the Flash version is equal or greater than 9.0.115.x
boolean	isFlashVersionH264Capable() Returns true if the connected client is capable of playing H.264 video (Flash player 9.0.45.x or greater)
boolean	isLiveRepeater() Returns true if this connection is from the live stream repeater
boolean	isObjectEncodingAMF0() Is the object encoding for this client AMF0
boolean	isObjectEncodingAMF3() Is the object encoding for this client AMF3
boolean	isSecure() Is this connection protected by either SSL or encryption (RTMPE, RTMPTE, RTMPS)
boolean	isSendCloseOnRejectConnection()
boolean	isSSL() Is this connection SSL (RTMPS)
boolean	isValidFMLEConnections() Returns true if validating FMLE connection (default is false)

int	ping (IModulePingResult pingResult) Ping client.
void	redirectConnection (String url) Redirection connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected and info.ex.code of 302)
void	redirectConnection (String url, String description) Redirection connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected and info.ex.code of 302)
void	redirectConnection (String url, String description, AMFData errorObj) Redirection connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected and info.ex.code of 302).
void	redirectConnection (String url, String description, String errorStr) Redirection connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected and info.ex.code of 302)
void	rejectConnection () Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)
void	rejectConnection (AMFData errorObj) Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)
void	rejectConnection (String errorStr) Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)
void	rejectConnection (String description, AMFData errorObj) Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)
void	rejectConnection (String description, String errorStr) Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)
void	reparentClient (IVHost vhost) Move a client object to a new vhost.
void	setAcceptConnection (boolean acceptConnection) Set the default for accept connection
void	setAcceptConnectionDescription (String description) Call this method from onConnect to set the info.description property returned in NetConnection onStatus handler
void	setAcceptConnectionExObj (AMFDataObj acceptConnectionExObj) Call this method from onConnect to set the info.ex property returned in NetConnection onStatus handler
void	setAcceptConnectionObj (AMFData acceptConnectionObj) Call this method from onConnect to add an "application" property to the info object that is passed back to the Flash client in the onStatus handler.
void	setAcceptConnectionSendClientId (boolean acceptConnectionSendClientId) Include the client id in the connection response

void	<u>setBufferTime</u> (int bufferTime) Set default buffer time for newly created mediaStream objects
void	<u>setFastPlaySettings</u> (FastPlaySettings fastPlaySettings) Set fastPlay settings
void	<u>setFlashVer</u> (String flashVer) Set client flash version
void	<u>setIdleFrequency</u> (int idleFrequency) Set client idle frequency (milliseconds)
void	<u>setLastValidateTime</u> (long lastValidateTime) Set the last time (milliseconds) the connection was validated with ping
void	<u>setLiveRepeaterCapabilities</u> (int liveRepeaterCapabilities) Set the live repeater capabilities of this connection
void	<u>setLiveStreamPacketizerList</u> (String liveStreamPacketizerList) Set the comma separated list of LiveStreamPacketizers names being used by this client (see conf/LiveStreamPacketizers.xml)
void	<u>setLiveStreamTranscoderList</u> (String liveStreamTranscoderList) Set the comma separated list of LiveStreamTranscoders names being used by this client (see conf/LiveStreamTranscoders.xml)
void	<u>setObjectEncoding</u> (int objectEncoding) Set the object encoding level
void	<u>setRepeaterOriginUrl</u> (String repeaterOriginUrl) Set the origin URL used by the Live Stream Repeater
void	<u>setSendCloseOnRejectConnection</u> (boolean sendCloseOnRejectConnection)
void	<u>setSharedObjectReadAccess</u> (String sharedObjectReadAccess) Set the shared object read access value.
void	<u>setSharedObjectWriteAccess</u> (String sharedObjectWriteAccess) Set the shared object write access value.
void	<u>setShutdownClient</u> (boolean shutdownClient) Gracefully and forcefully shutdown a client.
void	<u>setStreamAudioSampleAccess</u> (String audioSampleAccess) Set the stream audio sample access value.
void	<u>setStreamReadAccess</u> (String streamReadAccess) Set the stream object read access value.
void	<u>setStreamType</u> (String streamType) Set default streamType
void	<u>setStreamVideoSampleAccess</u> (String videoSampleAccess) Set the stream video sample access value.
void	<u>setStreamWriteAccess</u> (String streamWriteAccess) Set the stream object write access value.

void	setThreadContext() Set the thread logging context to this client
void	setValidateFMLEConnections(boolean validateFMLEConnections) Returns true if validating FMLE connection (default is false)
void	setWowzSession(com.wowza.wms.protocol.wowz.WOWZSession wowzSession)
void	shutdownClient() Gracefully shutdown a client.
int	testFlashVersion(int[] version) Test to see if the connected client flash version is equal to or greater than a given value.
void	touch() Update the last touch time for client

Fields

VIDEOSAMPLE_ACCESS_ALL

```
public static final java.lang.String VIDEOSAMPLE_ACCESS_ALL
```

Constant value: *

VIDEOSAMPLE_ACCESS_NONE

```
public static final java.lang.String VIDEOSAMPLE_ACCESS_NONE
```

Constant value:

AUDIOSAMPLE_ACCESS_ALL

```
public static final java.lang.String AUDIOSAMPLE_ACCESS_ALL
```

Constant value: *

AUDIOSAMPLE_ACCESS_NONE

```
public static final java.lang.String AUDIOSAMPLE_ACCESS_NONE
```

Constant value:

READ_ACCESS_ALL

```
public static final java.lang.String READ_ACCESS_ALL
```

Constant value: *

(continued from last page)

READ_ACCESS_NONE

```
public static final java.lang.String READ_ACCESS_NONE
```

Constant value:

WRITE_ACCESS_ALL

```
public static final java.lang.String WRITE_ACCESS_ALL
```

Constant value: *

WRITE_ACCESS_NONE

```
public static final java.lang.String WRITE_ACCESS_NONE
```

Constant value:

Methods

getClientId

```
public int getClientId()
```

Get client id. Assigned by server and connection time.

Returns:

client id

getFlashVer

```
public String getFlashVer()
```

Get client flash version

Returns:

client flash version string

setFlashVer

```
public void setFlashVer(String flashVer)
```

Set client flash version

Parameters:

flashVer - client flash version string

getTotalIOPerformanceCounter

```
public IOPerformanceCounter getTotalIOPerformanceCounter()
```

Get performance counter for all bytes transferred to this client. This includes function calls.

Returns:

performance counter

getMediaIOPerformanceCounter

public [IOPerformanceCounter](#) **getMediaIOPerformanceCounter()**

Get performance counter for media bytes transferred to this client. Only includes bytes to mediaStream objects

Returns:

performance counter

getAppInstance

public [IApplicationInstance](#) **getAppInstance()**

Get parent applicationInstance. Is null if connection reject or before accepted.

Returns:

parent applicationInstance

getApplication

public [IApplication](#) **getApplication()**

Get parent application. Is null if connection reject or before accepted.

Returns:

application

getPlayStreams

public java.util.List **getPlayStreams()**

Get a collection of all play streams. Play streams are streams that are created due to a call to play.

Iterate Play Streams

```
IClient client;

List playStreams = client.getPlayStreams();
Iterator iter = playStreams.iterator();
while(iter.hasNext())
{
    IMediaStream stream = (IMediaStream)iter.next();
    WMSLoggerFactory.getLogger(null).debug("stream: "+stream.getName());
}
```

Returns:

collection of play streams

getPublishStreams

```
public java.util.List getPublishStreams()
```

Get a collection of publish streams. Publish streams are streams that are created due to a call to publish.

Iterate Public Streams

```
IClient client;

List publishStreams = client.getPublishStreams();
Iterator iter = publishStreams.iterator();
while(iter.hasNext())
{
    IMediaStream stream = (IMediaStream)iter.next();
    WMSLoggerFactory.getLogger(null).debug("stream: "+stream.getName());
}
```

Returns:

collection of publish stream

getPlayStreamCount

```
public int getPlayStreamCount()
```

Get the number of play streams

Returns:

number of play streams

getPublishStreamCount

```
public int getPublishStreamCount()
```

Get the number of publish streams

Returns:

number of publish streams

shutdownClient

```
public void shutdownClient()
```

Gracefully shutdown a client. Only use this method to shutdown a client if you know the client is connected to Wowza Pro. If the client may be disconnected from Wowza Pro, use `IClient.setShutdownClient(true)`

(continued from last page)

touch

```
public void touch()
```

Update the last touch time for client

isConnected

```
public boolean isConnected()
```

Is this client connected

Returns:

is connected

getProperties

```
public WMSProperties getProperties()
```

Get client properties

Returns:

collection of client properties

getStreamType

```
public String getStreamType()
```

Get default streamType

Returns:

streamType

setStreamType

```
public void setStreamType(String streamType)
```

Set default streamType

Parameters:

streamType - streamType

isAcceptConnection

```
public boolean isAcceptConnection()
```

Is auto accept connection

Returns:

auto accept connection

acceptConnection

```
public void acceptConnection()
```

Accept connection

(continued from last page)

acceptConnection

```
public void acceptConnection(String successStr)
```

Accept connection

Parameters:

successStr - application property value added to NetConnection.Connect.Success event object

acceptConnection

```
public void acceptConnection(AMFData successObj)
```

Accept connection

Parameters:

successObj - application property value added to NetConnection.Connect.Success event object

rejectConnection

```
public void rejectConnection()
```

Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)

rejectConnection

```
public void rejectConnection(String errorStr)
```

Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)

Parameters:

errorStr - error (returned in onStatus handler in info.application parameter)

rejectConnection

```
public void rejectConnection(AMFData errorObj)
```

Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)

Parameters:

errorObj - error AMFData (returned in onStatus handler in info.application parameter)

rejectConnection

```
public void rejectConnection(String description,  
    String errorStr)
```

Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)

Parameters:

description - description (returned in onStatus handler in info.description parameter)

errorStr - error (returned in onStatus handler in info.application parameter)

rejectConnection

```
public void rejectConnection(String description,  
    AMFData errorObj)
```

Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)

(continued from last page)

Parameters:

`description` - description (returned in `onStatus` handler in `info.description` parameter)
`errorObj` - error AMFData (returned in `onStatus` handler in `info.application` parameter)

redirectConnection

```
public void redirectConnection(String url)
```

Redirection connection (NetConnection.onStatus handler returns `info.code` of NetConnection.Connect.Rejected and `info.ex.code` of 302)

Parameters:

`url` - url (returned in `onStatus` handler in `info.ex.redirect` parameter)

redirectConnection

```
public void redirectConnection(String url,  
    String description)
```

Redirection connection (NetConnection.onStatus handler returns `info.code` of NetConnection.Connect.Rejected and `info.ex.code` of 302)

Parameters:

`url` - url (returned in `onStatus` handler in `info.ex.redirect` parameter)
`description` - description (returned in `onStatus` handler in `info.description` parameter)

redirectConnection

```
public void redirectConnection(String url,  
    String description,  
    String errorStr)
```

Redirection connection (NetConnection.onStatus handler returns `info.code` of NetConnection.Connect.Rejected and `info.ex.code` of 302)

Parameters:

`url` - url (returned in `onStatus` handler in `info.ex.redirect` parameter)
`description` - description (returned in `onStatus` handler in `info.description` parameter)
`errorStr` - error (returned in `onStatus` handler in `info.application` parameter)

redirectConnection

```
public void redirectConnection(String url,  
    String description,  
    AMFData errorObj)
```

(continued from last page)

Redirection connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected and info.ex.code of 302). Code must be added client side to capture the NetConnection.Connect.Rejected message, look for the info.ex.code value of 302 and attempt a reconnect to the info.ex.redirect url. Client side example:

```
public function ncOnStatus(infoObject:NetStatusEvent)
{
    if (infoObject.info.code == "NetConnection.Connect.Rejected")
    {
        if (infoObject.info.ex.code == 302)
        {
            trace("Connection redirected: "+infoObject.info.ex.redirect);
            nc.connect(infoObject.info.ex.redirect);
        }
        else
            trace("Connection rejected");
    }
}
nc.addEventListener(NetStatusEvent.NET_STATUS, ncOnStatus);
```

Parameters:

url - url (returned in onStatus handler in info.ex.redirect parameter)
description - description (returned in onStatus handler in info.description parameter)
errorObj - error AMFData (returned in onStatus handler in info.application parameter)

isAcceptConnectionSendClientId

```
public boolean isAcceptConnectionSendClientId()
```

Include the client id in the accept connection response

Returns:

true if client id is included

setAcceptConnectionSendClientId

```
public void setAcceptConnectionSendClientId(boolean acceptConnectionSendClientId)
```

Include the client id in the connection response

Parameters:

acceptConnectionSendClientId - true if client id is included

getVHost

```
public IVHost getVHost()
```

Get parent vHost

Returns:

vHost object

call

```
public void call(String handlerName,  
    IModuleCallResult resultObj,  
    Object[] params)
```

Call client method/handler. You can call any method/handler attached to NetConnection object. Such as netConnection.myFunc

Call Client Handler Method With Result Object

```
IClient client;  
  
class ReturnObj implements IModuleCallResult  
{  
    public void onResult(IClient client, RequestFunction function,  
        AMFDataList params)  
    {  
        WMSLoggerFactory.getLogger(null).debug("onResult");  
    }  
}  
  
client.call("onCustomMethod", new ReturnObj(), "param1", 1.2345, false, new Date());
```

Parameters:

handlerName - handler name

resultObj - if client method returns data this object will receive callback, null if don't care or no return on client method/handler.

params - variable list of argument. Will be automatically wrapped in AMFData objects

call

```
public void call(String handlerName)
```

Simplified call client method/handler call. No resultObj. No parameters

Parameters:

handlerName - handler name

ping

```
public int ping(IModulePingResult pingResult)
```

(continued from last page)

Ping client. Unlike FMS this ping is asynchronous. pingResult object will be notified of successful response by client or timeout.

Ping Client and Kill Connection If Client Has Died

```
class PingResult implements IModulePingResult
{
    public void onResult(IClient client, long pingTime, int pingId, boolean result)
    {
        WMSLogger log = WMSLoggerFactory.getLogger(null);
        log.debug("onResult: result:"+result);
        if (!result)
        {
            // client has died lets kill it
            client.getAppInstance().shutdownClient(client);
        }
        else
            log.debug("lastPingTime: "+client.getPingRoundTripTime());
    }
}
client.ping(new PingResult());
```

Parameters:

pingResult - ping result object. Will receive callback on result of ping or timeout. Can be null.

Returns:

ping id

getIp

```
public String getIp()
```

Client ip address

Returns:

client ip address

getFastPlaySettings

```
public FastPlaySettings getFastPlaySettings()
```

Get the current fastPlay settings. FastPlay settings when set from the client are immediately cleared on the next call to seek/unpause/play.

Returns:

fastPlay settings

(continued from last page)

setFastPlaySettings

```
public void setFastPlaySettings(FastPlaySettings fastPlaySettings)
```

Set fastPlay settings

Parameters:

fastPlaySettings - fastPlay settings

clearFastPlaySettings

```
public void clearFastPlaySettings()
```

Force clear the fastPlay settings

getRespFunctions

```
public ResponseFunctions getRespFunctions()
```

Get client responseFunctions object. The responseFunctions object is the method by which events are sent to the client. This code snippet shows how to send an onStatus event for a mediaStream (stream) to the client.

Send Status Message to Client

```
ResponseFunctions respFunctions = client.getRespFunctions();

ResponseFunction resp = new ResponseFunction();
resp.createDefaultMessage("onStatus", 0.0);
resp.setRetAMFObj(stream.getRespAMFDataObj());
resp.setSrc(stream.getSrc());

AMFDataObj data = new AMFDataObj();
data.put("level", new AMFDataItem("status"));
data.put("code", new AMFDataItem("NetStream.Publish.Success"));
data.put("description", new AMFDataItem(stream.getName()+" is now unpublished.));
data.put("clientid", new AMFDataItem(clientID));
resp.addBody(data);

respFunctions.add(resp);
```

Returns:

responseFunctions object

getConnectTime

```
public long getConnectTime()
```

(continued from last page)

Get time in milliseconds the client connected to the server. To get the duration of time in milliseconds that the client has been connected to the server us the following formula: `(System.currentTimeMillis() - client.getConnectTime())`

Returns:

duration connected (milliseconds)

getPingRoundTripTime

```
public long getPingRoundTripTime()
```

Get turn around time (milliseconds) of last ping request

Returns:

time (milliseconds)

getDateStarted

```
public String getDateStarted()
```

Get date and time of client connection

Returns:

date and time of connection

getTimeRunning

```
public String getTimeRunning()
```

Get elapsed time of connection

Returns:

elapsed time of connection

getTimeRunningSeconds

```
public double getTimeRunningSeconds()
```

Get time running in seconds

Returns:

time running in seconds

getStreamFile

```
public java.io.File getStreamFile(String streamName)
```

Get File object for stream with given name. Assumes file extension is .flv.

Parameters:

streamName - stream name

Returns:

file

getStreamFile

```
public java.io.File getStreamFile(String streamName,  
String streamExt)
```

(continued from last page)

Get File object for stream with given name and extension. For example test.flv would be `getStreamFile("test", "flv");`

Get File Descriptor

```
IClient client;
File file = client.getStreamFile("test", "flv");
WMSLogger log = WMSLoggerFactory.getLogger(null);
if (file != null)
{
    if (file.exists())
        log.debug("getStreamFile: "+ file.getPath());
}
```

Parameters:

streamName - stream name
streamExt - stream extension

Returns:

file

getStreamFile

```
public java.io.File getStreamFile(String streamName,
    String streamExt,
    boolean doCreateFolder)
```

Get File object for stream with given name and extension. If doCreateFolder is true, create folder necessary to make path exist. For example test.flv would be `getStreamFile("test", "flv");`

Parameters:

streamName - stream name
streamExt - stream extension
doCreateFolder - create folders if needed

Returns:

file

getBufferTime

```
public int getBufferTime()
```

Get default buffer time for newly created mediaStream objects

Returns:

default buffer time (milliseconds)

setBufferTime

```
public void setBufferTime(int bufferTime)
```

(continued from last page)

Set default buffer time for newly created mediaStream objects

Parameters:

bufferTime - bufer time (milliseconds)

getResponseAMFObj

```
public AMFObj getResponseAMFObj(int index)
```

Get the response channel AMFObj for channel index.

Parameters:

index - channel index

Returns:

AMFObj

getRespAMFAudioObj

```
public AMFObj getRespAMFAudioObj(IMediaStream stream)
```

Get the audio response AMFObj for a given mediaStream

Parameters:

stream - mediaStream

Returns:

response channel AMFObj

getRespAMFVideoObj

```
public AMFObj getRespAMFVideoObj(IMediaStream stream)
```

Get the video response AMFObj for a given mediaStream

Parameters:

stream - mediaStream

Returns:

response channel AMFObj

getRespAMFDataObj

```
public AMFObj getRespAMFDataObj(IMediaStream stream)
```

Get the data response AMFObj for a given mediaStream

Parameters:

stream - mediaStream

Returns:

response channel AMFObj

getQueryStr

```
public String getQueryStr()
```

(continued from last page)

Get the query string part of the connection string. If the connection string where:
rtmp://localhost/app/appInst?data1=myData1&data2=myData2, then query string would be
data1=myData1&data2=myData2

Returns:

query string

getReferrer

```
public String getReferrer()
```

Get the referrer data for this connection. The referrer in Wowza Streaming Engine terms is the full url to the Flash movie that connected to the server. Checking referre upon connection is a great way to secure server connections and only allow your Flash movies to connect to the server.

Only Allow Your .swf Files to Connect to Wowza Pro server

```
public class MyModule extends ModuleBase
{
    static public void onConnect(IClient client, RequestFunction function,
        AMFDataList params)
    {
        String referrer = client.getReferrer();

        if (referrer.indexOf("www.mycompany.com") >= 0 &&
            referrer.indexOf("mycoolflash.swf") >= 0)
            client.acceptConnection("valid referrer");
        else
            client.rejectConnection("invalid referrer: "+referrer);
    }
}
```

Returns:

referrer

getPageUrl

```
public String getPageUrl()
```

Get the pageUrl for this connection.

Returns:

pageUrl for this connection

getUri

```
public String getUri()
```

Get the full URI of the connection string

(continued from last page)

Returns:

URI of connection string

getProtocol

```
public int getProtocol()
```

Get connection protocol (1 = RTMP, 3 = RTMPT)

Returns:

connection protocol (1 = RTMP, 3 = RTMPT)

getServerHostPort

```
public HostPort getServerHostPort()
```

Get the hostPort object for the connection that is servicing this client

Returns:

vHost hostPort servicing request

isSecure

```
public boolean isSecure()
```

Is this connection protected by either SSL or encryption (RTMPE, RTMPTE, RTMPS)

Returns:

is connection protected by either SSL or encryption (RTMPE, RTMPTE, RTMPS)

isSSL

```
public boolean isSSL()
```

Is this connection SSL (RTMPS)

Returns:

is connection (RTMPS)

isEncrypted

```
public boolean isEncrypted()
```

Is this connection encrypted (RTMPE or RTMPTE)

Returns:

is connection encrypted (RTMPE or RTMPTE)

getIdleFrequency

```
public int getIdleFrequency()
```

Get client idle frequency (milliseconds)

Returns:

client idle frequency (milliseconds)

setIdleFrequency

```
public void setIdleFrequency(int idleFrequency)
```

Set client idle frequency (milliseconds)

Parameters:

idleFrequency - client idle frequency (milliseconds)

getSharedObjectReadAccess

```
public String getSharedObjectReadAccess()
```

Get the shared object read access value. see setSharedObjectReadAccess for more information.

Returns:

shared object read access value

setSharedObjectReadAccess

```
public void setSharedObjectReadAccess(String sharedObjectReadAccess)
```

Set the shared object read access value. This list is a semi-colon delimited list of shared objects that this client has access to. By default the value is set to IClient.READ_ACCESS_ALL which indicates this client can read all shared objects. If you want to disable read access to all shared objects set this value to IClient.READ_ACCESS_NONE. If this value is set to anything other than IClient.READ_ACCESS_ALL or IClient.READ_ACCESS_NONE then each item in the semi-color delimited list is compared against incoming shared object read requests. If any item in the list completely matches the shared object name or the start of the shared object name, then access is allowed. For example, if the sharedObjectReadAccess list is set to "testa/testb;testc" then the following requests would be granted the following access:

- testc: Granted Access
- testc/test: Granted Access
- testC/test: Denied Access (incorrect case)
- testa/testb: Granted Access
- testa/testb123: Granted Access
- testa/testb/file123: Granted Access
- testa/test: Denied Access (incomplete match)

Values in this list are always case sensitive.

Parameters:

sharedObjectReadAccess - shared object read access value

getSharedObjectWriteAccess

```
public String getSharedObjectWriteAccess()
```

Get the shared object write access value. see setSharedObjectWriteAccess for more information.

Returns:

shared object write access value

setSharedObjectWriteAccess

```
public void setSharedObjectWriteAccess(String sharedObjectWriteAccess)
```

(continued from last page)

Set the shared object write access value. This list is a semi-colon delimited list of shared objects that this client has access to. By default the value is set to `IClient.WRITE_ACCESS_ALL` which indicates this client can write all shared objects. If you want to disable write access to all shared objects set this value to `IClient.WRITE_ACCESS_NONE`. If this value is set to anything other than `IClient.WRITE_ACCESS_ALL` or `IClient.WRITE_ACCESS_NONE` then each item in the semi-color delimited list is compared against incoming shared object write requests. If any item in the list completely matches the shared object name or the start of the shared object name, then access is allowed. For example, if the `sharedObjectWriteAccess` list is set to "testa/testb;testc" then the following requests would be granted the following access:

- testc: Granted Access
- testc/test: Granted Access
- testC/test: Denied Access (incorrect case)
- testa/testb: Granted Access
- testa/testb123: Granted Access
- testa/testb/file123: Granted Access
- testa/test: Denied Access (incomplete match)

Values in this list are always case sensitive.

Parameters:

`sharedObjectWriteAccess`

getStreamVideoSampleAccess

```
public String getStreamVideoSampleAccess()
```

Get the video sample access value. see `setVideoStreamAccess` for more information.

Returns:

video sample access

setStreamVideoSampleAccess

```
public void setStreamVideoSampleAccess(String videoSampleAccess)
```

Set the stream video sample access value. This list is a semi-colon delimited list of stream names that this client has access to. By default the value is set to `IClient.VIDEOSTREAM_ACCESS_NONE` which indicates this client can access no stream data client side. If you want to enable access to all stream names set this value to `IClient.VIDEOSTREAM_ACCESS_ALL`. If this value is set to anything other than `IClient.VIDEOSTREAM_ACCESS_ALL` or `IClient.VIDEOSTREAM_ACCESS_NONE` then each item in the semi-color delimited list is compared against incoming stream play requests. If any item in the list completely matches the stream name or the start of the stream name, then access is allowed. For example, if the `streamVideoSampleAccess` list is set to "testa/testb;testc" then the following play requests would be granted the following access:

- testc: Granted Access
- testc/test: Granted Access
- testC/test: Denied Access (incorrect case)
- testa/testb: Granted Access
- testa/testb123: Granted Access
- testa/testb/file123: Granted Access
- testa/test: Denied Access (incomplete match)

Values in this list are always case sensitive.

Parameters:

`videoSampleAccess`

getStreamAudioSampleAccess

```
public String getStreamAudioSampleAccess()
```

Get the audio sample access value. see `setVideoStreamAccess` for more information.

Returns:

(continued from last page)

audio sample access

setStreamAudioSampleAccess

```
public void setStreamAudioSampleAccess(String audioSampleAccess)
```

Set the stream audio sample access value. This list is a semi-colon delimited list of stream names that this client has access to. By default the value is set to IClient.AUDIOSTREAM_ACCESS_NONE which indicates this client can access no stream data client side. If you want to enable access to all stream names set this value to IClient.AUDIOSTREAM_ACCESS_ALL. If this value is set to anything other than IClient.AUDIOSTREAM_ACCESS_ALL or IClient.AUDIOSTREAM_ACCESS_NONE then each item in the semi-color delimited list is compared against incoming stream play requests. If any item in the list completely matches the stream name or the start of the stream name, then access is allowed. For example, if the streamAudioSampleAccess list is set to "testa/testb;testc" then the following play requests would be granted the following access:

- testc: Granted Access
- testc/test: Granted Access
- testC/test: Denied Access (incorrect case)
- testa/testb: Granted Access
- testa/testb123: Granted Access
- testa/testb/file123: Granted Access
- testa/test: Denied Access (incomplete match)

Values in this list are always case sensitive.

Parameters:

audioSampleAccess

getStreamReadAccess

```
public String getStreamReadAccess()
```

Get the stream read access value. see setStreamReadAccess for more information.

Returns:

stream read access value

setStreamReadAccess

```
public void setStreamReadAccess(String streamReadAccess)
```

Set the stream object read access value. This list is a semi-colon delimited list of stream names that this client has access to. By default the value is set to IClient.READ_ACCESS_ALL which indicates this client can play all streams. If you want to disable read access to all stream names set this value to IClient.READ_ACCESS_NONE. If this value is set to anything other than IClient.READ_ACCESS_ALL or IClient.READ_ACCESS_NONE then each item in the semi-color delimited list is compared against incoming stream play requests. If any item in the list completely matches the stream name or the start of the stream name, then access is allowed. For example, if the streamReadAccess list is set to "testa/testb;testc" then the following play requests would be granted the following access:

- testc: Granted Access
- testc/test: Granted Access
- testC/test: Denied Access (incorrect case)
- testa/testb: Granted Access
- testa/testb123: Granted Access
- testa/testb/file123: Granted Access
- testa/test: Denied Access (incomplete match)

Values in this list are always case sensitive.

Parameters:

streamReadAccess - shared object read access value

getStreamWriteAccess

```
public String getStreamWriteAccess()
```

Get the stream write access value. see `setStreamWriteAccess` for more information.

Returns:

stream write access value

setStreamWriteAccess

```
public void setStreamWriteAccess(String streamWriteAccess)
```

Set the stream object write access value. This list is a semi-colon delimited list of stream names that this client has access to. By default the value is set to `IClient.WRITE_ACCESS_ALL` which indicates this client can play all streams. If you want to disable write access to all stream names set this value to `IClient.WRITE_ACCESS_NONE`. If this value is set to anything other than `IClient.WRITE_ACCESS_ALL` or `IClient.WRITE_ACCESS_NONE` then each item in the semi-color delimited list is compared against incoming stream play requests. If any item in the list completely matches the stream name or the start of the stream name, then access is allowed. For example, if the `streamWriteAccess` list is set to "testa/testb;testc" then the following play requests would be granted the following access:

- testc: Granted Access
- testc/test: Granted Access
- testC/test: Denied Access (incorrect case)
- testa/testb: Granted Access
- testa/testb123: Granted Access
- testa/testb/file123: Granted Access
- testa/test: Denied Access (incomplete match)

Values in this list are always case sensitive.

Parameters:

`streamWriteAccess` - shared object read access value

getWriteListener

```
public ClientWriteListener getWriteListener()
```

Object that tracks write operations

Returns:

Object that tracks write operations

addAcceptConnectionAttribute

```
public void addAcceptConnectionAttribute(String key,  
    AMFDataObj item)
```

Add and attribute to the `resultObj` that gets passed back to the client on successful connection

Parameters:

`key` - key
`item` - item to add

addAcceptConnectionAttribute

```
public void addAcceptConnectionAttribute(String key,  
    String item)
```

Add and attribute to the `resultObj` that gets passed back to the client on successful connection

(continued from last page)

Parameters:

key - key
item - item to add

getRepeaterOriginUrl

```
public String getRepeaterOriginUrl()
```

Get the origin URL used by the Live Stream Repeater

Returns:

URL used by the Live Stream Repeater

setRepeaterOriginUrl

```
public void setRepeaterOriginUrl(String repeaterOriginUrl)
```

Set the origin URL used by the Live Stream Repeater

Parameters:

repeaterOriginUrl - URL used by the Live Stream Repeater

getLastValidateTime

```
public long getLastValidateTime()
```

Get last time (millisecond) the connection was validated with a ping

Returns:

last time (millisecond) the connection was validated with a ping

setLastValidateTime

```
public void setLastValidateTime(long lastValidateTime)
```

Set the last time (milliseconds) the connection was validated with ping

Parameters:

lastValidateTime - last time (milliseconds) the connection was validated with ping

getPingTimeout

```
public int getPingTimeout()
```

Get the ping timeout (milliseconds)

Returns:

ping timeout (milliseconds)

isLiveRepeater

```
public boolean isLiveRepeater()
```

Returns true if this connection is from the live stream repeater

Returns:

true if this connection is from the live stream repeater

isFlashVersionH264Capable

```
public boolean isFlashVersionH264Capable()
```

Returns true if the connected client is capable of playing H.264 video (Flash player 9.0.45.x or greater)

Returns:

returns true if the connected client is capable of playing H.264 video (Flash player 9.0.45.x or greater)

isFlashVersion90115

```
public boolean isFlashVersion90115()
```

Returns true if the Flash version is equal or greater than 9.0.115.x

Returns:

returns true if the Flash version is equal or greater than 9.0.115.x

isFlashVersion10

```
public boolean isFlashVersion10()
```

Returns true if the Flash version is equal or greater than 10.x.x.x

Returns:

returns true if the Flash version is equal or greater than 10.x.x.x

isFlashMediaLiveEncoder

```
public boolean isFlashMediaLiveEncoder()
```

Returns true if this connection is the Flash Media Live Encoder

Returns:

true if this connection is the Flash Media Live Encoder

testFlashVersion

```
public int testFlashVersion(int[] version)
```

Test to see if the connected client flash version is equal to or greater than a given value. Example: int isGood = testFlashVersion({ 9, 0, 5, 12});

Parameters:

version - array of version values

Returns:

1 if greater, 0 if equal, -1 if less than

isObjectEncodingAMF3

```
public boolean isObjectEncodingAMF3()
```

Is the object encoding for this client AMF3

Returns:

true of the object encoding for this client is AMF3

isObjectEncodingAMF0

```
public boolean isObjectEncodingAMF0()
```

Is the object encoding for this client AMF0

Returns:

true of the object encoding for this client is AMF0

setObjectEncoding

```
public void setObjectEncoding(int objectEncoding)
```

Set the object encoding level

Parameters:

objectEncoding - object encoding level

getObjectEncoding

```
public int getObjectEncoding()
```

Get the object encoding level

Returns:

object encoding level

setAcceptConnectionObj

```
public void setAcceptConnectionObj(AMFData acceptConnectionObj)
```

Call this method from onConnect to add an "application" property to the info object that is passed back to the Flash client in the onStatus handler.

Parameters:

acceptConnectionObj - connection object

setAcceptConnectionDescription

```
public void setAcceptConnectionDescription(String description)
```

Call this method from onConnect to set the info.description property returned in NetConnection onStatus handler

Parameters:

description - description

setAcceptConnectionExObj

```
public void setAcceptConnectionExObj(AMFDataObj acceptConnectionExObj)
```

Call this method from onConnect to set the info.ex property returned in NetConnection onStatus handler

Parameters:

acceptConnectionExObj - exObj AMFData item return in info.ex propert of NetConnection onStatus handler

(continued from last page)

getRTPStream

```
public RTPStream getRTPStream()
```

If this client was created due to an RTP connection to the server return the underlying RTPStream object

Returns:

underlying RTPStream object

setAcceptConnection

```
public void setAcceptConnection(boolean acceptConnection)
```

Set the default for accept connection

Parameters:

acceptConnection - default for accept connection

setShutdownClient

```
public void setShutdownClient(boolean shutdownClient)
```

Gracefully and forcefully shutdown a client.

Parameters:

shutdownClient - set to true to gracefully and forcefully shutdown a client

reparentClient

```
public void reparentClient(IVHost vhost)
```

Move a client object to a new vhost. This can only be done right after the handshake process has completed. See [IVHostNotify.onVHostClientConnect](#).

Parameters:

vhost - new vhost

getMaximumSetBufferTime

```
public int getMaximumSetBufferTime()
```

Get maximum number of milliseconds allowed for the `NetStream.setBufferTime(secs)` call. If set to zero this feature is turned off.

Returns:

maximum number of milliseconds allowed for the `NetStream.setBufferTime(secs)` call

getMaximumPendingWriteBytes

```
public int getMaximumPendingWriteBytes()
```

Get maximum number a bytes a client connection can have waiting to be sent before the connection is terminated. If set to zero this feature is turned off.

Returns:

maximum number a bytes a client connection can have waiting to be sent before the connection is terminated

(continued from last page)

getLiveStreamPacketizerList

```
public String getLiveStreamPacketizerList()
```

Get the comma separated list of LiveStreamPacketizers names being used by this client (see conf/LiveStreamPacketizers.xml)

Returns:

comma separated list of LiveStreamPacketizers names

setLiveStreamPacketizerList

```
public void setLiveStreamPacketizerList(String liveStreamPacketizerList)
```

Set the comma separated list of LiveStreamPacketizers names being used by this client (see conf/LiveStreamPacketizers.xml)

Parameters:

liveStreamPacketizerList - comma separated list of LiveStreamPacketizers names

getLiveStreamTranscoderList

```
public String getLiveStreamTranscoderList()
```

Get the comma separated list of LiveStreamTranscoders names being used by this client (see conf/LiveStreamTranscoders.xml)

Returns:

comma separated list of LiveStreamTranscoders names

setLiveStreamTranscoderList

```
public void setLiveStreamTranscoderList(String liveStreamTranscoderList)
```

Set the comma separated list of LiveStreamTranscoders names being used by this client (see conf/LiveStreamTranscoders.xml)

Parameters:

liveStreamTranscoderList - comma separated list of LiveStreamTranscoders names

getElapsedTime

```
public ElapsedTimer getElapsedTime()
```

Get elapsed time client has been connected.

Returns:

elapsed time client has been connected.

getLiveRepeaterCapabilities

```
public int getLiveRepeaterCapabilities()
```

Get the live repeater capabilities of this connection

Returns:

live repeater capabilities of this connection

setLiveRepeaterCapabilities

```
public void setLiveRepeaterCapabilities(int liveRepeaterCapabilities)
```

(continued from last page)

Set the live repeater capabilities of this connection

Parameters:

liveRepeaterCapabilities - live repeater capabilities of this connection

fcSubscribe

```
public void fcSubscribe(String streamName)
```

Subscribe to a live stream (for live stream repeater to start start from edge to origin)

Parameters:

streamName - stream name

fcSubscribe

```
public void fcSubscribe(String streamName,  
String mediaCasterType)
```

Subscribe to a live stream (use a particular mediaCasterType)

Parameters:

streamName - stream name

mediaCasterType - media caster type name

fcUnSubscribeAll

```
public void fcUnSubscribeAll()
```

UnSubscribe to all streams that this client is current subscribed to

fcUnSubscribe

```
public void fcUnSubscribe(String streamName)
```

UnSubscribe from a stream

Parameters:

streamName - stream name

isValidateFMLEConnections

```
public boolean isValidateFMLEConnections()
```

Returns true if validating FMLE connection (default is false)

Returns:

true if validating FMLE connection

setValidateFMLEConnections

```
public void setValidateFMLEConnections(boolean validateFMLEConnections)
```

Returns true if validating FMLE connection (default is false)

Parameters:

validateFMLEConnections - true if validating FMLE connection

(continued from last page)

setThreadContext

```
public void setThreadContext()
```

Set the thread logging context to this client

getWowzSession

```
public com.wowza.wms.protocol.wowz.WOWZSession getWowzSession()
```

setWowzSession

```
public void setWowzSession(com.wowza.wms.protocol.wowz.WOWZSession wowzSession)
```

isSendCloseOnRejectConnection

```
public boolean isSendCloseOnRejectConnection()
```

setSendCloseOnRejectConnection

```
public void setSendCloseOnRejectConnection(boolean sendCloseOnRejectConnection)
```

com.wowza.wms.client Interface IClientNotify

public interface **IClientNotify**
extends

IClientNotify: listener interface used by [IApplicationInstance.addClientListener\(IClientNotify\)](#)

See Also:

[IApplicationInstance.addClientListener\(IClientNotify\)](#)

Method Summary

void	onClientAccept(IClient client) Triggered when client connection accepted
void	onClientConnect(IClient client) Triggered when client attempt connection
void	onClientDisconnect(IClient client) Triggered when client disconnected
void	onClientReject(IClient client) Triggered when client connection rejected

Methods

onClientConnect

public void **onClientConnect**([IClient](#) client)

Triggered when client attempt connection

Parameters:

client - client

onClientDisconnect

public void **onClientDisconnect**([IClient](#) client)

Triggered when client disconnected

Parameters:

client - client

onClientAccept

public void **onClientAccept**([IClient](#) client)

Triggered when client connection accepted

Parameters:

client - client

onClientReject

```
public void onClientReject(IClient client)
```

Triggered when client connection rejected

Parameters:

client - client

com.wowza.wms.client Interface IConnectionNotify

public interface **IConnectionNotify**
extends

IConnectionNotify: internal class to manage connection counting

Method Summary

void	onAcceptConnection (ConnectionCounter connectionCounter, ConnectionHolder connectionHolder, java.util.Date date, long stamp) Triggered when client connection accepted
void	onDisconnect (ConnectionCounter connectionCounter, ConnectionHolder connectionHolder, boolean isValid, java.util.Date date, long stamp) Triggered when client disconnected
void	onRejectConnection (ConnectionCounter connectionCounter, ConnectionHolder connectionHolder, int reason, java.util.Date date, long stamp) Triggered when client connection rejected

Methods

onAcceptConnection

```
public void onAcceptConnection(ConnectionCounter connectionCounter,
    ConnectionHolder connectionHolder,
    java.util.Date date,
    long stamp)
```

Triggered when client connection accepted

Parameters:

connectionCounter
 connectionHolder
 date
 stamp

onRejectConnection

```
public void onRejectConnection(ConnectionCounter connectionCounter,
    ConnectionHolder connectionHolder,
    int reason,
    java.util.Date date,
    long stamp)
```

Triggered when client connection rejected

Parameters:

connectionCounter
 connectionHolder
 reason

(continued from last page)

date
stamp

onDisconnect

```
public void onDisconnect(ConnectionCounter connectionCounter,  
    ConnectionHolder connectionHolder,  
    boolean isValid,  
    java.util.Date date,  
    long stamp)
```

Triggered when client disconnected

Parameters:

connectionCounter
connectionHolder
isValid
date
stamp

Package

com.wowza.wms.closedcaption.cea608

com.wowza.wms.closedcaption.cea608 Class ClosedCaptionCEA608Utils

java.lang.Object

└-com.wowza.wms.timedtext.cea608.CEA608Constants

└-[com.wowza.wms.timedtext.cea608.ClosedCaptionCEA608Utils](#)

└-com.wowza.wms.closedcaption.cea608.ClosedCaptionCEA608Utils

public class **ClosedCaptionCEA608Utils**

extends [ClosedCaptionCEA608Utils](#)

Fields inherited from class [com.wowza.wms.timedtext.cea608.ClosedCaptionCEA608Utils](#)

[CEA608_EXTENDED_FR_SP_MAP](#), [CEA608_EXTENDED_NA_MAP](#),
[CEA608_EXTENDED_PORT_GERMAN_DANISH_MAP](#), [CEA608_MUSICAL_NOTE](#), [CEA608_SOLID_BLOCK](#), [CHANNEL1](#),
[CHANNEL2](#), [COL_0](#), [COL_12](#), [COL_16](#), [COL_20](#), [COL_24](#), [COL_28](#), [COL_4](#), [COL_5](#), [COL0_BLUE](#), [COL0_CYAN](#),
[COL0_GREEN](#), [COL0_HIBYTE](#), [COL0_LOWBYTE](#), [COL0_MAGENTA](#), [COL0_RED](#), [COL0_WHITE](#), [COL0_YELLOW](#),
[COLN_LOWBYTE](#), [CONTROLCODES_AOF](#), [CONTROLCODES_AON](#), [CONTROLCODES_BAO](#), [CONTROLCODES_BAS](#),
[CONTROLCODES_BBO](#), [CONTROLCODES_BBS](#), [CONTROLCODES_BCO](#), [CONTROLCODES_BCS](#), [CONTROLCODES_BGO](#),
[CONTROLCODES_BGS](#), [CONTROLCODES_BMO](#), [CONTROLCODES_BMS](#), [CONTROLCODES BRO](#), [CONTROLCODES_BRS](#),
[CONTROLCODES_BS](#), [CONTROLCODES_BT](#), [CONTROLCODES_BWO](#), [CONTROLCODES_BWS](#), [CONTROLCODES_BYO](#),
[CONTROLCODES_BYS](#), [CONTROLCODES_CR](#), [CONTROLCODES_DER](#), [CONTROLCODES_EDM](#), [CONTROLCODES_ENM](#),
[CONTROLCODES_EOC](#), [CONTROLCODES_FA](#), [CONTROLCODES_FAU](#), [CONTROLCODES_FON](#), [CONTROLCODES_RCL](#),
[CONTROLCODES_RDC](#), [CONTROLCODES_RTD](#), [CONTROLCODES_RU2](#), [CONTROLCODES_RU3](#), [CONTROLCODES_RU4](#),
[CONTROLCODES_TO1](#), [CONTROLCODES_TO2](#), [CONTROLCODES_TO3](#), [CONTROLCODES_TR](#), [COUNT_COLS](#),
[COUNT_ROWS](#), [DONOTHING_BYTE](#), [DONOTHING_SHORT](#), [FORMAT_COLOR](#), [FORMAT_FLASH](#), [FORMAT_ITALICS](#),
[FORMAT_ITALICS_UNDERLINE](#), [LANG_ASCII](#), [LANG_ASCII_DBL](#), [LANG_GB231280](#), [LANG_KSC56011987](#),
[LANG_PRIV1](#), [LANG_PRIV2](#), [LANG_REG1](#), [MAX_CCOUNT](#), [ODDPARITY](#), [SEI_PAYLOADTYPE](#), [SEI_STARTCODE](#),
[SEI_USERDATATYPECODE](#), [UTF8_BRITISH_POUND](#), [UTF8_BULLET](#), [UTF8_CENTS](#),
[UTF8_CLOSING_DOUBLE_QUOTE](#), [UTF8_CLOSING_GUILLEMETS](#), [UTF8_CONNECTING_VERTICAL_BAR](#),
[UTF8_COPYRIGHT](#), [UTF8_CURRENCY](#), [UTF8_DASH](#), [UTF8_DEGREE](#), [UTF8_DOUBLEQUOTE](#), [UTF8_EM_DASH](#),
[UTF8_EXCLAMATION](#), [UTF8_GREATERTHAN](#), [UTF8_INVERTED_EXCLAMATION](#), [UTF8_LEFT_SINGLE_QUOTATION](#),
[UTF8_LEFTPAREN](#), [UTF8_LESSTHAN](#), [UTF8_LOWER_A](#), [UTF8_LOWER_A_WITH_CIRCUMFLEX](#),
[UTF8_LOWER_A_WITH_DIAERESIS](#), [UTF8_LOWER_A_WITH_GRAVE](#), [UTF8_LOWER_A_WITH_RING](#),
[UTF8_LOWER_A_WITH_TILDE](#), [UTF8_LOWER_B](#), [UTF8_LOWER_C](#), [UTF8_LOWER_D](#), [UTF8_LOWER_E](#),
[UTF8_LOWER_E_WITH_CIRCUMFLEX](#), [UTF8_LOWER_E_WITH_DIAERESIS](#), [UTF8_LOWER_E_WITH_GRAVE](#),
[UTF8_LOWER_F](#), [UTF8_LOWER_G](#), [UTF8_LOWER_H](#), [UTF8_LOWER_I](#), [UTF8_LOWER_I_WITH_CIRCUMFLEX](#),
[UTF8_LOWER_I_WITH_DIAERESIS](#), [UTF8_LOWER_I_WITH_GRAVE](#), [UTF8_LOWER_J](#), [UTF8_LOWER_K](#),
[UTF8_LOWER_L](#), [UTF8_LOWER_M](#), [UTF8_LOWER_N](#), [UTF8_LOWER_O](#), [UTF8_LOWER_O_WITH_CIRCUMFLEX](#),
[UTF8_LOWER_O_WITH_DIAERESIS](#), [UTF8_LOWER_O_WITH_GRAVE](#), [UTF8_LOWER_O_WITH_STROKE](#),
[UTF8_LOWER_O_WITH_TILDE](#), [UTF8_LOWER_P](#), [UTF8_LOWER_Q](#), [UTF8_LOWER_R](#), [UTF8_LOWER_S](#),
[UTF8_LOWER_T](#), [UTF8_LOWER_U](#), [UTF8_LOWER_U_WITH_CIRCUMFLEX](#), [UTF8_LOWER_U_WITH_DIAERESIS](#),
[UTF8_LOWER_U_WITH_GRAVE](#), [UTF8_LOWER_V](#), [UTF8_LOWER_W](#), [UTF8_LOWER_X](#), [UTF8_LOWER_Y](#),
[UTF8_LOWER_Z](#), [UTF8_MINUSHYPHEN](#), [UTF8_MUSICAL_NOTE](#), [UTF8_NBSP](#), [UTF8_NOTMATCH](#), [UTF8_ONE_HALF](#),
[UTF8_OPENING_DOUBLE_QUOTE](#), [UTF8_OPENING_GUILLEMETS](#), [UTF8_PERIOD](#), [UTF8_PIPE](#), [UTF8_QUESTION](#),
[UTF8_REGISTERED_MARK](#), [UTF8_REVERSE_QUERY](#), [UTF8_RIGHTPAREN](#), [UTF8_SERVICE_MARK](#),
[UTF8_SINGLEQUOTE](#), [UTF8_SPACE](#), [UTF8_TRADEMARK](#), [UTF8_UNDERSCORE](#), [UTF8_UPPER_A](#),
[UTF8_UPPER_A_WITH_ACUTE](#), [UTF8_UPPER_A_WITH_CURCUMFLEX](#), [UTF8_UPPER_A_WITH_DIAERESIS](#),
[UTF8_UPPER_A_WITH_GRAVE](#), [UTF8_UPPER_A_WITH_RING](#), [UTF8_UPPER_A_WITH_TILDE](#), [UTF8_UPPER_B](#),
[UTF8_UPPER_C](#), [UTF8_UPPER_C_WITH_CEDILLA](#), [UTF8_UPPER_D](#), [UTF8_UPPER_E](#),
[UTF8_UPPER_E_WITH_ACUTE](#), [UTF8_UPPER_E_WITH_CIRCUMFLEX](#), [UTF8_UPPER_E_WITH_DIAERESIS](#),
[UTF8_UPPER_E_WITH_GRAVE](#), [UTF8_UPPER_F](#), [UTF8_UPPER_G](#), [UTF8_UPPER_H](#), [UTF8_UPPER_I](#),
[UTF8_UPPER_I_WITH_CIRCUMFLEX](#), [UTF8_UPPER_I_WITH_DIAERESIS](#), [UTF8_UPPER_I_WITH_GRAVE](#),
[UTF8_UPPER_I_WITH_TILDE](#), [UTF8_UPPER_J](#), [UTF8_UPPER_K](#), [UTF8_UPPER_L](#), [UTF8_UPPER_M](#),
[UTF8_UPPER_N](#), [UTF8_UPPER_O](#), [UTF8_UPPER_O_WITH_ACUTE](#), [UTF8_UPPER_O_WITH_CIRCUMFLEX](#),
[UTF8_UPPER_O_WITH_DIAERESIS](#), [UTF8_UPPER_O_WITH_GRAVE](#), [UTF8_UPPER_O_WITH_STROKE](#),
[UTF8_UPPER_O_WITH_TILDE](#), [UTF8_UPPER_P](#), [UTF8_UPPER_Q](#), [UTF8_UPPER_R](#), [UTF8_UPPER_S](#),
[UTF8_UPPER_T](#), [UTF8_UPPER_U](#), [UTF8_UPPER_U_WITH_ACUTE](#), [UTF8_UPPER_U_WITH_CIRCUMFLEX](#),
[UTF8_UPPER_U_WITH_DIAERESIS](#), [UTF8_UPPER_U_WITH_GRAVE](#), [UTF8_UPPER_V](#), [UTF8_UPPER_W](#),
[UTF8_UPPER_X](#), [UTF8_UPPER_Y](#), [UTF8_UPPER_Z](#), [UTF8_YEN](#), [UTF8MAP](#), [UTF8MAP_INDEX_OFFSET](#)

Fields inherited from class `com.wowza.wms.timedtext.cea608.CEA608Constants`

[CC_CHANNEL_CC1](#), [CC_CHANNEL_CC2](#), [CC_CHANNEL_CC3](#), [CC_CHANNEL_CC4](#), [CC_TYPE_DTVCC_PACKET_DATA](#),
[CC_TYPE_DTVCC_PACKET_START](#), [CC_TYPE_NTSC_FIELD_1](#), [CC_TYPE_NTSC_FIELD_2](#)

Constructor Summary

public [ClosedCaptionCEA608Utils\(\)](#)

Methods inherited from class [com.wowza.wms.timedtext.cea608.ClosedCaptionCEA608Utils](#)

[calcParity](#), [calcParity](#), [cea608CharToCharUTF8](#), [cea608ExtendedCharacterToUTF8](#),
[charUTF8ToCAE608](#), [charUTF8ToCAE608](#), [checkParity](#), [checkParity](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`,
`wait`

Constructors

ClosedCaptionCEA608Utils

```
public ClosedCaptionCEA608Utils()
```

Package

com.wowza.wms.drm.cenc

com.wowza.wms.drm.cenc Class CencInfo

java.lang.Object

└─ **com.wowza.wms.drm.cenc.CencInfo**

All Implemented Interfaces:

IEncryptionInfo, [IDvrEncryptionInfo](#)

```
public class CencInfo
  extends Object
  implements IDvrEncryptionInfo, IEncryptionInfo
```

Field Summary

public static final	ALGORITHMID_CBC Value: 2
public static final	ALGORITHMID_CTR Value: 1
public static final	ALGORITHMID_NONE Value: 0
public static final	KEY_ROTATION_TYPE_EXTERNAL Value: 3
public static final	KEY_ROTATION_TYPE_INTERNAL_RANDOM Value: 2
public static final	KEY_ROTATION_TYPE_INTERNAL_STATIC Value: 1
public static final	KEY_ROTATION_TYPE_NONE Value: 0
public static final	PSSH_VERSION_0 Value: 0
public static final	PSSH_VERSION_1 Value: 1

Fields inherited from interface [com.wowza.wms.dvr.IDvrEncryptionInfo](#)

[ENCRYPTION_TYPE_CENC](#), [ENCRYPTION_TYPE_CUPERTINO](#), [ENCRYPTION_TYPE_PLAYREADY](#)

Constructor Summary

public	CencInfo()
--------	----------------------------

Method Summary

void	addDRM (String hashKey, ICencDRMInfo drm) Adds a DRM system info instance to the list of DRM systems associated with the stream encryption.
Object	clone ()
static CencInfo	deserialize (byte[] data)
static CencInfo	deserialize (java.nio.ByteBuffer buffer)
static String	formatKID (String KID)
String	generateRandomKID ()
int	getAlgorithm ()
String	getAlgorithmString ()
String	getCencMp4ProtSchemeString ()
String	getCencMpegTsProtSchemeString ()
java.util.Map	getDRMs ()
byte[]	getEncIVBytes ()
byte[]	getEncKeyBytes ()
java.util.List	getEncKeyBytesList ()
String	getEncKeyString ()
byte[]	getEncRepeaterBytes ()
int	getEncryptionType ()
boolean	getIsRotatingKeys ()
java.util.Map	getKeyPairs ()
int	getKeyRotationType ()
String	getKID ()

byte[]	getKIDBytes()
byte[]	getKIDBytesSwapped()
java.util.List	getKIDsBytesList()
java.util.List	getKIDsBytesListSwapped()
java.util.List	getKIDsList()
String	getNameSpaceString()
int	getPSSHFlags()
int	getPSSHVersion()
int	getSerializeSize()
boolean	isValid()
static boolean	loadFromKeyFile(IApplicationInstance appInstance, String streamName, CencInfo cencInfo, long chunkId, int chunkDurationTarget, String keyFileParamPrefix)
byte[]	serialize()
int	serialize(byte[] buffer, int pos)
void	setAlgorithm(int algorithm) Sets the encryption algorithm to be used.
void	setAppInstance(IApplicationInstance appInstance)
void	setEncKeyBytes(byte[] keyBytes) Sets the encryption content key as a byte buffer.
void	setEncKeyBytesList(java.util.List keyBytesList)
void	setEncRepeaterBytes(byte[] encRepeaterBytes)
void	setIVBytes(byte[] encIVBytes)
void	setKeyPairs(java.util.Map keyPairs)
void	setKeyRotationInterval(int interval)
void	setKeyRotationType(int keyRotationType)
void	setKID(byte[] KIDbytes) Sets the encryption key id.

void	setKID (String KID) Sets the encryption key id.
void	setKIDsList (java.util.List KIDList) Sets the list of encryption key id strings.
void	setPSSHFlags (int psshFlags)
void	setPSSHVersion (int psshVersion)
static byte[]	swapKIDBytes (byte[] KID)
String	toString ()
void	updateKey (long chunkId, int chunkDurationTarget)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.dvr.IDvrEncryptionInfo](#)

[clone](#), [getEncryptionType](#), [getSerializeSize](#), [serialize](#), [serialize](#)

Methods inherited from interface `com.wowza.wms.httpstreamer.util.IEncryptionInfo`

`getEncIVBytes`, `getEncKeyBytes`

Fields

PSSH_VERSION_0

```
public static final int PSSH_VERSION_0
```

Constant value: **0**

PSSH_VERSION_1

```
public static final int PSSH_VERSION_1
```

Constant value: **1**

ALGORITHMID_NONE

```
public static final int ALGORITHMID_NONE
```

Constant value: **0**

(continued from last page)

ALGORITHMID_CTR

```
public static final int ALGORITHMID_CTR
```

Constant value: 1

ALGORITHMID_CBC

```
public static final int ALGORITHMID_CBC
```

Constant value: 2

KEY_ROTATION_TYPE_NONE

```
public static final int KEY_ROTATION_TYPE_NONE
```

Constant value: 0

KEY_ROTATION_TYPE_INTERNAL_STATIC

```
public static final int KEY_ROTATION_TYPE_INTERNAL_STATIC
```

Constant value: 1

KEY_ROTATION_TYPE_INTERNAL_RANDOM

```
public static final int KEY_ROTATION_TYPE_INTERNAL_RANDOM
```

Constant value: 2

KEY_ROTATION_TYPE_EXTERNAL

```
public static final int KEY_ROTATION_TYPE_EXTERNAL
```

Constant value: 3

Constructors

CencInfo

```
public CencInfo()
```

Methods

setEncKeyBytes

```
public void setEncKeyBytes(byte[] keyBytes)
```

Sets the encryption content key as a byte buffer.

Parameters:

(continued from last page)

keyBytes - the encryption content key as a byte buffer

setEncKeyBytesList

```
public void setEncKeyBytesList(java.util.List keyBytesList)
```

setKeyRotationType

```
public void setKeyRotationType(int keyRotationType)
```

getKeyRotationType

```
public int getKeyRotationType()
```

getIsRotatingKeys

```
public boolean getIsRotatingKeys()
```

generateRandomKID

```
public String generateRandomKID()
```

updateKey

```
public void updateKey(long chunkId,  
    int chunkDurationTarget)
```

getKeyPairs

```
public java.util.Map getKeyPairs()
```

setKeyPairs

```
public void setKeyPairs(java.util.Map keyPairs)
```

setKeyRotationInterval

```
public void setKeyRotationInterval(int interval)
```

(continued from last page)

getEncKeyBytes

```
public byte[] getEncKeyBytes()
```

getEncKeyBytesList

```
public java.util.List getEncKeyBytesList()
```

getEncKeyString

```
public String getEncKeyString()
```

setIVBytes

```
public void setIVBytes(byte[] encIVBytes)
```

getEncIVBytes

```
public byte[] getEncIVBytes()
```

swapKIDBytes

```
public static byte[] swapKIDBytes(byte[] KID)
```

setKID

```
public void setKID(String KID)
```

Sets the encryption key id. String must be in uuid form "F6005DCF-7F93-4B8E-85C7-F977740DA059" (big endian)

Parameters:

KID - key id

setKID

```
public void setKID(byte[] KIDbytes)
```

Sets the encryption key id.

Parameters:

KIDbytes - key id byte array

setKIDsList

```
public void setKIDsList(java.util.List KIDList)
```

(continued from last page)

Sets the list of encryption key id strings. Ids must be in uuid form "F6005DCF-7F93-4B8E-85C7-F977740DA059" (big endian)

Parameters:

KIDList - list of key id strings

getKID

```
public String getKID()
```

getKIDBytes

```
public byte[] getKIDBytes()
```

getKIDBytesSwapped

```
public byte[] getKIDBytesSwapped()
```

getKIDsList

```
public java.util.List getKIDsList()
```

getKIDsBytesList

```
public java.util.List getKIDsBytesList()
```

getKIDsBytesListSwapped

```
public java.util.List getKIDsBytesListSwapped()
```

getAlgorithm

```
public int getAlgorithm()
```

getAlgorithmString

```
public String getAlgorithmString()
```

setAlgorithm

```
public void setAlgorithm(int algorithm)
```

Sets the encryption algorithm to be used. Currently only CencInfo.ALGORITHMICID_CTR is supported.

(continued from last page)

Parameters:

algorithm - encryption algorithm

isValid

```
public boolean isValid()
```

getNameSpaceString

```
public String getNameSpaceString()
```

getCencMp4ProtSchemeString

```
public String getCencMp4ProtSchemeString()
```

getCencMpegTsProtSchemeString

```
public String getCencMpegTsProtSchemeString()
```

addDRM

```
public void addDRM(String hashKey,  
    ICencDRMInfo drm)
```

Adds a DRM system info instance to the list of DRM systems associated with the stream encryption. The hashKey should be some unique string to identify the DRM System, such as a concatenation of the DRM system's system name and systemId

Example hashKey: "myDRM:12345678-1234-1234-1234-123456789123"

Parameters:

hashKey - hash key

drm - the drm info instance

getDRMs

```
public java.util.Map getDRMs()
```

getEncRepeaterBytes

```
public byte[] getEncRepeaterBytes()
```

setEncRepeaterBytes

```
public void setEncRepeaterBytes(byte[] encRepeaterBytes)
```

(continued from last page)

setAppInstance

```
public void setAppInstance(IApplicationInstance appInstance)
```

formatKID

```
public static String formatKID(String KID)
```

loadFromKeyFile

```
public static boolean loadFromKeyFile(IApplicationInstance appInstance,  
    String streamName,  
    CencInfo cencInfo,  
    long chunkId,  
    int chunkDurationTarget,  
    String keyFileParamPrefix)
```

getSerializeSize

```
public int getSerializeSize()
```

serialize

```
public byte[] serialize()
```

serialize

```
public int serialize(byte[] buffer,  
    int pos)
```

deserialize

```
public static CencInfo deserialize(byte[] data)
```

deserialize

```
public static CencInfo deserialize(java.nio.ByteBuffer buffer)
```

(continued from last page)

toString

```
public String toString()
```

getPSSHVersion

```
public int getPSSHVersion()
```

setPSSHVersion

```
public void setPSSHVersion(int psshVersion)
```

getPSSHFlags

```
public int getPSSHFlags()
```

setPSSHFlags

```
public void setPSSHFlags(int psshFlags)
```

getEncryptionType

```
public int getEncryptionType()
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.drm.cenc Interface ICencConstants

public interface **ICencConstants**
extends

Field Summary

public static final	CENC_DRM_INFO_TYPE_PLAYREADY Value: 1
public static final	CENC_DRM_INFO_TYPE_VCAS Value: 2
public static final	CENC_DRM_INFO_TYPE_WIDEVINE Value: 3

Fields

CENC_DRM_INFO_TYPE_PLAYREADY

public static final int **CENC_DRM_INFO_TYPE_PLAYREADY**

Constant value: **1**

CENC_DRM_INFO_TYPE_VCAS

public static final int **CENC_DRM_INFO_TYPE_VCAS**

Constant value: **2**

CENC_DRM_INFO_TYPE_WIDEVINE

public static final int **CENC_DRM_INFO_TYPE_WIDEVINE**

Constant value: **3**

com.wowza.wms.drm.cenc Interface ICencDRMInfo

All Subinterfaces:

[ICencDRMInfo2](#)

public interface **ICencDRMInfo**
extends

Interface for Common Encryption (CENC) DRM information classes. DRM system-specific metadata can be attached to a stream's CENC data to indicate that a stream or a media segment within that stream is protected by the particular DRM system, and may be authorized and decrypted by a player client using the provided DRM system metadata. The metadata provided by classes implementing ICencDRMInfo is inserted into a stream's manifest and/or fragment files. CENC DRM support is in accordance with the Common Encryption standard (ISO/IEC 23001-7).

Method Summary

void	deserialize (byte[] data) Sets all internal class data by deserializing the data from the provided byte buffer representation of the class.
byte[]	generateKey (byte[] KID) Generates a 128-bit content key for use in AES encryption.
String	getMPEGDashCPSubElements (boolean keyRotation) Returns a string defining zero or more custom xml elements to be inserted as sub-elements to the ContentProtection element that defines the DRM system in an MPEG-DASH MPD.
String	getNameSpaces () Returns a string defining zero or more custom xml name space strings to be inserted into an xml-formatted manifest, such as an MPEG-DASH MPD.
byte[]	getPsshData (boolean keyRotation) Returns the DRM system-specific binary data associated with the encryption of the media.
String	getSystemId () Returns the DRM system id.
String	getSystemName () Returns a string defining the DRM system name.
String	getURL () Returns the license acquisition URL.
boolean	isComplete () Verifies whether all required class parameters have been set, such as systemId.
byte[]	serialize () Returns a byte buffer with a serialized representation of the class, which could later be reconstituted back into the class via the deserialize method.
void	setPsshData (byte[] psshData) Sets the DRM system-specific binary data associated with the encryption of the media.

void	setSystemId (String systemId) Sets the DRM system id.
void	setURL (String url) Sets the license acquisition URL.
boolean	supportsKeyGeneration () Verifies whether dynamic key generation is supported.
void	updateKeyInfo (byte[] KID, byte[] contentKey) Sets the new key id and a 128-bit content key values for use in AES encryption.

Methods

setSystemId

```
public void setSystemId(String systemId)
```

Sets the DRM system id.

Example: "12345678-1234-1234-1234-123456789012"

Parameters:

systemId - DRM system id

getSystemId

```
public String getSystemId()
```

Returns the DRM system id.

Returns:

DRM system id string

getURL

```
public String getURL()
```

Returns the license acquisition URL.

Returns:

license acquisition URL string

setURL

```
public void setURL(String url)
```

Sets the license acquisition URL.

Example: "http://www.mycompany.com/sdrm/rightsmanager.asmx"

Parameters:

url - license acquisition URL string

getNameSpaces

```
public String getNameSpaces()
```

Returns a string defining zero or more custom xml name space strings to be inserted into an xml-formatted manifest, such as an MPEG-DASH MPD.

Example: `xmlns:sdrma="urn:mycompany:superdrm:a" xmlns:sdrmb="urn:mycompany:superdrm:b"`

Returns:

zero or more xml name space strings separate by spaces, with a "" or 'null' return indicating no custom namespaces

getMPEGDashCPSubElements

```
public String getMPEGDashCPSubElements(boolean keyRotation)
```

Returns a string defining zero or more custom xml elements to be inserted as sub-elements to the ContentProtection element that defines the DRM system in an MPEG-DASH MPD. The element would typically contain Base64-encoded system-specific metadata.

Example: `<sdrma:hdr><!-- base64-encoded data --></sdrma:hdr>`

The resulting ContentProtection element would look something like:

```
<ContentProtection schemeIdUri="urn:uuid:12345678-1234-1234-1234-123456789012"
value="SuperDRM">
  <sdrma:hdr><!-- base64-encoded data --></sdrma:hdr>
</ContentProtection>
```

Parameters:

`keyRotation` - indicates whether key rotation is enabled

Returns:

string defining the MPEG-DASH ContentProtection sub-elements

getSystemName

```
public String getSystemName()
```

Returns a string defining the DRM system name. This string would be used as the value of the `value` attribute in the ContentProtection element that defines the DRM system in an MPEG-DASH MPD.

Example: `"SuperDRM"`

The resulting ContentProtection element in an MPEG-DASH MPD would look something like:

```
<ContentProtection schemeIdUri="urn:uuid:12345678-1234-1234-1234-123456789012"
value="SuperDRM">
  <sdrma:hdr><!-- base64-encoded data --></sdrma:hdr>
</ContentProtection>
```

Returns:

string defining the DRM system name

supportsKeyGeneration

```
public boolean supportsKeyGeneration()
```

Verifies whether dynamic key generation is supported. This capability is only required for dynamic random key rotation support.

(continued from last page)

Returns:

true if dynamic key generation is supported, else false

See Also:[generateKey\(byte\[\]\)](#)

generateKey

```
public byte[] generateKey(byte[] KID)
```

Generates a 128-bit content key for use in AES encryption. Support for this method is only required when dynamic random key generation & rotation is supported.

Parameters:

KID - key id for which a content key should be generated

Returns:

byte buffer containing the generated content key, or null if not supported

See Also:[supportsKeyGeneration\(\)](#)

updateKeyInfo

```
public void updateKeyInfo(byte[] KID,  
    byte[] contentKey)
```

Sets the new key id and a 128-bit content key values for use in AES encryption. Support for this method is only required in a Common Encryption scenario where dynamic random key generation & rotation is supported.

Parameters:

KID - new key id in effect

contentKey - new content key in effect

See Also:[supportsKeyGeneration\(\)](#)

serialize

```
public byte[] serialize()
```

Returns a byte buffer with a serialized representation of the class, which could later be reconstituted back into the class via the deserialize method.

Returns:

byte buffer containing a serialized representation of the class

See Also:[deserialize\(byte\[\]\)](#)

deserialize

```
public void deserialize(byte[] data)
```

Sets all internal class data by deserializing the data from the provided byte buffer representation of the class.

Parameters:

data - byte buffer containing the serialized representation of the class

(continued from last page)

See Also:

[serialize\(\)](#)

getPsshData

```
public byte[] getPsshData(boolean keyRotation)
```

Returns the DRM system-specific binary data associated with the encryption of the media. This data will be inserted into an ISOBMFF pssh box and identified by the associated systemId.

Parameters:

`keyRotation` - indicates whether key rotation is enabled

Returns:

byte buffer containing the DRM system-specific binary data for the pssh box

setPsshData

```
public void setPsshData(byte[] psshData)
```

Sets the DRM system-specific binary data associated with the encryption of the media. This data will be inserted into an ISOBMFF pssh box and identified by the associated systemId.

Parameters:

`psshData` - DRM system-specific binary data for the pssh box

isComplete

```
public boolean isComplete()
```

Verifies whether all required class parameters have been set, such as systemId.

Returns:

true if all required class parameters have been set, else false

com.wowza.wms.drm.cenc Interface ICencDRMInfo2

All Superinterfaces:

[ICencDRMInfo](#)

public interface **ICencDRMInfo2**
extends [ICencDRMInfo](#)

Extended interface for Common Encryption (CENC) DRM information classes. Adds extra field not present in ICencDRMInfo.

Method Summary

Object	clone() Gets a clone of the DRM Information class.
--------	---

Methods inherited from interface [com.wowza.wms.drm.cenc.ICencDRMInfo](#)

[deserialize](#), [generateKey](#), [getMPEGDashCPSubElements](#), [getNameSpaces](#), [getPsshData](#),
[getSystemId](#), [getSystemName](#), [getURL](#), [isComplete](#), [serialize](#), [setPsshData](#), [setSystemId](#),
[setURL](#), [supportsKeyGeneration](#), [updateKeyInfo](#)

Methods

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

Gets a clone of the DRM Information class. The implementing class should add `@Override` to the method implementation since the default Object clone() method is protected.

com.wowza.wms.drm.cenc Interface ICencEncryptor

public interface **ICencEncryptor**
extends

Method Summary

byte[]	encryptData (byte[] data, int offset, int len)
int	getBlockSize ()
void	init (IEncryptionInfo encInfo)
byte[]	startEncryption ()

Methods

init

public void **init**(IEncryptionInfo encInfo)

startEncryption

public byte[] **startEncryption**()

encryptData

public byte[] **encryptData**(byte[] data,
int offset,
int len)

getBlockSize

public int **getBlockSize**()

Package

com.wowza.wms.dvr

com.wowza.wms.dvr Class DefaultDvrStreamVersionHandler

java.lang.Object

└─ **com.wowza.wms.dvr.DefaultDvrStreamVersionHandler**

All Implemented Interfaces:

[IDvrStreamVersionHandler](#)

```
public class DefaultDvrStreamVersionHandler
    extends Object
    implements IDvrStreamVersionHandler
```

Default stream Version Handler. May be sub-classed

Constructor Summary

public	DefaultDvrStreamVersionHandler()
--------	--

Method Summary

IDvrStreamStore	determineExistingStoreForPlaying (IDvrStreamManager dvrMgr, String baseStreamName)
IDvrStreamStore	determineExistingStoreForRecording (IDvrStreamManager dvrMgr, String baseStreamName)
String	getArchiveStrategy (IDvrStreamManager dvrMgr, String baseStreamName)
boolean	handleArchivedStream (IDvrStreamManager dvrMgr, String baseStreamName, String vStreamName, java.util.SortedSet versions, DvrManifestHolder manifestHolder)
boolean	shouldDeleteArchivedStream (IDvrStreamManager dvrMgr, IDvrStreamStore store)
boolean	shouldLoadArchivedStream (IDvrStreamManager dvrMgr, String baseStreamName, String vStreamName, java.util.SortedSet versions, DvrManifestHolder manifest)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.dvr.IDvrStreamVersionHandler](#)

[determineExistingStoreForPlaying](#), [determineExistingStoreForRecording](#), [getArchiveStrategy](#), [handleArchivedStream](#), [shouldDeleteArchivedStream](#), [shouldLoadArchivedStream](#)

Constructors

DefaultDvrStreamVersionHandler

```
public DefaultDvrStreamVersionHandler()
```

Methods

getArchiveStrategy

```
public String getArchiveStrategy(IDvrStreamManager dvrMgr,  
    String baseStreamName)
```

determineExistingStoreForRecording

```
public IDvrStreamStore determineExistingStoreForRecording(IDvrStreamManager dvrMgr,  
    String baseStreamName)
```

determineExistingStoreForPlaying

```
public IDvrStreamStore determineExistingStoreForPlaying(IDvrStreamManager dvrMgr,  
    String baseStreamName)
```

handleArchivedStream

```
public boolean handleArchivedStream(IDvrStreamManager dvrMgr,  
    String baseStreamName,  
    String vStreamName,  
    java.util.SortedSet versions,  
    DvrManifestHolder manifestHolder)
```

shouldLoadArchivedStream

```
public boolean shouldLoadArchivedStream(IDvrStreamManager dvrMgr,  
    String baseStreamName,  
    String vStreamName,  
    java.util.SortedSet versions,  
    DvrManifestHolder manifest)
```

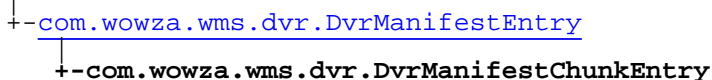
shouldDeleteArchivedStream

```
public boolean shouldDeleteArchivedStream(IDvrStreamManager dvrMgr,  
    IDvrStreamStore store)
```

com.wowza.wms.dvr

Class DvrManifestChunkEntry

java.lang.Object



public class **DvrManifestChunkEntry**
 extends [DvrManifestEntry](#)

Entry in DVR manifest that contains an associated chunk.

Field Summary

protected	artifact
protected	encryptions

Fields inherited from class [com.wowza.wms.dvr.DvrManifestEntry](#)

[dvrStart](#), [dvrStop](#), [index](#), [MANIFESTFILE_KEY_ARTIFACT](#), [MANIFESTFILE_KEY_AUDIO_CODEC](#), [MANIFESTFILE_KEY_CHUNKINDEX](#), [MANIFESTFILE_KEY_DVRTIME](#), [MANIFESTFILE_KEY_ENCRYPTIONS](#), [MANIFESTFILE_KEY_INDEX](#), [MANIFESTFILE_KEY_METADATA](#), [MANIFESTFILE_KEY_NAME](#), [MANIFESTFILE_KEY_PACKETTIME](#), [MANIFESTFILE_KEY_SIZE](#), [MANIFESTFILE_KEY_START](#), [MANIFESTFILE_KEY_STOP](#), [MANIFESTFILE_KEY_TYPE](#), [MANIFESTFILE_KEY_UTCTIME](#), [MANIFESTFILE_KEY_VIDEO_CODEC](#), [packetTime](#), [SERIALIZE_CURRENT_VERSION](#), [type](#), [utcTime](#)

Constructor Summary

public	DvrManifestChunkEntry (int type, int index, long dvrStart, long dvrStop, long packetTime, long utcTime, DvrChunkArtifact artifact) Constructor
public	DvrManifestChunkEntry (int type, int index, long dvrStart, long dvrStop, long packetTime, long utcTime, DvrChunkArtifact artifact, DvrEncryptionInfoHolder encryptions) Constructor

Method Summary

String	getArtifactsTextRepresentation ()
DvrChunkArtifact	getDvrArtifact () Get DVR artifact reference.
DvrEncryptionInfoHolder	getEncryptions () Get associated encryptions.
String	getEncryptionsTextRepresentation ()
String	getManifestRepresentation ()

void	serialize (java.io.DataOutputStream out)
void	setEncryptions (DvrEncryptionInfoHolder encryptions) Set associated encryptions.
String	toString ()

Methods inherited from class [com.wowza.wms.dvr.DvrManifestEntry](#)

[encodeBytes](#), [getCommonInitialTextRepString](#), [getDuration](#), [getIndex](#),
[getManifestRepresentation](#), [getPacketStartTime](#), [getStartTimecode](#), [getStopTimecode](#),
[getType](#), [getUtcStartTime](#), [serialize](#), [serialize](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

Fields

artifact

protected com.wowza.wms.dvr.DvrChunkArtifact **artifact**

encryptions

protected com.wowza.wms.dvr.DvrEncryptionInfoHolder **encryptions**

Constructors

DvrManifestChunkEntry

```
public DvrManifestChunkEntry(int type,
                             int index,
                             long dvrStart,
                             long dvrStop,
                             long packetTime,
                             long utcTime,
                             DvrChunkArtifact artifact)
```

Constructor

Parameters:

type - type
index - manifest index
dvrStart - start time (ms in DVR time scale)
dvrStop - stop time (ms in DVR time scale)
utcTime
packetTime
artifact - reference to the chunk artifact

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DvrManifestChunkEntry

```
public DvrManifestChunkEntry(int type,
                             int index,
                             long dvrStart,
                             long dvrStop,
                             long packetTime,
                             long utcTime,
                             DvrChunkArtifact artifact,
                             DvrEncryptionInfoHolder encryptions)
```

Constructor

Parameters:

type - type
index - manifest index
dvrStart - start time (ms in DVR time scale)
dvrStop - stop time (ms in DVR time scale)
utcTime
packetTime
artifact - reference to the chunk artifact
encryptions - associated encryptions

Methods

getDvrArtifact

```
public DvrChunkArtifact getDvrArtifact()
```

Get DVR artifact reference.

Returns:

DVR artifact reference.

setEncryptions

```
public void setEncryptions(DvrEncryptionInfoHolder encryptions)
```

Set associated encryptions.

Parameters:

encryptions - encryptions

getEncryptions

```
public DvrEncryptionInfoHolder getEncryptions()
```

Get associated encryptions.

Returns:

encryptions

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize manifest record.

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getManifestRepresentation

```
public String getManifestRepresentation()
```

Get textual representation of record for textual manifest usage.

getEncryptionsTextRepresentation

```
protected String getEncryptionsTextRepresentation()
```

getArtifactsTextRepresentation

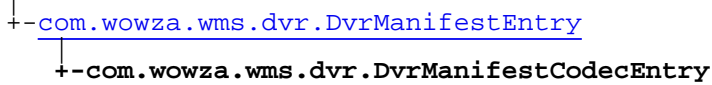
```
protected String getArtifactsTextRepresentation()
```

toString

```
public String toString()
```

com.wowza.wms.dvr Class DvrManifestCodecEntry

java.lang.Object



```

public class DvrManifestCodecEntry
extends DvrManifestEntry
  
```

Entry in DVR manifest that contains codec information

Fields inherited from class [com.wowza.wms.dvr.DvrManifestEntry](#)

[dvrStart](#), [dvrStop](#), [index](#), [MANIFESTFILE_KEY_ARTIFACT](#), [MANIFESTFILE_KEY_AUDIO_CODEC](#), [MANIFESTFILE_KEY_CHUNKINDEX](#), [MANIFESTFILE_KEY_DVRTIME](#), [MANIFESTFILE_KEY_ENCRYPTIONS](#), [MANIFESTFILE_KEY_INDEX](#), [MANIFESTFILE_KEY_METADATA](#), [MANIFESTFILE_KEY_NAME](#), [MANIFESTFILE_KEY_PACKETTIME](#), [MANIFESTFILE_KEY_SIZE](#), [MANIFESTFILE_KEY_START](#), [MANIFESTFILE_KEY_STOP](#), [MANIFESTFILE_KEY_TYPE](#), [MANIFESTFILE_KEY_UTCTIME](#), [MANIFESTFILE_KEY_VIDEO_CODEC](#), [packetTime](#), [SERIALIZE_CURRENT_VERSION](#), [type](#), [utcTime](#)

Constructor Summary

public	DvrManifestCodecEntry (int index, long dvrStart, long packetTime, long utcTime, com.wowza.wms.media.model.MediaCodecInfoAudio audioCodec, com.wowza.wms.media.model.MediaCodecInfoVideo videoCodec) Constructor
--------	--

Method Summary

com.wowza.wms.media.model.MediaCodecInfoAudio	getAudioCodec () Get audio codec information
String	getManifestRepresentation ()
com.wowza.wms.media.model.MediaCodecInfoVideo	getVideoCodec () Get video codec information
void	serialize (java.io.DataOutputStream out)
String	toString ()

Methods inherited from class [com.wowza.wms.dvr.DvrManifestEntry](#)

[encodeBytes](#), [getCommonInitialTextRepString](#), [getDuration](#), [getIndex](#), [getManifestRepresentation](#), [getPacketStartTime](#), [getStartTimeCode](#), [getStopTimeCode](#), [getType](#), [getUtcStartTime](#), [serialize](#), [serialize](#)

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Constructors

DvrManifestCodecEntry

```
public DvrManifestCodecEntry(int index,
                             long dvrStart,
                             long packetTime,
                             long utcTime,
                             com.wowza.wms.media.model.MediaCodecInfoAudio audioCodec,
                             com.wowza.wms.media.model.MediaCodecInfoVideo videoCodec)
```

Constructor

Parameters:

index - manifest index
dvrStart - start time (ms in DVR time scale)
audioCodec - audio codec info
videoCodec - video codec info

Methods

getVideoCodec

```
public com.wowza.wms.media.model.MediaCodecInfoVideo getVideoCodec()
```

Get video codec information

Returns:

video codec information

getAudioCodec

```
public com.wowza.wms.media.model.MediaCodecInfoAudio getAudioCodec()
```

Get audio codec information

Returns:

audio codec information

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize manifest record.

getManifestRepresentation

```
public String getManifestRepresentation()
```

Get textual representation of record for textual manifest usage.

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toString

```
public String toString()
```

com.wowza.wms.dvr

Class DvrManifestEntry

java.lang.Object

└─ **com.wowza.wms.dvr.DvrManifestEntry**

Direct Known Subclasses:

[DvrManifestTimeMapEntry](#), [DvrManifestOnMetadataEntry](#), [DvrManifestCodecEntry](#), [DvrManifestChunkEntry](#)

public abstract class **DvrManifestEntry**
extends Object

Abstract class representing entry in DVR manifest.

Field Summary

protected	dvrStart
protected	dvrStop
protected	index
public static final	MANIFESTFILE_KEY_ARTIFACT Value: artifact
public static final	MANIFESTFILE_KEY_AUDIO_CODEC Value: aCodec
public static final	MANIFESTFILE_KEY_CHUNKINDEX Value: chunkIndex
public static final	MANIFESTFILE_KEY_DVRTIME Value: dvrTime
public static final	MANIFESTFILE_KEY_ENCRYPTIONS Value: enc
public static final	MANIFESTFILE_KEY_INDEX Value: index
public static final	MANIFESTFILE_KEY_METADATA Value: metadata
public static final	MANIFESTFILE_KEY_NAME Value: name

public static final	MANIFESTFILE_KEY_PACKETTIME Value: packetTime
public static final	MANIFESTFILE_KEY_SIZE Value: size
public static final	MANIFESTFILE_KEY_START Value: start
public static final	MANIFESTFILE_KEY_STOP Value: stop
public static final	MANIFESTFILE_KEY_TYPE Value: type
public static final	MANIFESTFILE_KEY_UTCTIME Value: utcTime
public static final	MANIFESTFILE_KEY_VIDEO_CODEC Value: vCodec
protected	packetTime
protected static final	SERIALIZE_CURRENT_VERSION Value: 2
protected	type
protected	utcTime

Constructor Summary

public	DvrManifestEntry (int type, int index, long dvrStart, long dvrStop, long packetTime, long utcTime) Constructor Valid types include: IVHost.CONTENTTYPE_AUDIO , IVHost.CONTENTTYPE_VIDEO , IVHost.CONTENTTYPE_DATA , IDvrManifest.ON_METADATA_TYPE , IDvrManifest.CODEC_TYPE , or IDvrManifest.TIME_MAP_TYPE
--------	--

Method Summary

String	encodeBytes (byte[] bytes) Encode string of bytes as Base64.
String	getCommonInitialTextRepString ()
long	getDuration () Get duration
int	getIndex () Get manifest index.

abstract String	getManifestRepresentation() Get textual representation of record for textual manifest usage.
long	getPacketStartTime() Get chunk start timecode in packetTime units.
long	getStartTimecode() Get start timecode.
long	getStopTimecode() Get stop timecode.
int	getType() Get type of manifest record.
long	getUtcStartTime() Get chunk start timecode in UTC units.
byte[]	serialize() Serialize manifest record.
abstract void	serialize(java.io.DataOutputStream out) Serialize manifest record.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

MANIFESTFILE_KEY_INDEX

```
public static final java.lang.String MANIFESTFILE_KEY_INDEX
```

Constant value: **index**

MANIFESTFILE_KEY_TYPE

```
public static final java.lang.String MANIFESTFILE_KEY_TYPE
```

Constant value: **type**

MANIFESTFILE_KEY_START

```
public static final java.lang.String MANIFESTFILE_KEY_START
```

Constant value: **start**

MANIFESTFILE_KEY_STOP

```
public static final java.lang.String MANIFESTFILE_KEY_STOP
```

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Constant value: **stop**

MANIFESTFILE_KEY_SIZE

```
public static final java.lang.String MANIFESTFILE_KEY_SIZE
```

Constant value: **size**

MANIFESTFILE_KEY_ARTIFACT

```
public static final java.lang.String MANIFESTFILE_KEY_ARTIFACT
```

Constant value: **artifact**

MANIFESTFILE_KEY_DVRTIME

```
public static final java.lang.String MANIFESTFILE_KEY_DVRTIME
```

Constant value: **dvrTime**

MANIFESTFILE_KEY_CHUNKINDEX

```
public static final java.lang.String MANIFESTFILE_KEY_CHUNKINDEX
```

Constant value: **chunkIndex**

MANIFESTFILE_KEY_PACKETTIME

```
public static final java.lang.String MANIFESTFILE_KEY_PACKETTIME
```

Constant value: **packetTime**

MANIFESTFILE_KEY_UTCTIME

```
public static final java.lang.String MANIFESTFILE_KEY_UTCTIME
```

Constant value: **utcTime**

MANIFESTFILE_KEY_NAME

```
public static final java.lang.String MANIFESTFILE_KEY_NAME
```

Constant value: **name**

MANIFESTFILE_KEY_AUDIO_CODEC

```
public static final java.lang.String MANIFESTFILE_KEY_AUDIO_CODEC
```

Constant value: **aCodec**

(continued from last page)

MANIFESTFILE_KEY_VIDEO_CODEC

```
public static final java.lang.String MANIFESTFILE_KEY_VIDEO_CODEC
```

Constant value: **vCodec**

MANIFESTFILE_KEY_ENCRYPTIONS

```
public static final java.lang.String MANIFESTFILE_KEY_ENCRYPTIONS
```

Constant value: **enc**

MANIFESTFILE_KEY_METADATA

```
public static final java.lang.String MANIFESTFILE_KEY_METADATA
```

Constant value: **metadata**

SERIALIZE_CURRENT_VERSION

```
protected static final byte SERIALIZE_CURRENT_VERSION
```

Constant value: **2**

dvrStart

```
protected long dvrStart
```

dvrStop

```
protected long dvrStop
```

packetTime

```
protected long packetTime
```

utcTime

```
protected long utcTime
```

index

```
protected int index
```

(continued from last page)

type

protected int **type**

Constructors

DvrManifestEntry

```
public DvrManifestEntry(int type,  
                        int index,  
                        long dvrStart,  
                        long dvrStop,  
                        long packetTime,  
                        long utcTime)
```

Constructor Valid types include: [IVHost.CONTENTTYPE_AUDIO](#), [IVHost.CONTENTTYPE_VIDEO](#), [IVHost.CONTENTTYPE_DATA](#), [IDvrManifest.ON_METADATA_TYPE](#), [IDvrManifest.CODEC_TYPE](#), or [IDvrManifest.TIME_MAP_TYPE](#)

Parameters:

type - type
index - manifest index
dvrStart - start time (ms in DVR time scale)
dvrStop - stop time (ms in DVR time scale)
packetTime
utcTime

Methods

getStartTimecode

```
public long getStartTimecode()
```

Get start timecode. In milliseconds, DVR time base.

Returns:

start time

getStopTimecode

```
public long getStopTimecode()
```

Get stop timecode. In milliseconds, DVR time base.

Returns:

stop time

getPacketStartTime

```
public long getPacketStartTime()
```

Get chunk start timecode in packetTime units. In milliseconds.

Returns:

packet start time

(continued from last page)

getUtcStartTime

```
public long getUtcStartTime()
```

Get chunk start timecode in UTC units. In milliseconds.

Returns:

UTC start time

getDuration

```
public long getDuration()
```

Get duration

Returns:

duration in ms

getType

```
public int getType()
```

Get type of manifest record. Valid types include: [IVHost.CONTENTTYPE_AUDIO](#), [IVHost.CONTENTTYPE_VIDEO](#), [IVHost.CONTENTTYPE_DATA](#), [IDvrManifest.ON_METADATA_TYPE](#), [IDvrManifest.CODEC_TYPE](#), or [IDvrManifest.TIME_MAP_TYPE](#)

Returns:

type

getIndex

```
public int getIndex()
```

Get manifest index.

Returns:

index

serialize

```
public abstract void serialize(java.io.DataOutputStream out)
```

Serialize manifest record.

Parameters:

out - output stream

serialize

```
public byte[] serialize()
```

Serialize manifest record.

Returns:

serialized data

(continued from last page)

getManifestRepresentation

public abstract String **getManifestRepresentation()**

Get textual representation of record for textual manifest usage.

Returns:

textual representation of entry

getCommonInitialTextRepString

protected String **getCommonInitialTextRepString()**

encodeBytes

protected String **encodeBytes**(byte[] bytes)

Encode string of bytes as Base64. Provides check for null buffer or empty buffer.

Parameters:

bytes - buffer to encode.

Returns:

Base64 encoding or "".

com.wowza.wms.dvr Class DvrManifestEntryFactory

java.lang.Object

└─com.wowza.wms.dvr.DvrManifestEntryFactory

```
public class DvrManifestEntryFactory
extends Object
```

Deserialize manifest entry blobs.

Constructor Summary

public	DvrManifestEntryFactory()
--------	---

Method Summary

static DvrManifestEntry	deserialize (byte[] data)
--	---

static DvrManifestEntry	deserialize (java.nio.ByteBuffer buffer)
--	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

DvrManifestEntryFactory

```
public DvrManifestEntryFactory()
```

Methods

deserialize

```
public static DvrManifestEntry deserialize(byte[] data)
```

deserialize

```
public static DvrManifestEntry deserialize(java.nio.ByteBuffer buffer)
```

com.wowza.wms.dvr Class DvrManifestEntryRange

java.lang.Object

└─com.wowza.wms.dvr.DvrManifestEntryRange

public class **DvrManifestEntryRange**
extends Object

Class that compactly represents a range of indices of a certain manifest type.

Constructor Summary

public	DvrManifestEntryRange (int type, int startIndex, int endIndex) Construct a range of a given type.
--------	--

Method Summary

void	deserialize (byte[] data) Deserialize.
int	getEndIndex () Get end index.
IndexRange	getRange () Get index range.
int	getStartIndex () Get start index.
int	getType () Get range type
boolean	isEmpty ()
boolean	isInRange (int index) Is index in range.
byte[]	serialize () Serialize range.
void	setRange (IndexRange range) Set index range.
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

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Constructors

DvrManifestEntryRange

```
public DvrManifestEntryRange(int type,  
                             int startIndex,  
                             int endIndex)
```

Construct a range of a given type.

Parameters:

type - manifest type
startIndex - initial member of range
endIndex - final member of range

Methods

getType

```
public int getType()
```

Get range type

Returns:

type.

getRange

```
public IndexRange getRange()
```

Get index range.

Returns:

index range

setRange

```
public void setRange(IndexRange range)
```

Set index range.

Parameters:

range - index range.

getStartIndex

```
public int getStartIndex()
```

Get start index.

Returns:

start index (or -1 if undefined)

getEndIndex

```
public int getEndIndex()
```

Get end index.

(continued from last page)

Returns:

end index (or -1 if undefined)

isInRange

```
public boolean isInRange(int index)
```

Is index in range.

Parameters:

index - index in question.

Returns:

true if part of range.

serialize

```
public byte[] serialize()
```

Serialize range.

Returns:

out buffer containing serialized range.

deserialize

```
public void deserialize(byte[] data)
```

Deserialize. Called after no-op constructor.

Parameters:

data - buffer to deserialize.

isEmpty

```
public boolean isEmpty()
```

toString

```
public String toString()
```

com.wowza.wms.dvr Class DvrManifestEntryRangeGroup

java.lang.Object

└─com.wowza.wms.dvr.DvrManifestEntryRangeGroup

```
public class DvrManifestEntryRangeGroup
extends Object
```

A group of Manifest Ranges. The group may contain ranges of different types.

Field Summary

public	ranges
--------	------------------------

Constructor Summary

public	DvrManifestEntryRangeGroup()
--------	--

Method Summary

void	addRange(DvrManifestEntryRange range) Add an index range to the group.
void	deserialize(byte[] data) Deserialize.
boolean	isEmpty() Determine if group of ranges is empty
boolean	isInRange(int type, int index) Determine if index of given type is contained in the group of ranges.
byte[]	serialize() Serialize range group
String	toString()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

ranges

```
public java.util.List ranges
```

Constructors

DvrManifestEntryRangeGroup

```
public DvrManifestEntryRangeGroup()
```

Methods

addRange

```
public void addRange(DvrManifestEntryRange range)
```

Add an index range to the group.

Parameters:

range

isInRange

```
public boolean isInRange(int type,  
int index)
```

Determine if index of given type is contained in the group of ranges.

Parameters:

type - range type

index - index in question

Returns:

true if in range.

isEmpty

```
public boolean isEmpty()
```

Determine if group of ranges is empty

Returns:

true if empty

serialize

```
public byte[] serialize()
```

Serialize range group

Returns:

bytes representing range group

deserialize

```
public void deserialize(byte[] data)
```

Deserialize. Called after no-op constructor.

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Parameters:

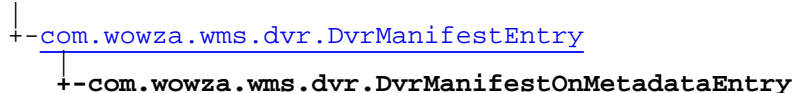
data - buffer to deserialize.

toString

```
public String toString()
```

com.wowza.wms.dvr Class DvrManifestOnMetadataEntry

java.lang.Object



```
public class DvrManifestOnMetadataEntry
extends DvrManifestEntry
```

Entry in DVR manifest that contains onMetadata information and associated onMetadata chunk.

Field Summary

protected	artifact
protected	data

Fields inherited from class [com.wowza.wms.dvr.DvrManifestEntry](#)

[dvrStart](#), [dvrStop](#), [index](#), [MANIFESTFILE_KEY_ARTIFACT](#), [MANIFESTFILE_KEY_AUDIO_CODEC](#), [MANIFESTFILE_KEY_CHUNKINDEX](#), [MANIFESTFILE_KEY_DVRTIME](#), [MANIFESTFILE_KEY_ENCRYPTIONS](#), [MANIFESTFILE_KEY_INDEX](#), [MANIFESTFILE_KEY_METADATA](#), [MANIFESTFILE_KEY_NAME](#), [MANIFESTFILE_KEY_PACKETTIME](#), [MANIFESTFILE_KEY_SIZE](#), [MANIFESTFILE_KEY_START](#), [MANIFESTFILE_KEY_STOP](#), [MANIFESTFILE_KEY_TYPE](#), [MANIFESTFILE_KEY_UTCTIME](#), [MANIFESTFILE_KEY_VIDEO_CODEC](#), [packetTime](#), [SERIALIZE_CURRENT_VERSION](#), [type](#), [utcTime](#)

Constructor Summary

public	DvrManifestOnMetadataEntry (int index, long start, long packetTime, long utcTime, DvrChunkArtifact artifact, byte[] data) Constructor
--------	--

Method Summary

String	getArtifactsTextRepresentation ()
byte[]	getData () Get onMetadata information.
DvrChunkArtifact	getDvrArtifact ()
String	getManifestRepresentation ()
void	serialize (java.io.DataOutputStream out)
String	toString ()

Methods inherited from class [com.wowza.wms.dvr.DvrManifestEntry](#)

[encodeBytes](#), [getCommonInitialTextRepString](#), [getDuration](#), [getIndex](#),
[getManifestRepresentation](#), [getPacketStartTime](#), [getStartTimecode](#), [getStopTimecode](#),
[getType](#), [getUtcStartTime](#), [serialize](#), [serialize](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`,
`wait`

Fields

artifact

protected `com.wowza.wms.dvr.DvrChunkArtifact` **artifact**

data

protected `byte` **data**

Constructors

DvrManifestOnMetadataEntry

```
public DvrManifestOnMetadataEntry(int index,  
                                   long start,  
                                   long packetTime,  
                                   long utcTime,  
                                   DvrChunkArtifact artifact,  
                                   byte[] data)
```

Constructor

Parameters:

`index` - manifest index
`start` - start time (ms in DVR time scale)
`utcTime`
`packetTime`
`artifact` - reference to the chunk artifact
`data` - buffer of onMetadata information

Methods

getDvrArtifact

```
public DvrChunkArtifact getDvrArtifact()
```

getData

```
public byte[] getData()
```

(continued from last page)

Get onMetadata information.

Returns:

onMetadata information.

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize manifest record.

getManifestRepresentation

```
public String getManifestRepresentation()
```

Get textual representation of record for textual manifest usage.

getArtifactsTextRepresentation

```
protected String getArtifactsTextRepresentation()
```

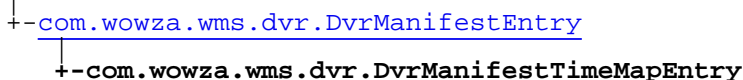
toString

```
public String toString()
```


com.wowza.wms.dvr

Class DvrManifestTimeMapEntry

java.lang.Object



```

public class DvrManifestTimeMapEntry
extends DvrManifestEntry
  
```

Entry in DVR manifest that contains time map information.

Fields inherited from class [com.wowza.wms.dvr.DvrManifestEntry](#)

[dvrStart](#), [dvrStop](#), [index](#), [MANIFESTFILE_KEY_ARTIFACT](#), [MANIFESTFILE_KEY_AUDIO_CODEC](#), [MANIFESTFILE_KEY_CHUNKINDEX](#), [MANIFESTFILE_KEY_DVRTIME](#), [MANIFESTFILE_KEY_ENCRYPTIONS](#), [MANIFESTFILE_KEY_INDEX](#), [MANIFESTFILE_KEY_METADATA](#), [MANIFESTFILE_KEY_NAME](#), [MANIFESTFILE_KEY_PACKETTIME](#), [MANIFESTFILE_KEY_SIZE](#), [MANIFESTFILE_KEY_START](#), [MANIFESTFILE_KEY_STOP](#), [MANIFESTFILE_KEY_TYPE](#), [MANIFESTFILE_KEY_UTCTIME](#), [MANIFESTFILE_KEY_VIDEO_CODEC](#), [packetTime](#), [SERIALIZE_CURRENT_VERSION](#), [type](#), [utcTime](#)

Constructor Summary

public	DvrManifestTimeMapEntry (int index, int chunkIndex, long start, long packetTime, long utcTime, TimeMapRecord timeMap) Constructor
--------	--

Method Summary

int	getChunkIndex () Get chunk index that correlates to this time mapping
String	getManifestRepresentation ()
TimeMapRecord	getTimeMapping () Get time map record.
void	serialize (java.io.DataOutputStream out)
String	toString ()

Methods inherited from class [com.wowza.wms.dvr.DvrManifestEntry](#)

[encodeBytes](#), [getCommonInitialTextRepString](#), [getDuration](#), [getIndex](#), [getManifestRepresentation](#), [getPacketStartTime](#), [getStartTimecode](#), [getStopTimecode](#), [getType](#), [getUtcStartTime](#), [serialize](#), [serialize](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

DvrManifestTimeMapEntry

```
public DvrManifestTimeMapEntry(int index,
                               int chunkIndex,
                               long start,
                               long packetTime,
                               long utcTime,
                               TimeMapRecord timeMap)
```

Constructor

Parameters:

index - manifest index
start - start time (ms in DVR time scale)
timeMap - time map record

Methods

getTimeMapping

```
public TimeMapRecord getTimeMapping()
```

Get time map record.

Returns:

time map record

getChunkIndex

```
public int getChunkIndex()
```

Get chunk index that correlates to this time mapping

Returns:

chunk index

getManifestRepresentation

```
public String getManifestRepresentation()
```

Get textual representation of record for textual manifest usage.

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize manifest record.

toString

```
public String toString()
```

com.wowza.wms.dvr Interface IDvrApplicationConverterContext

public interface **IDvrApplicationConverterContext**
extends

Method Summary

java.util.Map	getDvrConversions (boolean force) Get a list of all the single conversions that have not expired
IDvrConverterStore	getDvrConverterStore (String dvrStoreName) Gets a nDVR store for conversion If the store name provided is not available the converter has no information about the store.
java.util.Map	getDvrGroups (boolean force) Get a list of all the group conversions that have not expired
java.util.SortedMap	getDvrStoresAvailable () Get a list of all the nDVR stores available for this application instance
void	shutDownAllConverstions () Stops all conversions currently running
IDvrConverter	startConversion (IDvrConverterStore store, DvrConverterControlBase dvrControlObject) Start a single conversion
IDvrConverter	startConversion (String dvrStoreName, long start, long end) Start a single conversion
IDvrConverterGroupStatus	startGroupConversion (DvrConverterControlBase dvrControlObject) Start a group conversion
IDvrConverterGroupStatus	startGroupConversion (java.util.List storeNames, long start, long end) Start a group conversion
IDvrConverter	stopConversion (IDvrConverterStore store) Stop a single conversion
IDvrConverter	stopConversion (String dvrStoreName) Stop a single conversion
IDvrConverterGroupStatus	stopGroupConversion (DvrConverterControlBase dvrControlObject) Stop a group conversion
java.util.List	stopGroupConversion (java.util.List storeNames) Stop a group conversion

Methods

(continued from last page)

shutDownAllConverstions

```
public void shutDownAllConverstions()
```

Stops all conversions currently running

getDvrConverterStore

```
public IDvrConverterStore getDvrConverterStore(String dvrStoreName)
```

Gets a nDVR store for conversion If the store name provided is not available the converter has no information about the store. You can present 'myStream' and if there are multiple stores, such as myStream.0, myStream1 then the highest number store will be used.

Parameters:

dvrStoreName

getDvrGroups

```
public java.util.Map getDvrGroups(boolean force)
```

Get a list of all the group conversions that have not expired

Returns:

Map>Integer,IDvrConverterGroup<

getDvrConversions

```
public java.util.Map getDvrConversions(boolean force)
```

Get a list of all the single conversions that have not expired

Returns:

Map<String,IDvrConverter>

getDvrStoresAvailable

```
public java.util.SortedMap getDvrStoresAvailable()
```

Get a list of all the nDVR stores available for this application instance

Returns:

SortedMap<String, SortedSet<Integer>>

startGroupConversion

```
public IDvrConverterGroupStatus startGroupConversion(DvrConverterControlBase  
dvrControlObject)
```

Start a group conversion

Parameters:

dvrControlObject

Returns:

IDvrConverterGroupStatus

(continued from last page)

startGroupConversion

```
public IDvrConverterGroupStatus startGroupConversion(java.util.List storeNames,  
    long start,  
    long end)
```

Start a group conversion

Parameters:

storeNames
start
end

Returns:

IDvrConverterGroupStatus

startConversion

```
public IDvrConverter startConversion(String dvrStoreName,  
    long start,  
    long end)
```

Start a single conversion

Parameters:

dvrStoreName
start
end

Returns:

IDvrConverter

startConversion

```
public IDvrConverter startConversion(IDvrConverterStore store,  
    DvrConverterControlBase dvrControlObject)
```

Start a single conversion

Parameters:

store
dvrControlObject

Returns:

IDvrConverter

stopConversion

```
public IDvrConverter stopConversion(String dvrStoreName)
```

Stop a single conversion

Parameters:

dvrStoreName

Returns:

IDvrConverter

(continued from last page)

stopConversion

```
public IDvrConverter stopConversion(IDvrConverterStore store)
```

Stop a single conversion

Parameters:

store

Returns:

IDvrConverter

stopGroupConversion

```
public IDvrConverterGroupStatus stopGroupConversion(DvrConverterControlBase  
dvrControlObject)
```

Stop a group conversion

Parameters:

dvrControlObject

Returns:

IDvrConverterGroupStatus

stopGroupConversion

```
public java.util.List stopGroupConversion(java.util.List storeNames)
```

Stop a group conversion

Parameters:

storeNames

Returns:

List<DvrConverterStatus>

com.wowza.wms.dvr Interface IDvrChannelManifest

All Subinterfaces:

[IDvrTimeMap](#)

public interface **IDvrChannelManifest**
extends

Method Summary

long	expandEndTime (long dvrEndTime)
long	expandStartTime (long dvrStartTime)
long	getClosestStartTime (long t)
DvrManifestEntry	getFirstEntry ()
int	getFirstIndex ()
java.util.Map	getIndexMap ()
DvrManifestEntry	getLastLiveEntry ()
DvrManifestEntry	getLastRecordedEntry ()
int	getLastRecordedIndex ()
long	getLiveDuration ()
java.util.List	getLiveEntries ()
java.util.List	getLiveEntries (long startTime)
java.util.List	getLiveEntriesWithLimit (long t, int limit)
DvrManifestEntryRange	getLiveRangeEndingBeforeTime (long time)
DvrManifestEntryRange	getLiveRangeEndingBeforeTime (long time, boolean skipFirst)
java.util.List	getLiveTailEntries (int index)
int	getNumberLiveEntries (long dvrStart)
int	getNumberLiveEntries (long dvrStart, long dvrEnd)

int	getNumberRecordedEntries (long dvrStart)
int	getNumberRecordedEntries (long dvrStart, long dvrEnd)
long	getRecordedDuration ()
java.util.List	getRecordedEntries ()
java.util.List	getRecordedEntries (long dvrStartTime)
java.util.List	getRecordedEntries (long dvrStartTime, long dvrEndTime)
java.util.List	getRecordedEntriesInRange (int startIndex, int endIndex)
java.util.List	getRecordedEntriesWithLimit (long t, int limit)
DvrManifestEntry	getRecordedEntryByIndex (int index)
DvrManifestEntry	getRecordedEntryByTimeKey (long t)
DvrManifestEntry	getRecordedEntryStartingBeforeTime (long t, boolean inclusive)
int	getType ()
boolean	isEmpty ()

Methods

isEmpty

```
public boolean isEmpty()
```

getType

```
public int getType()
```

getLastRecordedIndex

```
public int getLastRecordedIndex()
```

getRecordedEntries

```
public java.util.List getRecordedEntries()
```


(continued from last page)

getRecordedEntriesInRange

```
public java.util.List getRecordedEntriesInRange(int startIndex,
        int endIndex)
```

getIndexMap

```
public java.util.Map getIndexMap()
```

getRecordedEntryByTimeKey

```
public DvrManifestEntry getRecordedEntryByTimeKey(long t)
```

getRecordedEntryByIndex

```
public DvrManifestEntry getRecordedEntryByIndex(int index)
```

getRecordedEntryStartingBeforeTime

```
public DvrManifestEntry getRecordedEntryStartingBeforeTime(long t,
        boolean inclusive)
```

getRecordedEntries

```
public java.util.List getRecordedEntries(long dvrStartTime)
```

getRecordedEntries

```
public java.util.List getRecordedEntries(long dvrStartTime,
        long dvrEndTime)
```

getRecordedEntriesWithLimit

```
public java.util.List getRecordedEntriesWithLimit(long t,
        int limit)
```

getRecordedDuration

```
public long getRecordedDuration()
```

getLiveDuration

```
public long getLiveDuration()
```

getClosestStartTime

```
public long getClosestStartTime(long t)
```

getLiveEntries

```
public java.util.List getLiveEntries()
```

getLiveTailEntries

```
public java.util.List getLiveTailEntries(int index)
```

getNumberLiveEntries

```
public int getNumberLiveEntries(long dvrStart)
```

getNumberLiveEntries

```
public int getNumberLiveEntries(long dvrStart,  
                                long dvrEnd)
```

getNumberRecordedEntries

```
public int getNumberRecordedEntries(long dvrStart)
```

getNumberRecordedEntries

```
public int getNumberRecordedEntries(long dvrStart,  
                                long dvrEnd)
```

getLiveEntries

```
public java.util.List getLiveEntries(long startTime)
```

(continued from last page)

getLiveEntriesWithLimit

```
public java.util.List getLiveEntriesWithLimit(long t,  
int limit)
```

getFirstIndex

```
public int getFirstIndex()
```

getFirstEntry

```
public DvrManifestEntry getFirstEntry()
```

getLastLiveEntry

```
public DvrManifestEntry getLastLiveEntry()
```

getLastRecordedEntry

```
public DvrManifestEntry getLastRecordedEntry()
```

getLiveRangeEndingBeforeTime

```
public DvrManifestEntryRange getLiveRangeEndingBeforeTime(long time)
```

getLiveRangeEndingBeforeTime

```
public DvrManifestEntryRange getLiveRangeEndingBeforeTime(long time,  
boolean skipFirst)
```

expandStartTime

```
public long expandStartTime(long dvrStartTime)
```

expandEndTime

```
public long expandEndTime(long dvrEndTime)
```

com.wowza.wms.dvr Interface IDvrChunker

public interface **IDvrChunker**
extends

Method Summary

long	calculateChunkGroupTime (long dvrTime)
String	determineChunkGroupIdentifier (long dvrTime)
int	getChunkGroupDuration ()
void	setChunkGroupDuration (int chunkGrouping)

Methods

getChunkGroupDuration

public int **getChunkGroupDuration**()

determineChunkGroupIdentifier

public String **determineChunkGroupIdentifier**(long dvrTime)

calculateChunkGroupTime

public long **calculateChunkGroupTime**(long dvrTime)

setChunkGroupDuration

public void **setChunkGroupDuration**(int chunkGrouping)

com.wowza.wms.dvr Interface IDvrChunkIDHandler

All Subinterfaces:

[IDvrChunkIDHandler2](#)

public interface **IDvrChunkIDHandler**
extends

This interface should no longer be used directly. Please use IDvrChunkIDHandler2

Method Summary

void	init (IDvrManifest dvrManifest) Initialize the chunk ID handler
int	onAssignChunkId (String streamName, DvrPacketHolder vPackets, DvrPacketHolder aPackets) This returns the chunkID to use for the nDVR chunk to be stored.
void	setAudioManifest (DvrChannelManifest audioManifest) Set the audio manifest for this handler
void	setCodecManifest (DvrChannelManifest codecManifest) Set the codec manifest for this handler
void	setDataManifest (DvrChannelManifest dataManifest) Set the data manifest for this handler
void	setMetadataManifest (DvrChannelManifest onMetaManifest) Set the meta data manifest for this handler
void	setVideoManifest (DvrChannelManifest videoManifest) Set the video manifest for this handler

Methods

init

public void **init**([IDvrManifest](#) dvrManifest)

Initialize the chunk ID handler

Parameters:

dvrManifest

setVideoManifest

public void **setVideoManifest**(DvrChannelManifest videoManifest)

Set the video manifest for this handler

Parameters:

(continued from last page)

videoManifest

setAudioManifest

```
public void setAudioManifest(DvrChannelManifest audioManifest)
```

Set the audio manifest for this handler

Parameters:

audioManifest

setDataManifest

```
public void setDataManifest(DvrChannelManifest dataManifest)
```

Set the data manifest for this handler

Parameters:

dataManifest

setMetadataManifest

```
public void setMetadataManifest(DvrChannelManifest onMetaManifest)
```

Set the meta data manifest for this handler

Parameters:

onMetaManifest

setCodecManifest

```
public void setCodecManifest(DvrChannelManifest codecManifest)
```

Set the codec manifest for this handler

Parameters:

codecManifest

onAssignChunkId

```
public int onAssignChunkId(String streamName,  
    DvrPacketHolder vPackets,  
    DvrPacketHolder aPackets)
```

This returns the chunkID to use for the nDVR chunk to be stored. It MUST return a consist number based on the state of the manifests/packets provided, i.e. return the same answer if no changes are made between calls.

Parameters:

streamName
vPackets
aPackets

Returns:

com.wowza.wms.dvr Interface IDvrChunkIDHandler2

All Superinterfaces:

[IDvrChunkIDHandler](#)

public interface **IDvrChunkIDHandler2**

extends [IDvrChunkIDHandler](#)

Method Summary

void	setDVRStore (IDvrStreamStore dvrStore) Set the DVR Store for this ID Handler
------	--

Methods inherited from interface [com.wowza.wms.dvr.IDvrChunkIDHandler](#)

[init](#), [onAssignChunkId](#), [setAudioManifest](#), [setCodecManifest](#), [setDataManifest](#),
[setMetadataManifest](#), [setVideoManifest](#)

Methods

setDVRStore

public void **setDVRStore**([IDvrStreamStore](#) dvrStore)

Set the DVR Store for this ID Handler

Parameters:

dvrStore

com.wowza.wms.dvr Interface IDvrChunkMemoryCache

All Superinterfaces:

[IDvrRawChunkProvider](#)

public interface **IDvrChunkMemoryCache**
extends [IDvrRawChunkProvider](#)

Interface for managing in-memory cache of chunks. The implementor is responsible for implementing the desired algorithm for keeping DVR chunks in memory.

Method Summary

void	addToCache (DvrManifestChunkEntry entry, DvrChunk chunk) Provide in-memory cache the opportunity to add the DVR chunk to its cache.
void	init (IDvrStreamStore store) Called to initialize the in-memory cache.
DvrChunk	retrieveRawChunk (DvrManifestChunkEntry entry)

Methods inherited from interface [com.wowza.wms.dvr.IDvrRawChunkProvider](#)

[retrieveRawChunk](#)

Methods

init

public void **init**([IDvrStreamStore](#) store)

Called to initialize the in-memory cache.

Parameters:

store - The DVR stream store associated with this cache.

retrieveRawChunk

public [DvrChunk](#) **retrieveRawChunk**([DvrManifestChunkEntry](#) entry)

addToCache

public void **addToCache**([DvrManifestChunkEntry](#) entry,
[DvrChunk](#) chunk)

Provide in-memory cache the opportunity to add the DVR chunk to its cache. The implementation may choose to cache the chunk or ignore it.

Parameters:

(continued from last page)

entry - DVR manifest entry
chunk - the chunk.

com.wowza.wms.dvr Interface IDvrChunkUtcDelegate

public interface **IDvrChunkUtcDelegate**
extends

Delegate class for determining utc time of DVR chunk.

Method Summary

long	determineUtcTime (long currentUtc, long aChunkStartUtc, long aFirstPacketUtc, AMFPacket aFirstPacket, long vChunkStartUtc, long vFirstPacketUtc, AMFPacket vFirstPacket)
void	init (IDvrStreamStore store)

Methods

init

public void **init**([IDvrStreamStore](#) store)

determineUtcTime

```
public long determineUtcTime(long currentUtc,  
    long aChunkStartUtc,  
    long aFirstPacketUtc,  
    AMFPacket aFirstPacket,  
    long vChunkStartUtc,  
    long vFirstPacketUtc,  
    AMFPacket vFirstPacket)
```

com.wowza.wms.dvr Interface IDvrConstants

All Superinterfaces:

[IDvrPrivateConstants](#)

public interface **IDvrConstants**

extends [IDvrPrivateConstants](#)

Nested Class Summary

class	IDvrConstants.DvrTimeScale IDvrConstants.DvrTimeScale
-------	--

Field Summary

public static final	ARCHIVE_STRATEGY_APPEND Value: append
public static final	ARCHIVE_STRATEGY_DELETE Value: delete
public static final	ARCHIVE_STRATEGY_VERSION Value: version
public static final	DEFAULT_CHUNK_MEMORY_CACHESIZE Default value for DVR Property "chunkMemoryCacheSize". Value: 10
public static final	DEFAULT_CUPERTINO_PLAYLIST_GZIP_THRESHOLD Default value for property "dvrCupertinoPlaylistGzipThreshold" #see PROPERTY_CUPERTINO_PLAYLIST_GZIP_THRESHOLD Value: 4000
public static final	DEFAULT_PLAYLIST_REQUEST_DELEGATE Value: com.wowza.wms.dvr.impl.DvrStartDurationPlaylistRequestDelegat e
public static final	DEFAULT_PROPERTY_ALLOWABLE_AV_PACKET_DELTA Default value for DVR Property "dvrAllowableAVPacketDelta". Value: 2000
public static final	DEFAULT_PROPERTY_APPEND_DISCONTINUITY_DELTA Default value for DVR Property "dvrAppendDiscontinuityDelta". Value: 0
public static final	DEFAULT_PROPERTY_AUDIO_ONLY_CHUNK_TARGET_DURATION Default value for DVR Property "dvrAudioOnlyChunkTargetDuration". Value: 2000

public static final	DEFAULT_PROPERTY_BREAK_ON_PTS Default value for DVR Property "dvrChunkBreakOnPTS". Value: true
public static final	DEFAULT_PROPERTY_BREAK_ON_PTS_MANIFEST Default value for DVR Property "dvrChunkBreakOnPTSManifest". Value: false
public static final	DEFAULT_PROPERTY_CHUNK_CACHE_CLASS Default value for DVR Property "dvrChunkMemoryCacheClass". Value: com.wowza.wms.dvr.impl.DvrDefaultChunkMemoryCache
public static final	DEFAULT_PROPERTY_CHUNK_DURATION_MINIMUM Default value for DVR Property "dvrChunkDurationMinimum". Value: 1500
public static final	DEFAULT_PROPERTY_CHUNK_GROUPING_SECONDS Default value for DVR Property "dvrChunkGroupingSeconds". Value: 600
public static final	DEFAULT_PROPERTY_CHUNK_ID_CLASS Internal DO NOT USE Value: com.wowza.wms.dvr.DvrChunkIDHandler2
public static final	DEFAULT_PROPERTY_CHUNK_READER_CLASS Default value for DVR Property "dvrChunkReaderClass". Value: com.wowza.wms.dvr.impl.io.DvrFileChunkReader
public static final	DEFAULT_PROPERTY_CHUNK_WRITER_CLASS Default value for DVR Property "dvrChunkWriterClass". Value: com.wowza.wms.dvr.impl.io.DvrFileChunkWriter
public static final	DEFAULT_PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED Default value for DVR Property "dvrMaxInvalidChunksLogged". Value: 10
public static final	DEFAULT_PROPERTY_DEBUG_MAX_RAW_PACKETS Default value for DVR Property "dvrDebugMaximumRawPackets". Value: 200
public static final	DEFAULT_PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED Default value for DVR Property "dvrMaxValidChunksLogged". Value: 10
public static final	DEFAULT_PROPERTY_DEBUG_RAW_PACKETS Default value for DVR Property "dvrDebugRawPackets". Value: false
public static final	DEFAULT_PROPERTY_DVR_MAX_CHUNK_LOG Default value for DVR Property "dvrMaxChunkLogCount". Value: 10
public static final	DEFAULT_PROPERTY_FILE_SYSTEM_CLASS Default value for DVR Property "dvrFileSystemClass". Value: com.wowza.wms.dvr.impl.io.DvrDefaultFileSystem

public static final	DEFAULT_PROPERTY_MANIFEST_PERSISTER_CLASS Default value for DVR Property "dvrManifestPersisterClass". Value: com.wowza.wms.dvr.impl.DvrManifestPersister
public static final	DEFAULT_PROPERTY_MAX_RECALC_DURATION_LOG Default value for DVR Property "dvrMaxRecountDurationLogCount". Value: 30
public static final	DEFAULT_PROPERTY_MAX_RECORDING_LENGTH Default value for DVR Property "dvrMaximumRecordingLength". Value: 108000
public static final	DEFAULT_PROPERTY_MBR_ALTERNATIVE_MATCH_DELTA Default value for DVR Property "dvrMbrAlternateMatchDelta". Value: 1000
public static final	DEFAULT_PROPERTY_MBR_CLASS_ALIGNER Internal DO NOT USE Value:
public static final	DEFAULT_PROPERTY_MBR_MINIMUM_PACKETTIME_GAP_SIZE Default value for DVR Property "dvrMbrMinimumPacketTimeGapSize". Value: 100
public static final	DEFAULT_PROPERTY_MBR_MINIMUM_UTCTIME_GAP_SIZE Default value for DVR Property "dvrMbrMinimumPacketTimeGapSize". Value: 750
public static final	DEFAULT_PROPERTY_MEDIACACHE_READER_CLASS Default value for DVR Property "dvrMediaCacheReaderClass". Value: com.wowza.wms.mediacache.impl.MediaCacheRandomAccessReader
public static final	DEFAULT_PROPERTY_PACKET_DELTA_TO_NOTIFY Value: 200
public static final	DEFAULT_PROPERTY_PACKET_DELTA_TO_RESET_TIME Default value for DVR Property "dvrResetTimePacketDelta". Value: 200
public static final	DEFAULT_PROPERTY_PACKET_DURATION_MAXIMUM Default value for DVR Property "dvrChunkDurationMinimum". Value: 5000
public static final	DEFAULT_PROPERTY_PACKET_SORT_TIME Default value for DVR Property "dvrPacketSortTime". Value: 0
public static final	DEFAULT_PROPERTY_RECORDINGS_LOADER_CLASS Default value for DVR Property "dvrRecordingsLoaderClass". Value: com.wowza.wms.dvr.DvrRecordingsLoader
public static final	DEFAULT_PROPERTY_REPEATER_HEARTBEAT_DURATION Value: 4000

public static final	DEFAULT_PROPERTY_SANJOSE_ABST_DURATION_TOLERANCE Default value for property "dvrSanJosePlaylistAbstDurationTolerance" #see PROPERTY_SANJOSE_ABST_DURATION_TOLERANCE Value: 4
public static final	DEFAULT_PROPERTY_SANJOSE_ABST_TIMESCALE Default value for property "dvrSanJosePlaylistAbstTimescale" #see PROPERTY_SANJOSE_ABST_TIMESCALE Value: 1000
public static final	DEFAULT_PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_PAUSE Value: true
public static final	DEFAULT_PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_SEEK Value: true
public static final	DEFAULT_PROPERTY_SMOOTH_MANIFEST_MAJOR_VERSION Value: 2
public static final	DEFAULT_PROPERTY_SMOOTH_MANIFEST_MINOR_VERSION Value: 1
public static final	DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_PAUSE Value: true
public static final	DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_SEEK Value: true
public static final	DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_SPECIFY_DURATION Value: true
public static final	DEFAULT_PROPERTY_STORAGE_DIRECTORY Default value for DVR Property "dvrStorageDirectory". Value: <code>`\${com.wowza.wms.context.VHostConfigHome}/dvr</code>
public static final	DEFAULT_PROPERTY_TEXT_READER_CLASS Default value for DVR Property "dvrTextReaderClass". Value: <code>com.wowza.wms.dvr.impl.io.DvrTextFileReader</code>
public static final	DEFAULT_PROPERTY_TEXT_WRITER_CLASS Default value for DVR Property "dvrTextWriterClass". Value: <code>com.wowza.wms.dvr.impl.io.DvrTextFileWriter</code>
public static final	DVR_DEFAULT_FILESTORE The default DVR store ID: "dvrfilestorage". Value: <code>dvrfilestorage</code>
public static final	DVR_DEFAULT_RECORDER_ID The default DVR recorder ID: "dvrrecorder". Value: <code>dvrrecorder</code>
public static final	DVR_REPEATER_PACKETIZER_ID The default DVR streaming repeater ID: "dvrstreamingrepeater". Value: <code>dvrstreamingrepeater</code>

public static final	DVR_STREAMING_PACKETIZER_ID The default DVR streaming packetizer ID: "dvrstreamingpacketizer". Value: dvrstreamingpacketizer
public static final	DVR_WINDOW_DURATION_UNLIMITED Value: 0
public static final	MEDIACACHE_PREFIX The MediaCache prefix for dvr repeater Value: dvrorigin
public static final	MIMETYPE_VIDEO_MP4 Constant for mime type "video/mp4" Value: video/mp4
public static final	PROPERTY_ALLOWABLE_AV_PACKET_DELTA DVR Property "dvrAllowableAVPacketDelta": for specifying how much audio and video packets may diverge before triggering an error. Value: dvrAllowableAVPacketDelta
public static final	PROPERTY_APPEND_DISCONTINUITY_DELTA DVR Property "dvrAppendDiscontinuityDelta": for specifying how many milliseconds of empty space are put between individual recordings that when in append mode. Value: dvrAppendDiscontinuityDelta
public static final	PROPERTY_ARCHIVE_STRATEGY DVR Property "dvrArchiveStrategy": for specifying the DVR archive strategy. Value: dvrArchiveStrategy
public static final	PROPERTY_AUDIO_ONLY_CHUNK_TARGET_DURATION DVR Property "dvrAudioOnlyChunkTargetDuration": for target duration when recording audio-only. Value: dvrAudioOnlyChunkTargetDuration
public static final	PROPERTY_BREAK_ON_PTS DVR Property "dvrChunkBreakOnPTS": for specifying that DVR should be broken on PTS. Value: dvrChunkBreakOnPTS
public static final	PROPERTY_BREAK_ON_PTS_MANIFEST DVR Property "dvrChunkBreakOnPTSManifest": for specifying that DVR manifest should use the PTS when dvrChunkBreakOnPTS is enabled. Value: dvrChunkBreakOnPTSManifest
public static final	PROPERTY_CHUNK_CACHE_CLASS DVR Property "dvrChunkMemoryCacheClass": for controlling the class responsible for caching DVR chunks in memory. Value: dvrChunkMemoryCacheClass
public static final	PROPERTY_CHUNK_DURATION_MINIMUM DVR Property "dvrChunkDurationMinimum": for minimum chunk duration, in milliseconds. Value: dvrChunkDurationMinimum
public static final	PROPERTY_CHUNK_GROUPING_SECONDS DVR Property "dvrChunkGroupingSeconds": for determining how many seconds of DVR are stored in each stores sub-folder. Value: dvrChunkGroupingSeconds

public static final	PROPERTY_CHUNK_ID_CLASS The associated class must implement the IDvrChunkIDHandler2 interface Value: dvrChunkIDHandlerClass
public static final	PROPERTY_CHUNK_MBR_ALIGNER Internal DO NOT USE Value: dvrChunkMbrCustomAligner
public static final	PROPERTY_CHUNK_MEMORY_CACHESIZE DVR Property "chunkMemoryCacheSize": used by DvrDefaultChunkMemoryCache to set number of chunks stored in DVR in-memory cache. Value: chunkMemoryCacheSize
public static final	PROPERTY_CHUNK_READER_CLASS DVR Property "dvrChunkReaderClass": for controlling the class responsible for reading DVR Chunks. Value: dvrChunkReaderClass
public static final	PROPERTY_CHUNK_WRITER_CLASS DVR Property "dvrChunkWriterClass": for controlling the class responsible for writing DVR Chunks. Value: dvrChunkWriterClass
public static final	PROPERTY_CUPERTINO_ENABLE_DATA_EVENTS HTTP Streamer Property "dvrCupertinoEnableDataEvents": used to stream ID3 data for HLS DVR streams Value: dvrCupertinoEnableDataEvents
public static final	PROPERTY_CUPERTINO_ON_CHUNK_START_RESET_COUNTER DVR Property "dvrCupertinoOnChunkStartResetCounter": when a new chunk starts, reset internal tsPacketizer counters Value: dvrCupertinoOnChunkStartResetCounter
public static final	PROPERTY_CUPERTINO_PLAYLIST_ALLOW_CACHING DVR Property "dvrCupertinoPlaylistAllowCaching": used to force Cupertino playlist to set #EXT-X-ALLOW-CACHE: value Value: dvrCupertinoPlaylistAllowCaching
public static final	PROPERTY_CUPERTINO_PLAYLIST_DISC_AT_ALTERNATES HTTP Streamer Property "dvrCupertinoPlaylistDiscontinuityAtAlternates": used to insert discontinuity tags into HLS stream if DVR store switches mid-playlist. Value: dvrCupertinoPlaylistDiscontinuityAtAlternates
public static final	PROPERTY_CUPERTINO_PLAYLIST_FORCE_LIVE DVR Property "dvrCupertinoPlaylistForceLive": used to override playlist request delegate logic that determines if playlist is live. Value: dvrCupertinoPlaylistForceLive
public static final	PROPERTY_CUPERTINO_PLAYLIST_FORCE_NONLIVE DVR Property "dvrCupertinoPlaylistForceLive": used to override playlist request delegate logic that determines if playlist is live versus non-live. Value: dvrCupertinoPlaylistForceNonLive
public static final	PROPERTY_CUPERTINO_PLAYLIST_GZIP_THRESHOLD DVR Property "dvrCupertinoPlaylistGzipThreshold": when playlist is larger than this number of bytes, and gzip is enabled and accepted, the playlist will be compressed Value: dvrCupertinoPlaylistGzipThreshold

public static final	PROPERTY_CUPERTINO_PLAYLIST_USE_GZIP DVR Property "dvrCupertinoPlaylistUseGzip": used to force Cupertino playlist to use gzip if it is accepted Value: dvrCupertinoPlaylistUseGzip
public static final	PROPERTY_CUPERTINO_PUT_END_TAG_BEFORE_CHUNKS DVR Property "dvrCupertinoPutEndTagBeforeChunks": if set to true, puts the EXT-X-ENDELIST before the DVR chunks. Value: dvrCupertinoPutEndTagBeforeChunks
public static final	PROPERTY_DEBUG_CHUNK_RETRIEVALS DVR Property "dvrDebugChunkRetrievals": for logging each chunk retrieval Value: dvrDebugChunkRetrievals
public static final	PROPERTY_DEBUG_CUPERTINO_PLAYER_ADAPTER HTTP Streamer Property "dvrDebugCupertinoPlayerAdapter": for turning on DVR Player Cupertino Adapter debug logging. Value: dvrDebugCupertinoPlayerAdapter
public static final	PROPERTY_DEBUG_FAILED_CHUNK_RETRIEVALS DVR Property "dvrDebugFailedChunkRetrievals": for logging info about each failed chunk retrieval Value: dvrDebugFailedChunkRetrievals
public static final	PROPERTY_DEBUG_LOG_INVALID_CHUNK_DETAILS DVR Property "dvrLogInvalidChunkDetails": to control detailed logging information of DVR invalid chunks Value: dvrLogInvalidChunkDetails
public static final	PROPERTY_DEBUG_LOG_INVALID_CHUNK_MATCHER DVR Property "dvrLogInvalidChunkMatcher": for matching stream names that will log chunk packets Value: dvrLogInvalidChunkMatcher
public static final	PROPERTY_DEBUG_LOG_VALID_CHUNK_DETAILS DVR Property "dvrLogValidChunkDetails": to control detailed logging information of DVR valid chunks Value: dvrLogValidChunkDetails
public static final	PROPERTY_DEBUG_LOG_VALID_CHUNK_MATCHER DVR Property "dvrLogValidChunkMatcher": for matching stream names that will log chunk packets Value: dvrLogValidChunkMatcher
public static final	PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED DVR Property "dvrMaxInvalidChunksLogged": for controlling maximum number of invalid DVR chunks logged. Value: dvrMaxInvalidChunksLogged
public static final	PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED DVR Property "dvrMaxValidChunksLogged": for controlling maximum number of valid DVR chunks logged. Value: dvrMaxValidChunksLogged
public static final	PROPERTY_DEBUG_MAXIMUM_RAW_PACKETS DVR Property "dvrDebugMaximumRawPackets": for setting maximum number of logged raw packets. Value: dvrDebugMaximumRawPackets

public static final	PROPERTY_DEBUG_MBR_ALIGNMENT HTTP Streamer or DVR Property "dvrDebugMbrAlignment": for turning on logging of mbr alignment Value: dvrDebugMbrAlignment
public static final	PROPERTY_DEBUG_MBR_ALIGNMENT_RESOLUTION DVR Property "dvrDebugMbrAlignmentResolution": for turning on logging of mbr alignment resolution (requested to actual) Value: dvrDebugMbrAlignmentResolution
public static final	PROPERTY_DEBUG_MBR_DETAILS_WHEN_RECORD_DNE HTTP Streamer or DVR Property "dvrDebugMbrDetailsWhenRecordDNE": for turning on DVR MBR Player Adapter debug logging. Value: dvrDebugMbrDetailsWhenRecordDNE
public static final	PROPERTY_DEBUG_MBR_PLAYER_ADAPTER HTTP Streamer or DVR Property "dvrDebugMbrPlayerAdapter": for turning on DVR MBR Player Adapter debug logging. Value: dvrDebugMbrPlayerAdapter
public static final	PROPERTY_DEBUG_MBR_PLAYER_ADAPTER_IF_SHIFTED_EMPTY HTTP Streamer or DVR Property "dvrDebugMbrPlayerAdapter": for turning on DVR MBR Player Adapter debug logging when null shifted entries is returned. Value: dvrDebugMbrPlayerAdapterWhenShiftedEmpty
public static final	PROPERTY_DEBUG_METHODS DVR Property "dvrDebugManagerLogMethods": for turning on DVR Manager debug logging. Value: dvrDebugManagerLogMethods
public static final	PROPERTY_DEBUG_MPEGDASH_PLAYER_ADAPTER HTTP Streamer Property "dvrDebugMPEGDashPlayerAdapter": for turning on DVR Player MPEG-DASH Adapter debug logging. Value: dvrDebugMPEGDashPlayerAdapter
public static final	PROPERTY_DEBUG_PLAYER_ADAPTER HTTP Streamer Property "dvrDebugPlayerAdapter": for turning on DVR Player Adapter debug logging for all streamer types. Value: dvrDebugPlayerAdapter
public static final	PROPERTY_DEBUG_PLAYLIST_REQUEST DVR Property "dvrDebugPlaylistRequest": for turning on logging of DVR playlist requests. Value: dvrDebugPlaylistRequest
public static final	PROPERTY_DEBUG_RAW_PACKETS DVR Property "dvrDebugRawPackets": for turning on logging of incoming raw packets. Value: dvrDebugRawPackets
public static final	PROPERTY_DEBUG_RAW_PACKETS_MATCHER DVR Property "dvrDebugRawPacketsMatcher": for matching stream names that will dump raw packet. Value: dvrDebugRawPacketsMatcher
public static final	PROPERTY_DEBUG_REPEATER DVR Property "dvrDebugRepeater": for turning on logging of DVR repeater Value: dvrDebugRepeater

public static final	PROPERTY_DEBUG_SANJOSE_PLAYER_ADAPTER HTTP Streamer Property "dvrDebugSanJosePlayerAdapter": for turning on DVR Player San Jose Adapter debug logging. Value: dvrDebugSanJosePlayerAdapter
public static final	PROPERTY_DEBUG_SMOOTH_PLAYER_ADAPTER HTTP Streamer Property "dvrDebugSmoothPlayerAdapter": for turning on DVR Player Smooth Adapter debug logging. Value: dvrDebugSmoothPlayerAdapter
public static final	PROPERTY_DEBUG_STATE_CHANGE DVR Property "dvrDebugStateChange": for logging state changes of DVR store. Value: dvrDebugStateChange
public static final	PROPERTY_DEBUG_TOSSED_HOLDERS DVR Property "dvrDebugTossedHolders": for turning on logging of packets that are being tossed. Value: dvrDebugTossedHolders
public static final	PROPERTY_ENCRYPTION_INFO_DELEGATE DVR Property "dvrPlaylistEncryptionInfoDelegate": used to over-ride the encryption info on the playback side. Value: dvrPlaylistEncryptionInfoDelegate
public static final	PROPERTY_FILE_SYSTEM_CLASS DVR Property "dvrFileSystemClass": for controlling the class responsible for managing the DVR File System. Value: dvrFileSystemClass
public static final	PROPERTY_MANIFEST_PERSISTER_CLASS DVR Property "dvrManifestPersisterClass": for controlling the class responsible for persisting the manifest files. Value: dvrManifestPersisterClass
public static final	PROPERTY_MAX_CHUNK_LOG DVR Property "dvrMaxChunkLogCount": for maximum number of DVR chunks to log. Value: dvrMaxChunkLogCount
public static final	PROPERTY_MAX_RECALC_DURATION_LOG DVR Property "dvrMaxRecountDurationLogCount": for maximum number of messages to log regarding recalculating DVR chunk duration Value: dvrMaxRecountDurationLogCount
public static final	PROPERTY_MAX_RECORDING_LENGTH DVR Property "dvrMaximumRecordingLength": The maximum recording length in seconds. Value: dvrMaximumRecordingLength
public static final	PROPERTY_MBR_ALIGNMENT_ALWAYS_START_AT_ZERO DVR Property "abrIndexesAlwaysStartWithZero": when doing mbr alignment, always start the alignment at index 0. Value: abrIndexesAlwaysStartWithZero
public static final	PROPERTY_MBR_ALIGNMENT_CHUNKS_IN_RESERVE DVR Property "dvrAbrAlignmentChunksInReserve": when doing mbr alignment, implement code that ignores n chunks in each chunklist and determines a trim time based on the maximum time of all of the non-reserve chunks. Value: dvrAbrAlignmentChunksInReserve

public static final	PROPERTY_MBR_ALTERNATIVE_MATCH_DELTA DVR Property "dvrMbrAlternateMatchDelta": when finding alternative for a MBR gap, an alternate is considered a match is within this many ms of the gap in question. Value: dvrMbrAlternateMatchDelta
public static final	PROPERTY_MBR_MINIMUM_PACKETTIME_GAP_SIZE DVR Property "dvrMbrMinimumPacketTimeGapSize": when doing mbr alignment gaps smaller than this are ignored. Value: dvrMbrMinimumPacketTimeGapSize
public static final	PROPERTY_MBR_MINIMUM_UTCTIME_GAP_SIZE DVR Property "dvrMbrMinimumUtcTimeGapSize": when doing mbr alignment gaps smaller than this are ignored. Value: dvrMbrMinimumUtcTimeGapSize
public static final	PROPERTY_MBR_USE_UTC_FOR_ALIGNMENT DVR Property "dvrMbrUseUtcForAlignment": when doing mbr alignment use utc time for alignment Value: dvrMbrUseUtcForAlignment
public static final	PROPERTY_MEDIACACHE_ENABLED DVR Property "dvrMediaCacheEnabled" Value: dvrMediaCacheEnabled
public static final	PROPERTY_MEDIACACHE_READER_CLASS DVR Property "dvrMediaCacheReaderClass" Value: dvrMediaCacheReaderClass
public static final	PROPERTY_PACKET_DELTA_TO_NOTIFY Value: dvrPacketDeltaToNotify
public static final	PROPERTY_PACKET_DELTA_TO_RESET_TIME DVR Property "dvrResetTimePacketDelta": for controlling how much Chunk start times must diverge from last chunk's end time before the DVR time gets reset. Value: dvrResetTimePacketDelta
public static final	PROPERTY_PACKET_DURATION_MAXIMUM DVR Property "dvrPacketDurationMaximum": for maximum packet duration, in milliseconds. Value: dvrPacketDurationMaximum
public static final	PROPERTY_PACKET_SORT_TIME DVR Property "dvrPacketSortTime": for sorting incoming packets. Value: dvrPacketSortTime
public static final	PROPERTY_PLAYLIST_REQUEST_DELEGATE DVR Property "dvrPlaylistRequestDelegate": used to over-ride the class that generates a playlist request. Value: dvrPlaylistRequestDelegate
public static final	PROPERTY_RECORD_AUDIO DVR Property "recordAudio": for determining if audio should be recorded. Value: recordAudio
public static final	PROPERTY_RECORD_DATA DVR Property "recordData": for determining if data should be recorded. Value: recordData

public static final	PROPERTY_RECORD_VIDEO DVR Property "recordVideo": for determining if video should be recorded. Value: recordVideo
public static final	PROPERTY_RECORDINGS_LOADER_CLASS DVR Property "dvrRecordingsLoaderClass": for controlling the class responsible for loading DVR recordings. Value: dvrRecordingsLoaderClass
public static final	PROPERTY_REPEATER_HEARTBEAT_DURATION DVR Property "dvrRepeaterHeartbeatDuration": for time in ms that origin pings edges Value: dvrRepeaterHeartbeatDuration
public static final	PROPERTY_REPEATER_SHARED_SECRET DVR Property "dvrEncryptionSharedSecret": for encryption shared secret between origins and edges. Value: dvrEncryptionSharedSecret
public static final	PROPERTY_SANJOSE_ABST_DURATION_TOLERANCE DVR Property "dvrSanJosePlaylistAbstDurationEqualityTolerance": used to over-ride the tolerance when determining equal chunks lengths. Value: dvrSanJosePlaylistAbstDurationTolerance
public static final	PROPERTY_SANJOSE_ABST_TIMESCALE DVR Property "dvrSanJosePlaylistAbstTimescale": used to over-ride the time-scale for abst files. Value: dvrSanJosePlaylistAbstTimescale
public static final	PROPERTY_SANJOSE_PLAYLIST_DELIVERYTYPE DVR Property "dvrSanJosePlaylistDeliveryType": used to over-ride the mime type for DVR San Jose F4m playlists. Value: dvrSanJosePlaylistDeliveryType
public static final	PROPERTY_SANJOSE_PLAYLIST_LIVE_STREAMTYPE DVR Property "dvrSanJosePlaylistLiveStreamType": used to over-ride the stream type for live DVR in San Jose f4m playlists. Value: dvrSanJosePlaylistLiveStreamType
public static final	PROPERTY_SANJOSE_PLAYLIST_MIMETYPE DVR Property "dvrSanJosePlaylistMimeType": used to over-ride the mime type for DVR San Jose F4m playlists. Value: dvrSanJosePlaylistMimeType
public static final	PROPERTY_SANJOSE_PLAYLIST_RECORDED_STREAMTYPE DVR Property "dvrSanJosePlaylistRecordedStreamType": used to over-ride the stream type for non-live (recorded) DVR in San Jose f4m playlists. Value: dvrSanJosePlaylistRecordedStreamType
public static final	PROPERTY_SANJOSE_PLAYLIST_VERSION DVR Property "dvrSanJosePlaylistVersion": used to over-ride the version of the San Jose f4m playlist. Value: dvrSanJosePlaylistVersion
public static final	PROPERTY_SMOOTH_MANIFEST_H264_CODEC DVR Property "dvrSmoothManifestH264Codec": used to force Smooth Manifest to use this as its FourCC H264 codec info. Value: dvrSmoothManifestH264Codec

public static final	PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_PAUSE DVR Property "dvrSmoothManifestLiveCanPause": used to determine is CanPause is enabled in smooth Manifest. Value: dvrSmoothManifestLiveCanPause
public static final	PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_SEEK DVR Property "dvrSmoothManifestLiveCanSeek": used to determine is CanSeek is enabled in smooth Manifest. Value: dvrSmoothManifestLiveCanSeek
public static final	PROPERTY_SMOOTH_MANIFEST_MAJOR_VERSION DVR Property "dvrSmoothManifestMajorVersion": used to determine Smooth manifest major version Value: dvrSmoothManifestMajorVersion
public static final	PROPERTY_SMOOTH_MANIFEST_MINOR_VERSION DVR Property "dvrSmoothManifestMinorVersion": used to determine Smooth manifest major version Value: dvrSmoothManifestMinorVersion
public static final	PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_PAUSE DVR Property "dvrSmoothManifestRecordedCanPause": used to determine is CanPause is enabled in smooth Manifest. Value: dvrSmoothManifestRecordedCanPause
public static final	PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_SEEK DVR Property "dvrSmoothManifestRecordedCanSeek": used to determine is CanSeek is enabled in smooth Manifest. Value: dvrSmoothManifestRecordedCanSeek
public static final	PROPERTY_SMOOTH_MANIFEST_RECORDED_SPECIFY_DURATION DVR Property "dvrSmoothManifestRecordedSpecifyDuration": used to determine if duration is specified. Value: dvrSmoothManifestRecordedSpecifyDuration
public static final	PROPERTY_SMOOTH_MANIFEST_VERBOSE_DURATION DVR Property "dvrSmoothManifestVerboseDuration": used to force Smooth Manifest to include durations for each record Value: dvrSmoothManifestVerboseDuration
public static final	PROPERTY_START_RECORDING_ON_STARTUP DVR Property "startRecordingOnStartup": for determining if DVR recorder should start recording immediately. Value: startRecordingOnStartup
public static final	PROPERTY_STORAGE_DIRECTORY DVR Property "dvrStorageDirectory": for overriding the DVR storage directory location Typically this is defined application-wide in Application.xml under Application/DVR/StorageDirectory. Value: dvrStorageDirectory
public static final	PROPERTY_STREAM_DATA Value: dvrStreamRecordedData
public static final	PROPERTY_STREAM_ONLY_LIVE_STREAMS DVR Property "dvrStreamOnlyLiveStreams": used to allow only streaming of 'live' DVR streams. Value: dvrStreamOnlyLiveStreams

public static final	PROPERTY_TEXT_READER_CLASS DVR Property "dvrTextReaderClass": for controlling the class responsible for reading DVR text files. Value: dvrTextReaderClass
public static final	PROPERTY_TEXT_WRITER_CLASS DVR Property "dvrTextWriterClass": for controlling the class responsible for writing DVR text files. Value: dvrTextWriterClass
public static final	PROPERTY_USE_SAX_PARSER DVR Property "dvrUseSAXParser": for controlling the XML parser for DVR container manifests Value: dvrUseSAXParser
public static final	PROPERTY_WINDOW_DURATION DVR Property "dvrWindowDuration": for specifying the DVR window duration, in seconds. Value: dvrWindowDuration
public static final	SANJOSE_F4M_STREAMINGTYPE_STREAMING Constant for San Jose streaming type "streaming" Value: streaming
public static final	SANJOSE_F4M_STREAMTYPE_DVR Constant for San Jose stream type "dvr". Value: dvr
public static final	SANJOSE_F4M_STREAMTYPE_LIVE Constant for San Jose stream type "live". Value: live
public static final	SANJOSE_F4M_STREAMTYPE_LIVEORRECORDED Constant for San Jose stream type "liveOrRecorded". Value: liveOrRecorded
public static final	SANJOSE_F4M_STREAMTYPE_RECORDED Constant for San Jose stream type "recorded". Value: recorded
public static final	SANJOSE_F4M_VERSION_1_0 Constant for San Jose f4m version "1.0". Value: 1.0
public static final	SANJOSE_F4M_VERSION_2_0 Constant for San Jose f4m version "2.0". Value: 2.0

Fields inherited from interface [com.wowza.wms.dvr.IDvrPrivateConstants](#)

[CHUNK_FILENAME_FORMAT_AUDIO](#), [CHUNK_FILENAME_FORMAT_DATA](#), [CHUNK_FILENAME_FORMAT_METADATA](#),
[CHUNK_FILENAME_FORMAT_VIDEO](#), [CHUNK_FOLDER_FORMAT](#), [DEFAULT_PROPERTY_AUDIO_GROUP_COUNT](#),
[DEFAULT_PROPERTY_MANIFEST_PURGE_SIZE](#), [DEFAULT_PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION](#),
[DEFAULT_PROPERTY_MAX_SAVE_HOLDER_SIZE](#), [DEFAULT_PROPERTY_MINIMUM_AVAILABLE_CHUNKS](#),
[DEFAULT_PROPERTY_PLAYLIST_CHUNKS_HELD_BACK](#), [DEFAULT_PROPERTY_PURGE_CONTROL_CLASS](#),
[DEFAULT_PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER](#),
[DEFAULT_PROPERTY_RECALC_DURATION_TRIGGER_SIZE](#), [DEFAULT_PROPERTY_STREAM_IDLE_TIMEOUT](#),
[DEFAULT_PROPERTY_STREAM_STARTUP_TIMEOUT](#), [DEFAULT_PROPERTY_UTC_ALIGN_TO_AUDIO](#),
[DEFAULT_PROPERTY_UTC_USE_WOWZA_PACKET_ARRIVAL](#), [DEFAULT_PROPERTY_WAIT_FOR_CODEC_TIME](#),
[PROPERTY_AUDIO_GROUP_COUNT](#), [PROPERTY_DEBUG_MBR_RESOLVER](#),
[PROPERTY_DEBUG_MBR_RESOLVER_GAP_DETAILS](#),
[PROPERTY_DEBUG_MBR_RESOLVER_INTERSECTION_DETAILS](#), [PROPERTY_INTERCEPTOR_CHUNK_DELEGATE](#),
[PROPERTY_MANIFEST_PURGE_CACHE_SIZE](#), [PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION](#),
[PROPERTY_MAX_SAVE_HOLDER_SIZE](#), [PROPERTY_MBR_USE_SIMPLEALIGNMENT](#),
[PROPERTY_MINIMUM_AVAILABLE_CHUNKS](#), [PROPERTY_PLAYLIST_CHUNKS_HELD_BACK](#),
[PROPERTY_PURGE_CONTROL_CLASS](#), [PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER](#),
[PROPERTY_RECALC_DURATION_TRIGGER_SIZE](#), [PROPERTY_UTC_ALIGN_TO_AUDIO](#),
[PROPERTY_UTC_DELEGATE_CLASS](#), [PROPERTY_UTC_USE_WOWZA_PACKET_ARRIVAL](#),
[PROPERTY_VERIFY_CHUNK_EXISTENCE_ON_MANIFEST_LOAD](#), [PROPERTY_WAIT_FOR_CODEC_TIME](#)

Fields

DVR_STREAMING_PACKETIZER_ID

```
public static final java.lang.String DVR_STREAMING_PACKETIZER_ID
```

The default DVR streaming packetizer ID: "dvrstreamingpacketizer".

See DVR.xml and Application.xml.

Constant value: **dvrstreamingpacketizer**

DVR_REPEATER_PACKETIZER_ID

```
public static final java.lang.String DVR_REPEATER_PACKETIZER_ID
```

The default DVR streaming repeater ID: "dvrstreamingrepeater".

See DVR.xml and Application.xml.

Constant value: **dvrstreamingrepeater**

DVR_DEFAULT_RECORDER_ID

```
public static final java.lang.String DVR_DEFAULT_RECORDER_ID
```

The default DVR recorder ID: "dvrrecorder".

See DVR.xml and Application.xml.

Constant value: **dvrrecorder**

DVR_DEFAULT_FILESTORE

```
public static final java.lang.String DVR_DEFAULT_FILESTORE
```

The default DVR store ID: "dvrfilestorage".

See DVR.xml and Application.xml.

Constant value: **dvrfilestorage**

MEDIACACHE_PREFIX

```
public static final java.lang.String MEDIACACHE_PREFIX
```

The MediaCache prefix for dvr repeater

See MediaCache.xml

Constant value: **dvrorigin**

PROPERTY_CHUNK_GROUPING_SECONDS

```
public static final java.lang.String PROPERTY_CHUNK_GROUPING_SECONDS
```

DVR Property "dvrChunkGroupingSeconds": for determining how many seconds of DVR are stored in each stores sub-folder.

The directory naming convention is HHHH_MM_SS with H = hours, M = minutes, S = seconds. Using the defaults, first directory would be named 0000_00_00 and the second directory would be named 0000_10_00, etc.

Valid values are integers greater than 60. Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrChunkGroupingSeconds**

See Also:

[DEFAULT_PROPERTY_CHUNK_GROUPING_SECONDS](#)

DEFAULT_PROPERTY_CHUNK_GROUPING_SECONDS

```
public static final int DEFAULT_PROPERTY_CHUNK_GROUPING_SECONDS
```

Default value for DVR Property "dvrChunkGroupingSeconds".

Default value is 600 seconds (10 minutes).

Constant value: **600**

See Also:

[PROPERTY_CHUNK_GROUPING_SECONDS](#)

PROPERTY_APPEND_DISCONTINUITY_DELTA

```
public static final java.lang.String PROPERTY_APPEND_DISCONTINUITY_DELTA
```

DVR Property "dvrAppendDiscontinuityDelta": for specifying how many milliseconds of empty space are put between individual recordings that when in append mode.

Valid values are integers greater than or equal to 0. Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrAppendDiscontinuityDelta**

See Also:

[DEFAULT_PROPERTY_APPEND_DISCONTINUITY_DELTA](#)

DEFAULT_PROPERTY_APPEND_DISCONTINUITY_DELTA

```
public static final int DEFAULT_PROPERTY_APPEND_DISCONTINUITY_DELTA
```

Default value for DVR Property "dvrAppendDiscontinuityDelta".

Default value is 0.

Constant value: **0**

See Also:

(continued from last page)

[PROPERTY_APPEND_DISCONTINUITY_DELTA](#)

PROPERTY_WINDOW_DURATION

```
public static final java.lang.String PROPERTY_WINDOW_DURATION
```

DVR Property "dvrWindowDuration": for specifying the DVR window duration, in seconds.

Typically this is defined application-wide in Application.xml under Application/DVR/WindowDuration. However, to override this on a per stream basis, the property may be set on the IDvrStreamManager after creation and before initialization. Valid values are integers greater than or equal to 0. Add the property to Application/DVR/Properties section of Application.xml. The default is 0, meaning the window size is unlimited.

Constant value: **dvrWindowDuration**

See Also:

[DVR_WINDOW_DURATION_UNLIMITED](#)

DVR_WINDOW_DURATION_UNLIMITED

```
public static final int DVR_WINDOW_DURATION_UNLIMITED
```

Constant value: **0**

PROPERTY_STORAGE_DIRECTORY

```
public static final java.lang.String PROPERTY_STORAGE_DIRECTORY
```

DVR Property "dvrStorageDirectory": for overriding the DVR storage directory location. Typically this is defined application-wide in Application.xml under Application/DVR/StorageDirectory. However, to override this on a per stream basis, the property may be set on the IDvrStreamManager after creation and before initialization.

Constant value: **dvrStorageDirectory**

See Also:

[DEFAULT_PROPERTY_STORAGE_DIRECTORY](#)

DEFAULT_PROPERTY_STORAGE_DIRECTORY

```
public static final java.lang.String DEFAULT_PROPERTY_STORAGE_DIRECTORY
```

Default value for DVR Property "dvrStorageDirectory".

Default value is "`${com.wowza.wms.context.VHostConfigHome}/dvr`".

Constant value: **`${com.wowza.wms.context.VHostConfigHome}/dvr`**

See Also:

[PROPERTY_STORAGE_DIRECTORY](#)

PROPERTY_ARCHIVE_STRATEGY

```
public static final java.lang.String PROPERTY_ARCHIVE_STRATEGY
```

DVR Property "dvrArchiveStrategy": for specifying the DVR archive strategy.

Typically this is defined application-wide in Application.xml under Application/DVR/ArchiveStrategy. However, to override this on a per stream basis, the property may be set on the IDvrStreamManager after creation and before initialization. Valid values are:

Constant value: **dvrArchiveStrategy**

See Also:

[ARCHIVE_STRATEGY_APPEND](#)

(continued from last page)

[ARCHIVE_STRATEGY_VERSION](#)[ARCHIVE_STRATEGY_APPEND](#)

ARCHIVE_STRATEGY_DELETE

```
public static final java.lang.String ARCHIVE_STRATEGY_DELETE
```

Constant value: **delete**

ARCHIVE_STRATEGY_VERSION

```
public static final java.lang.String ARCHIVE_STRATEGY_VERSION
```

Constant value: **version**

ARCHIVE_STRATEGY_APPEND

```
public static final java.lang.String ARCHIVE_STRATEGY_APPEND
```

Constant value: **append**

PROPERTY_CHUNK_READER_CLASS

```
public static final java.lang.String PROPERTY_CHUNK_READER_CLASS
```

DVR Property "dvrChunkReaderClass": for controlling the class responsible for reading DVR Chunks.

The class must implement IDvrChunkReader

Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrChunkReaderClass**

See Also:

[com.wowza.wms.dvr.io.IDvrChunkReader](#)

[DEFAULT_PROPERTY_CHUNK_READER_CLASS](#)

DEFAULT_PROPERTY_CHUNK_READER_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_CHUNK_READER_CLASS
```

Default value for DVR Property "dvrChunkReaderClass".

Default value is "com.wowza.wms.dvr.impl.io.DvrFileChunkReader".

Constant value: **com.wowza.wms.dvr.impl.io.DvrFileChunkReader**

See Also:

[PROPERTY_CHUNK_READER_CLASS](#)

PROPERTY_CHUNK_WRITER_CLASS

```
public static final java.lang.String PROPERTY_CHUNK_WRITER_CLASS
```

DVR Property "dvrChunkWriterClass": for controlling the class responsible for writing DVR Chunks.

The class must implement IDvrChunkWriter

Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrChunkWriterClass**

(continued from last page)

See Also:

`com.wowza.wms.dvr.io.IDvrChunkWriter`
[DEFAULT_PROPERTY_CHUNK_WRITER_CLASS](#)

DEFAULT_PROPERTY_CHUNK_WRITER_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_CHUNK_WRITER_CLASS
```

Default value for DVR Property "dvrChunkWriterClass".

Default value is "com.wowza.wms.dvr.impl.io.DvrFileChunkWriter".
Constant value: **com.wowza.wms.dvr.impl.io.DvrFileChunkWriter**

See Also:

[PROPERTY_CHUNK_WRITER_CLASS](#)

PROPERTY_FILE_SYSTEM_CLASS

```
public static final java.lang.String PROPERTY_FILE_SYSTEM_CLASS
```

DVR Property "dvrFileSystemClass": for controlling the class responsible for managing the DVR File System.

The class must implement `com.wowza.wms.dvr.io.IDvrFileSystem` and may sub-class `com.wowza.wms.dvr.impl.io.DvrDefaultFileSystem`

Add the property to Application/DVR/Properties section of Application.xml.
Constant value: **dvrFileSystemClass**

See Also:

`com.wowza.wms.dvr.io.IDvrFileSystem`
[DEFAULT_PROPERTY_FILE_SYSTEM_CLASS](#)

DEFAULT_PROPERTY_FILE_SYSTEM_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_FILE_SYSTEM_CLASS
```

Default value for DVR Property "dvrFileSystemClass".

Default value is "com.wowza.wms.dvr.impl.io.DvrDefaultFileSystem".
Constant value: **com.wowza.wms.dvr.impl.io.DvrDefaultFileSystem**

See Also:

[PROPERTY_FILE_SYSTEM_CLASS](#)

PROPERTY_MANIFEST_PERSISTER_CLASS

```
public static final java.lang.String PROPERTY_MANIFEST_PERSISTER_CLASS
```

DVR Property "dvrManifestPersisterClass": for controlling the class responsible for persisting the manifest files.

The class must implement `com.wowza.wms.dvr.io.IDvrManifestPersister`

Add the property to Application/DVR/Properties section of Application.xml.
Constant value: **dvrManifestPersisterClass**

See Also:

`com.wowza.wms.dvr.io.IDvrManifestPersister`
[DEFAULT_PROPERTY_MANIFEST_PERSISTER_CLASS](#)

(continued from last page)

DEFAULT_PROPERTY_MANIFEST_PERSISTER_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_MANIFEST_PERSISTER_CLASS
```

Default value for DVR Property "dvrManifestPersisterClass".

Default value is "com.wowza.wms.dvr.impl.DvrManifestPersister".
Constant value: **com.wowza.wms.dvr.impl.DvrManifestPersister**

See Also:

[PROPERTY_MANIFEST_PERSISTER_CLASS](#)

PROPERTY_CHUNK_CACHE_CLASS

```
public static final java.lang.String PROPERTY_CHUNK_CACHE_CLASS
```

DVR Property "dvrChunkMemoryCacheClass": for controlling the class responsible for caching DVR chunks in memory.

The class must implement [IDvrChunkMemoryCache](#) and may sub-class
com.wowza.wms.dvr.impl.DvrDefaultChunkMemoryCache

Add the property to Application/DVR/Properties section of Application.xml.
Constant value: **dvrChunkMemoryCacheClass**

See Also:

[IDvrChunkMemoryCache](#)

[DEFAULT_PROPERTY_CHUNK_CACHE_CLASS](#)

DEFAULT_PROPERTY_CHUNK_CACHE_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_CHUNK_CACHE_CLASS
```

Default value for DVR Property "dvrChunkMemoryCacheClass".

Default value is "com.wowza.wms.dvr.impl.DvrDefaultChunkMemoryCache".
Constant value: **com.wowza.wms.dvr.impl.DvrDefaultChunkMemoryCache**

See Also:

[PROPERTY_CHUNK_CACHE_CLASS](#)

PROPERTY_RECORDINGS_LOADER_CLASS

```
public static final java.lang.String PROPERTY_RECORDINGS_LOADER_CLASS
```

DVR Property "dvrRecordingsLoaderClass": for controlling the class responsible for loading DVR recordings.

The class must implement [IDvrRecordingsLoader](#)

Add the property to Application/DVR/Properties section of Application.xml.
Constant value: **dvrRecordingsLoaderClass**

See Also:

[IDvrRecordingsLoader](#)

[DEFAULT_PROPERTY_RECORDINGS_LOADER_CLASS](#)

DEFAULT_PROPERTY_RECORDINGS_LOADER_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_RECORDINGS_LOADER_CLASS
```

Default value for DVR Property "dvrRecordingsLoaderClass".

Default value is "com.wowza.wms.dvr.DvrRecordingsLoader".

(continued from last page)

Constant value: **com.wowza.wms.dvr.DvrRecordingsLoader**

See Also:

[PROPERTY_RECORDINGS_LOADER_CLASS](#)

PROPERTY_TEXT_WRITER_CLASS

```
public static final java.lang.String PROPERTY_TEXT_WRITER_CLASS
```

DVR Property "dvrTextWriterClass": for controlling the class responsible for writing DVR text files.

The class must implement [IDvrTextWriter](#)

Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrTextWriterClass**

See Also:

[IDvrTextWriter](#)

[DEFAULT_PROPERTY_TEXT_WRITER_CLASS](#)

DEFAULT_PROPERTY_TEXT_WRITER_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_TEXT_WRITER_CLASS
```

Default value for DVR Property "dvrTextWriterClass".

Default value is "com.wowza.wms.dvr.impl.io.DvrTextFileWriter".

Constant value: **com.wowza.wms.dvr.impl.io.DvrTextFileWriter**

See Also:

[PROPERTY_TEXT_WRITER_CLASS](#)

PROPERTY_TEXT_READER_CLASS

```
public static final java.lang.String PROPERTY_TEXT_READER_CLASS
```

DVR Property "dvrTextReaderClass": for controlling the class responsible for reading DVR text files.

The class must implement [IDvrTextReader](#)

Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrTextReaderClass**

See Also:

[IDvrTextReader](#)

[DEFAULT_PROPERTY_TEXT_READER_CLASS](#)

DEFAULT_PROPERTY_TEXT_READER_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_TEXT_READER_CLASS
```

Default value for DVR Property "dvrTextReaderClass".

Default value is "com.wowza.wms.dvr.impl.io.DvrTextFileReader".

Constant value: **com.wowza.wms.dvr.impl.io.DvrTextFileReader**

See Also:

[PROPERTY_TEXT_READER_CLASS](#)

(continued from last page)

PROPERTY_CHUNK_ID_CLASS

```
public static final java.lang.String PROPERTY_CHUNK_ID_CLASS
```

The associated class must implement the IDvrChunkIDHandler2 interface
Constant value: **dvrChunkIDHandlerClass**

DEFAULT_PROPERTY_CHUNK_ID_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_CHUNK_ID_CLASS
```

Internal DO NOT USE
Constant value: **com.wowza.wms.dvr.DvrChunkIDHandler2**

PROPERTY_CHUNK_MBR_ALIGNER

```
public static final java.lang.String PROPERTY_CHUNK_MBR_ALIGNER
```

Internal DO NOT USE
Constant value: **dvrChunkMbrCustomAligner**

DEFAULT_PROPERTY_MBR_CLASS_ALIGNER

```
public static final java.lang.String DEFAULT_PROPERTY_MBR_CLASS_ALIGNER
```

Internal DO NOT USE
Constant value:

PROPERTY_USE_SAX_PARSER

```
public static final java.lang.String PROPERTY_USE_SAX_PARSER
```

DVR Property "dvrUseSAXParser": for controlling the XML parser for DVR container manifests

Add the property to Application/DVR/Properties section of Application.xml.
Constant value: **dvrUseSAXParser**

PROPERTY_ALLOWABLE_AV_PACKET_DELTA

```
public static final java.lang.String PROPERTY_ALLOWABLE_AV_PACKET_DELTA
```

DVR Property "dvrAllowableAVPacketDelta": for specifying how much audio and video packets may diverge before triggering an error.

Wowza nDVR expects the incoming audio and video to be aligned. Through this parameter, Wowza nDVR will try to compensate for out of alignment issues, but it cannot resolve them. This setting safeguards against audio and data video packets that are not closely aligned. The units are in ms. The default value is 2000 ms. If audio and video are out of alignment by more than this value, the audio and video chunks will be ignored in an attempt to get the streams back into alignment. If you already have an out of alignment issue, increasing the default value is likely to cause more problems. Increasing this value will increase the number of chunks not recorded which may cause the overall quality to be unacceptable.

Add the property to Application/DVR/Properties section of Application.xml.
Constant value: **dvrAllowableAVPacketDelta**

See Also:

[DEFAULT_PROPERTY_ALLOWABLE_AV_PACKET_DELTA](#)

DEFAULT_PROPERTY_ALLOWABLE_AV_PACKET_DELTA

```
public static final int DEFAULT_PROPERTY_ALLOWABLE_AV_PACKET_DELTA
```

(continued from last page)

Default value for DVR Property "dvrAllowableAVPacketDelta".

Default value is 2000 ms.
Constant value: **2000**

See Also:

[PROPERTY_ALLOWABLE_AV_PACKET_DELTA](#)

PROPERTY_PACKET_DELTA_TO_RESET_TIME

```
public static final java.lang.String PROPERTY_PACKET_DELTA_TO_RESET_TIME
```

DVR Property "dvrResetTimePacketDelta": for controlling how much Chunk start times must diverge from last chunk's end time before the DVR time gets reset.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrResetTimePacketDelta**

See Also:

[DEFAULT_PROPERTY_PACKET_DELTA_TO_RESET_TIME](#)

DEFAULT_PROPERTY_PACKET_DELTA_TO_RESET_TIME

```
public static final int DEFAULT_PROPERTY_PACKET_DELTA_TO_RESET_TIME
```

Default value for DVR Property "dvrResetTimePacketDelta".

Default value is 200 ms.
Constant value: **200**

See Also:

[PROPERTY_PACKET_DELTA_TO_RESET_TIME](#)

PROPERTY_PACKET_DELTA_TO_NOTIFY

```
public static final java.lang.String PROPERTY_PACKET_DELTA_TO_NOTIFY
```

Constant value: **dvrPacketDeltaToNotify**

DEFAULT_PROPERTY_PACKET_DELTA_TO_NOTIFY

```
public static final int DEFAULT_PROPERTY_PACKET_DELTA_TO_NOTIFY
```

Constant value: **200**

PROPERTY_RECORD_DATA

```
public static final java.lang.String PROPERTY_RECORD_DATA
```

DVR Property "recordData": for determining if data should be recorded.

Set property to: true to record data of incoming stream. Default is true. Set property to: false to ignore data packets during recording.
Constant value: **recordData**

PROPERTY_RECORD_VIDEO

```
public static final java.lang.String PROPERTY_RECORD_VIDEO
```

(continued from last page)

DVR Property "recordVideo": for determining if video should be recorded.

Set property to: true to record video of incoming stream. Default is true. Set property to: false to ignore video packets during recording. Either recordVideo or recordAudio property must be set to: true
Constant value: **recordVideo**

PROPERTY_RECORD_AUDIO

```
public static final java.lang.String PROPERTY_RECORD_AUDIO
```

DVR Property "recordAudio": for determining if audio should be recorded.

Set property to: true to record audio of incoming stream. Default is true. Set property to: false to ignore audio packets during recording. Either recordVideo or recordAudio property must be set to: true
Constant value: **recordAudio**

PROPERTY_START_RECORDING_ON_STARTUP

```
public static final java.lang.String PROPERTY_START_RECORDING_ON_STARTUP
```

DVR Property "startRecordingOnStartup": for determining if DVR recorder should start recording immediately.

Set property to: true (default) to start recording immediately when stream is detected. Set property to: false to init the DVR recorder but to not start recording immediately when stream starts.
Constant value: **startRecordingOnStartup**

PROPERTY_AUDIO_ONLY_CHUNK_TARGET_DURATION

```
public static final java.lang.String PROPERTY_AUDIO_ONLY_CHUNK_TARGET_DURATION
```

DVR Property "dvrAudioOnlyChunkTargetDuration": for target duration when recording audio-only.

Applies to recording an audio-only stream and is the target chunk duration. The unit is in ms. The default value is 2000 ms. This setting is ignored if the stream contains video and audio, in which case the keyframe determines the chunk size.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrAudioOnlyChunkTargetDuration**

See Also:

[DEFAULT_PROPERTY_AUDIO_ONLY_CHUNK_TARGET_DURATION](#)

DEFAULT_PROPERTY_AUDIO_ONLY_CHUNK_TARGET_DURATION

```
public static final int DEFAULT_PROPERTY_AUDIO_ONLY_CHUNK_TARGET_DURATION
```

Default value for DVR Property "dvrAudioOnlyChunkTargetDuration".

Default value is 2000 ms.
Constant value: **2000**

See Also:

[PROPERTY_AUDIO_ONLY_CHUNK_TARGET_DURATION](#)

PROPERTY_PACKET_SORT_TIME

```
public static final java.lang.String PROPERTY_PACKET_SORT_TIME
```

DVR Property "dvrPacketSortTime": for sorting incoming packets. Specified in milliseconds.

Valid values are a integer greater than equal to 0. Zero means no sorting occurs. Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrPacketSortTime**

(continued from last page)

See Also:

[DEFAULT_PROPERTY_PACKET_SORT_TIME](#)

DEFAULT_PROPERTY_PACKET_SORT_TIME

```
public static final int DEFAULT_PROPERTY_PACKET_SORT_TIME
```

Default value for DVR Property "dvrPacketSortTime".

Default value is 0 ms (i.e. no sorting).

Constant value: **0**

See Also:

[PROPERTY_PACKET_SORT_TIME](#)

PROPERTY_BREAK_ON_PTS_MANIFEST

```
public static final java.lang.String PROPERTY_BREAK_ON_PTS_MANIFEST
```

DVR Property "dvrChunkBreakOnPTSManifest": for specifying that DVR manifest should use the PTS when dvrChunkBreakOnPTS is enabled.

Valid values are "true" or "false" Add the property to Application/DVR/Properties section of Application.xml

Constant value: **dvrChunkBreakOnPTSManifest**

See Also:

[DEFAULT_PROPERTY_BREAK_ON_PTS_MANIFEST](#)

DEFAULT_PROPERTY_BREAK_ON_PTS_MANIFEST

```
public static final boolean DEFAULT_PROPERTY_BREAK_ON_PTS_MANIFEST
```

Default value for DVR Property "dvrChunkBreakOnPTSManifest".

Default value is true.

Constant value: **false**

See Also:

[PROPERTY_BREAK_ON_PTS_MANIFEST](#)

PROPERTY_BREAK_ON_PTS

```
public static final java.lang.String PROPERTY_BREAK_ON_PTS
```

DVR Property "dvrChunkBreakOnPTS": for specifying that DVR should be broken on PTS.

Valid values are "true" or "false" Add the property to Application/DVR/Properties section of Application.xml

Constant value: **dvrChunkBreakOnPTS**

See Also:

[DEFAULT_PROPERTY_BREAK_ON_PTS](#)

DEFAULT_PROPERTY_BREAK_ON_PTS

```
public static final boolean DEFAULT_PROPERTY_BREAK_ON_PTS
```

Default value for DVR Property "dvrChunkBreakOnPTS".

Default value is true.

Constant value: **true**

(continued from last page)

See Also:

[PROPERTY_BREAK_ON_PTS](#)

PROPERTY_REPEATER_SHARED_SECRET

```
public static final java.lang.String PROPERTY_REPEATER_SHARED_SECRET
```

DVR Property "dvrEncryptionSharedSecret": for encryption shared secret between origins and edges. In Origin-Edge scenarios when Wowza is using encryption, a shared secret must be defined for both origin and edges to encrypt the information sent between origin and edge so that encryption information is not revealed.

A String values.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrEncryptionSharedSecret**

PROPERTY_REPEATER_HEARTBEAT_DURATION

```
public static final java.lang.String PROPERTY_REPEATER_HEARTBEAT_DURATION
```

DVR Property "dvrRepeaterHeartbeatDuration": for time in ms that origin pings edges

A Integer Value.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrRepeaterHeartbeatDuration**

DEFAULT_PROPERTY_REPEATER_HEARTBEAT_DURATION

```
public static final int DEFAULT_PROPERTY_REPEATER_HEARTBEAT_DURATION
```

Constant value: **4000**

PROPERTY_CHUNK_DURATION_MINIMUM

```
public static final java.lang.String PROPERTY_CHUNK_DURATION_MINIMUM
```

DVR Property "dvrChunkDurationMinimum": for minimum chunk duration, in milliseconds.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrChunkDurationMinimum**

See Also:

[DEFAULT_PROPERTY_CHUNK_DURATION_MINIMUM](#)

DEFAULT_PROPERTY_CHUNK_DURATION_MINIMUM

```
public static final int DEFAULT_PROPERTY_CHUNK_DURATION_MINIMUM
```

Default value for DVR Property "dvrChunkDurationMinimum".

Default value is 1500 ms.
Constant value: **1500**

See Also:

[PROPERTY_CHUNK_DURATION_MINIMUM](#)

PROPERTY_CHUNK_MEMORY_CACHESIZE

```
public static final java.lang.String PROPERTY_CHUNK_MEMORY_CACHESIZE
```

(continued from last page)

DVR Property "chunkMemoryCacheSize": used by DvrDefaultChunkMemoryCache to set number of chunks stored in DVR in-memory cache.

Default value is [DEFAULT_CHUNK_MEMORY_CACHESIZE](#)

Add this to Application/DVR/Properties section of Application.xml
Constant value: **chunkMemoryCacheSize**

DEFAULT_CHUNK_MEMORY_CACHESIZE

```
public static final int DEFAULT_CHUNK_MEMORY_CACHESIZE
```

Default value for DVR Property "chunkMemoryCacheSize".

Default value is 10 chunks.
Constant value: **10**

See Also:

[PROPERTY_CHUNK_MEMORY_CACHESIZE](#)

PROPERTY_MBR_USE_UTC_FOR_ALIGNMENT

```
public static final java.lang.String PROPERTY_MBR_USE_UTC_FOR_ALIGNMENT
```

DVR Property "dvrMbrUseUtcForAlignment": when doing mbr alignment use utc time for alignment

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrMbrUseUtcForAlignment**

PROPERTY_MBR_ALIGNMENT_ALWAYS_START_AT_ZERO

```
public static final java.lang.String PROPERTY_MBR_ALIGNMENT_ALWAYS_START_AT_ZERO
```

DVR Property "abrIndexesAlwaysStartWithZero": when doing mbr alignment, always start the alignment at index 0.

Previous to 4.1.1.03, when DVR aligns single renditions into an ABR stream, it always starts the ABR rendition at index zero, not matter the indexes of the individual streams. The behavior was changed to better accommodate HTTP Origin, where indexes were innappropriately getting re-used after the session was restarted.

The default is false. Add the property to Application/DVR/Properties section of Application.xml
Constant value: **abrIndexesAlwaysStartWithZero**

PROPERTY_MBR_ALIGNMENT_CHUNKS_IN_RESERVE

```
public static final java.lang.String PROPERTY_MBR_ALIGNMENT_CHUNKS_IN_RESERVE
```

DVR Property "dvrAbrAlignmentChunksInReserve": when doing mbr alignment, implement code that ignores n chunks in each chunklist and determines a trim time based on the maximum time of all of the non-reserve chunks. This prevents some alignment issues when one stream is falling behind others

Introduced in 4.6.0.02

The default is 0. Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrAbrAlignmentChunksInReserve**

PROPERTY_MBR_MINIMUM_PACKETTIME_GAP_SIZE

```
public static final java.lang.String PROPERTY_MBR_MINIMUM_PACKETTIME_GAP_SIZE
```

DVR Property "dvrMbrMinimumPacketTimeGapSize": when doing mbr alignment gaps smaller than this are ignored.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrMbrMinimumPacketTimeGapSize**

(continued from last page)

See Also:

[DEFAULT_PROPERTY_MBR_MINIMUM_PACKETTIME_GAP_SIZE](#)

PROPERTY_MBR_ALTERNATIVE_MATCH_DELTA

```
public static final java.lang.String PROPERTY_MBR_ALTERNATIVE_MATCH_DELTA
```

DVR Property "dvrMbrAlternateMatchDelta": when finding alternative for a MBR gap, an alternate is considered a match is within this many ms of the gap in question.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrMbrAlternateMatchDelta**

See Also:

[DEFAULT_PROPERTY_MBR_ALTERNATIVE_MATCH_DELTA](#)

DEFAULT_PROPERTY_MBR_ALTERNATIVE_MATCH_DELTA

```
public static final int DEFAULT_PROPERTY_MBR_ALTERNATIVE_MATCH_DELTA
```

Default value for DVR Property "dvrMbrAlternateMatchDelta".

Default value is 1000 ms.
Constant value: **1000**

See Also:

[PROPERTY_MBR_ALTERNATIVE_MATCH_DELTA](#)

PROPERTY_PACKET_DURATION_MAXIMUM

```
public static final java.lang.String PROPERTY_PACKET_DURATION_MAXIMUM
```

DVR Property "dvrPacketDurationMaximum": for maximum packet duration, in milliseconds.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrPacketDurationMaximum**

See Also:

[DEFAULT_PROPERTY_PACKET_DURATION_MAXIMUM](#)

DEFAULT_PROPERTY_PACKET_DURATION_MAXIMUM

```
public static final int DEFAULT_PROPERTY_PACKET_DURATION_MAXIMUM
```

Default value for DVR Property "dvrChunkDurationMinimum".

Default value is 5000 ms.
Constant value: **5000**

See Also:

[PROPERTY_PACKET_DURATION_MAXIMUM](#)

DEFAULT_PROPERTY_MBR_MINIMUM_PACKETTIME_GAP_SIZE

```
public static final int DEFAULT_PROPERTY_MBR_MINIMUM_PACKETTIME_GAP_SIZE
```

Default value for DVR Property "dvrMbrMinimumPacketTimeGapSize".

Default value is 100 ms.
Constant value: **100**

(continued from last page)

See Also:

[PROPERTY_MBR_MINIMUM_PACKETTIME_GAP_SIZE](#)

PROPERTY_MBR_MINIMUM_UTCTIME_GAP_SIZE

```
public static final java.lang.String PROPERTY_MBR_MINIMUM_UTCTIME_GAP_SIZE
```

DVR Property "dvrMbrMinimumUtcTimeGapSize": when doing mbr alignment gaps smaller than this are ignored.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrMbrMinimumUtcTimeGapSize**

See Also:

[DEFAULT_PROPERTY_MBR_MINIMUM_UTCTIME_GAP_SIZE](#)

DEFAULT_PROPERTY_MBR_MINIMUM_UTCTIME_GAP_SIZE

```
public static final int DEFAULT_PROPERTY_MBR_MINIMUM_UTCTIME_GAP_SIZE
```

Default value for DVR Property "dvrMbrMinimumPacketTimeGapSize".

Default value is 750 ms.
Constant value: **750**

See Also:

[PROPERTY_MBR_MINIMUM_UTCTIME_GAP_SIZE](#)

PROPERTY_MAX_RECORDING_LENGTH

```
public static final java.lang.String PROPERTY_MAX_RECORDING_LENGTH
```

DVR Property "dvrMaximumRecordingLength": The maximum recording length in seconds. Recording stops when it reaches this value.

Add the property to Application/DVR/Properties section of Application.xml A value of zero means no maximum recording length is enforced. If used in conjunction with DVRWindow, should be slightly larger (1-2%) than DVRWindow.
Constant value: **dvrMaximumRecordingLength**

See Also:

[DEFAULT_PROPERTY_MAX_RECORDING_LENGTH](#)

DEFAULT_PROPERTY_MAX_RECORDING_LENGTH

```
public static final long DEFAULT_PROPERTY_MAX_RECORDING_LENGTH
```

Default value for DVR Property "dvrMaximumRecordingLength".

Default value is 108000 (30 hours)
Constant value: **108000**

See Also:

[PROPERTY_MAX_RECORDING_LENGTH](#)

PROPERTY_MEDIACACHE_ENABLED

```
public static final java.lang.String PROPERTY_MEDIACACHE_ENABLED
```

DVR Property "dvrMediaCacheEnabled"

Add the property to Application/DVR/Properties section of Application.xml Default is false.

(continued from last page)

Constant value: **dvrMediaCacheEnabled**

PROPERTY_MEDIACACHE_READER_CLASS

```
public static final java.lang.String PROPERTY_MEDIACACHE_READER_CLASS
```

DVR Property "dvrMediaCacheReaderClass"

Add the property to Application/DVR/Properties section of Application.xml

Constant value: **dvrMediaCacheReaderClass**

See Also:

[DEFAULT_PROPERTY_MEDIACACHE_READER_CLASS](#)

DEFAULT_PROPERTY_MEDIACACHE_READER_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_MEDIACACHE_READER_CLASS
```

Default value for DVR Property "dvrMediaCacheReaderClass".

Constant value: **com.wowza.wms.mediacache.impl.MediaCacheRandomAccessReader**

See Also:

[PROPERTY_MEDIACACHE_READER_CLASS](#)

PROPERTY_DEBUG_LOG_INVALID_CHUNK_DETAILS

```
public static final java.lang.String PROPERTY_DEBUG_LOG_INVALID_CHUNK_DETAILS
```

DVR Property "dvrLogInvalidChunkDetails": to control detailed logging information of DVR invalid chunks

The default is false, meaning do not log invalid chunks. Add the property to Application/DVR/Properties section of Application.xml

Constant value: **dvrLogInvalidChunkDetails**

See Also:

[PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED](#)

PROPERTY_DEBUG_LOG_INVALID_CHUNK_MATCHER

```
public static final java.lang.String PROPERTY_DEBUG_LOG_INVALID_CHUNK_MATCHER
```

DVR Property "dvrLogInvalidChunkMatcher": for matching stream names that will log chunk packets

Only affects logging if [PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED](#) is true.Constant value: **dvrLogInvalidChunkMatcher**

See Also:

[PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED](#)

PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED

```
public static final java.lang.String PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED
```

DVR Property "dvrMaxInvalidChunksLogged": for controlling maximum number of invalid DVR chunks logged.

The default is 10. Logging only occurs if property [PROPERTY_DEBUG_LOG_INVALID_CHUNK_DETAILS](#) is true. Add the property to Application/DVR/Properties section of Application.xmlConstant value: **dvrMaxInvalidChunksLogged**

See Also:

[DEFAULT_PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED](#)

(continued from last page)

[PROPERTY_DEBUG_LOG_INVALID_CHUNK_DETAILS](#)

DEFAULT_PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED

```
public static final int DEFAULT_PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED
```

Default value for DVR Property "dvrMaxInvalidChunksLogged".

Default value is 10.

Constant value: **10**

See Also:

[PROPERTY_DEBUG_LOG_INVALID_CHUNK_DETAILS](#)

[PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED](#)

PROPERTY_DEBUG_LOG_VALID_CHUNK_DETAILS

```
public static final java.lang.String PROPERTY_DEBUG_LOG_VALID_CHUNK_DETAILS
```

DVR Property "dvrLogValidChunkDetails": to control detailed logging information of DVR valid chunks

The default is false, meaning do not log valid chunks. Add the property to Application/DVR/Properties section of Application.xml

Constant value: **dvrLogValidChunkDetails**

See Also:

[PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED](#)

PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED

```
public static final java.lang.String PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED
```

DVR Property "dvrMaxValidChunksLogged": for controlling maximum number of valid DVR chunks logged.

The default is 10. Logging only occurs if property [PROPERTY_DEBUG_LOG_VALID_CHUNK_DETAILS](#) is true. Add the property to Application/DVR/Properties section of Application.xml

Constant value: **dvrMaxValidChunksLogged**

See Also:

[DEFAULT_PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED](#)

[PROPERTY_DEBUG_LOG_VALID_CHUNK_DETAILS](#)

DEFAULT_PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED

```
public static final int DEFAULT_PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED
```

Default value for DVR Property "dvrMaxValidChunksLogged".

Default value is 10.

Constant value: **10**

See Also:

[PROPERTY_DEBUG_LOG_VALID_CHUNK_DETAILS](#)

[PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED](#)

PROPERTY_DEBUG_LOG_VALID_CHUNK_MATCHER

```
public static final java.lang.String PROPERTY_DEBUG_LOG_VALID_CHUNK_MATCHER
```

(continued from last page)

DVR Property "dvrLogValidChunkMatcher": for matching stream names that will log chunk packets

Only affects logging if [PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED](#) is true.

Constant value: **dvrLogValidChunkMatcher**

See Also:

[PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED](#)

PROPERTY_DEBUG_TOSSED_HOLDERS

```
public static final java.lang.String PROPERTY_DEBUG_TOSSED_HOLDERS
```

DVR Property "dvrDebugTossedHolders": for turning on logging of packets that are being tossed.

Valid values are "true" or "false". Default is false.

Constant value: **dvrDebugTossedHolders**

PROPERTY_DEBUG_RAW_PACKETS

```
public static final java.lang.String PROPERTY_DEBUG_RAW_PACKETS
```

DVR Property "dvrDebugRawPackets": for turning on logging of incoming raw packets.

Valid values are "true" or "false".

Constant value: **dvrDebugRawPackets**

See Also:

[PROPERTY_DEBUG_MAXIMUM_RAW_PACKETS](#)

DEFAULT_PROPERTY_DEBUG_RAW_PACKETS

```
public static final boolean DEFAULT_PROPERTY_DEBUG_RAW_PACKETS
```

Default value for DVR Property "dvrDebugRawPackets".

Default value is false.

Constant value: **false**

See Also:

[PROPERTY_DEBUG_RAW_PACKETS](#)

[PROPERTY_DEBUG_RAW_PACKETS_MATCHER](#)

PROPERTY_DEBUG_RAW_PACKETS_MATCHER

```
public static final java.lang.String PROPERTY_DEBUG_RAW_PACKETS_MATCHER
```

DVR Property "dvrDebugRawPacketsMatcher": for matching stream names that will dump raw packet.

Only affects logging if [PROPERTY_DEBUG_RAW_PACKETS](#) is true.

Constant value: **dvrDebugRawPacketsMatcher**

See Also:

[PROPERTY_DEBUG_RAW_PACKETS](#)

PROPERTY_DEBUG_MAXIMUM_RAW_PACKETS

```
public static final java.lang.String PROPERTY_DEBUG_MAXIMUM_RAW_PACKETS
```

(continued from last page)

DVR Property "dvrDebugMaximumRawPackets": for setting maximum number of logged raw packets.

Valid values is an integer. 0 means there is no limit.

Only affects logging if [PROPERTY_DEBUG_RAW_PACKETS](#) is true.

Constant value: **dvrDebugMaximumRawPackets**

See Also:

[PROPERTY_DEBUG_RAW_PACKETS](#)

DEFAULT_PROPERTY_DEBUG_MAX_RAW_PACKETS

```
public static final int DEFAULT_PROPERTY_DEBUG_MAX_RAW_PACKETS
```

Default value for DVR Property "dvrDebugMaximumRawPackets".

Default value is 200 log statements.

Constant value: **200**

See Also:

[PROPERTY_DEBUG_MAXIMUM_RAW_PACKETS](#)

PROPERTY_DEBUG_STATE_CHANGE

```
public static final java.lang.String PROPERTY_DEBUG_STATE_CHANGE
```

DVR Property "dvrDebugStateChange": for logging state changes of DVR store.

Constant value: **dvrDebugStateChange**

PROPERTY_DEBUG_CHUNK_RETRIEVALS

```
public static final java.lang.String PROPERTY_DEBUG_CHUNK_RETRIEVALS
```

DVR Property "dvrDebugChunkRetrievals": for logging each chunk retrieval

Constant value: **dvrDebugChunkRetrievals**

PROPERTY_DEBUG_FAILED_CHUNK_RETRIEVALS

```
public static final java.lang.String PROPERTY_DEBUG_FAILED_CHUNK_RETRIEVALS
```

DVR Property "dvrDebugFailedChunkRetrievals": for logging info about each failed chunk retrieval

Constant value: **dvrDebugFailedChunkRetrievals**

PROPERTY_MAX_CHUNK_LOG

```
public static final java.lang.String PROPERTY_MAX_CHUNK_LOG
```

DVR Property "dvrMaxChunkLogCount": for maximum number of DVR chunks to log.

Maximum number of chunks to log recording information about in the wowzamedia_access.log file. As recording is continued past this value, there is no feedback for normal operation in the log. View directories and files created in [install-dir]/dvr for on-going feedback that recording is occurring. Add the property to Application/DVR/Properties section of Application.xml

Constant value: **dvrMaxChunkLogCount**

See Also:

[DEFAULT_PROPERTY_DVR_MAX_CHUNK_LOG](#)

DEFAULT_PROPERTY_DVR_MAX_CHUNK_LOG

```
public static final int DEFAULT_PROPERTY_DVR_MAX_CHUNK_LOG
```

(continued from last page)

Default value for DVR Property "dvrMaxChunkLogCount".

Default value is 10 logging statements.
Constant value: **10**

See Also:

[PROPERTY_MAX_CHUNK_LOG](#)

PROPERTY_MAX_RECALC_DURATION_LOG

```
public static final java.lang.String PROPERTY_MAX_RECALC_DURATION_LOG
```

DVR Property "dvrMaxRecountDurationLogCount": for maximum number of messages to log regarding recalculating DVR chunk duration

Maximum number of log statements recorded regarding chunk duration being recalculated. A value less than 0 means all statements will be logged with no limit.

Constant value: **dvrMaxRecountDurationLogCount**

See Also:

[DEFAULT_PROPERTY_MAX_RECALC_DURATION_LOG](#)

DEFAULT_PROPERTY_MAX_RECALC_DURATION_LOG

```
public static final int DEFAULT_PROPERTY_MAX_RECALC_DURATION_LOG
```

Default value for DVR Property "dvrMaxRecountDurationLogCount".

Default value is 30 logging statements.
Constant value: **30**

See Also:

[PROPERTY_MAX_RECALC_DURATION_LOG](#)

PROPERTY_DEBUG_METHODS

```
public static final java.lang.String PROPERTY_DEBUG_METHODS
```

DVR Property "dvrDebugManagerLogMethods": for turning on DVR Manager debug logging.

Valid values are "true" or "false".

Add the property to Application/DVR/Properties section of Application.xml

Constant value: **dvrDebugManagerLogMethods**

PROPERTY_DEBUG_REPEATER

```
public static final java.lang.String PROPERTY_DEBUG_REPEATER
```

DVR Property "dvrDebugRepeater": for turning on logging of DVR repeater

Valid values are "true" or "false".

Constant value: **dvrDebugRepeater**

PROPERTY_DEBUG_PLAYER_ADAPTER

```
public static final java.lang.String PROPERTY_DEBUG_PLAYER_ADAPTER
```

(continued from last page)

HTTP Streamer Property "dvrDebugPlayerAdapter": for turning on DVR Player Adapter debug logging for all streamer types.

Valid values are "true" or "false". (Default is false)

Add this property to Application/HTTPStreamer/Properties.
Constant value: **dvrDebugPlayerAdapter**

PROPERTY_DEBUG_SMOOTH_PLAYER_ADAPTER

```
public static final java.lang.String PROPERTY_DEBUG_SMOOTH_PLAYER_ADAPTER
```

HTTP Streamer Property "dvrDebugSmoothPlayerAdapter": for turning on DVR Player Smooth Adapter debug logging.

Valid values are "true" or "false". (Default is false)

Add this property to Application/HTTPStreamer/Properties.
Constant value: **dvrDebugSmoothPlayerAdapter**

PROPERTY_DEBUG_SANJOSE_PLAYER_ADAPTER

```
public static final java.lang.String PROPERTY_DEBUG_SANJOSE_PLAYER_ADAPTER
```

HTTP Streamer Property "dvrDebugSanJosePlayerAdapter": for turning on DVR Player San Jose Adapter debug logging.

Valid values are "true" or "false". (Default is false)

Add this property to Application/HTTPStreamer/Properties.
Constant value: **dvrDebugSanJosePlayerAdapter**

PROPERTY_DEBUG_CUPERTINO_PLAYER_ADAPTER

```
public static final java.lang.String PROPERTY_DEBUG_CUPERTINO_PLAYER_ADAPTER
```

HTTP Streamer Property "dvrDebugCupertinoPlayerAdapter": for turning on DVR Player Cupertino Adapter debug logging.

Valid values are "true" or "false". (Default is false)

Add this property to Application/HTTPStreamer/Properties.
Constant value: **dvrDebugCupertinoPlayerAdapter**

PROPERTY_DEBUG_MPEGDASH_PLAYER_ADAPTER

```
public static final java.lang.String PROPERTY_DEBUG_MPEGDASH_PLAYER_ADAPTER
```

HTTP Streamer Property "dvrDebugMPPEGDashPlayerAdapter": for turning on DVR Player MPEG-DASH Adapter debug logging.

Valid values are "true" or "false". (Default is false)

Add this property to Application/HTTPStreamer/Properties.
Constant value: **dvrDebugMPPEGDashPlayerAdapter**

PROPERTY_DEBUG_MBR_PLAYER_ADAPTER

```
public static final java.lang.String PROPERTY_DEBUG_MBR_PLAYER_ADAPTER
```

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HTTP Streamer or DVR Property "dvrDebugMbrPlayerAdapter": for turning on DVR MBR Player Adapter debug logging.

Valid values are "true" or "false". (Default is false)

Add this property to Application/HTTPStreamer/Properties.
Constant value: **dvrDebugMbrPlayerAdapter**

PROPERTY_DEBUG_MBR_PLAYER_ADAPTER_IF_SHIFTED_EMPTY

```
public static final java.lang.String  
PROPERTY_DEBUG_MBR_PLAYER_ADAPTER_IF_SHIFTED_EMPTY
```

HTTP Streamer or DVR Property "dvrDebugMbrPlayerAdapter": for turning on DVR MBR Player Adapter debug logging when null shifted entries is returned.

Valid values are "true" or "false". (Default is false)

Add this property to Application/HTTPStreamer/Properties.
Constant value: **dvrDebugMbrPlayerAdapterWhenShiftedEmpty**

PROPERTY_DEBUG_MBR_DETAILS_WHEN_RECORD_DNE

```
public static final java.lang.String PROPERTY_DEBUG_MBR_DETAILS_WHEN_RECORD_DNE
```

HTTP Streamer or DVR Property "dvrDebugMbrDetailsWhenRecordDNE": for turning on DVR MBR Player Adapter debug logging.

Valid values are "true" or "false". (Default is false)

Add this property to Application/HTTPStreamer/Properties.
Constant value: **dvrDebugMbrDetailsWhenRecordDNE**

PROPERTY_DEBUG_MBR_ALIGNMENT

```
public static final java.lang.String PROPERTY_DEBUG_MBR_ALIGNMENT
```

HTTP Streamer or DVR Property "dvrDebugMbrAlignment": for turning on logging of mbr alignment

Valid values are "true" or "false". Default is false.
Constant value: **dvrDebugMbrAlignment**

PROPERTY_DEBUG_MBR_ALIGNMENT_RESOLUTION

```
public static final java.lang.String PROPERTY_DEBUG_MBR_ALIGNMENT_RESOLUTION
```

DVR Property "dvrDebugMbrAlignmentResolution": for turning on logging of mbr alignment resolution (requested to actual)

Valid values are "true" or "false". Default is false.
Constant value: **dvrDebugMbrAlignmentResolution**

PROPERTY_DEBUG_PLAYLIST_REQUEST

```
public static final java.lang.String PROPERTY_DEBUG_PLAYLIST_REQUEST
```

DVR Property "dvrDebugPlaylistRequest": for turning on logging of DVR playlist requests.

Valid values are "true" or "false". Default is false.
Constant value: **dvrDebugPlaylistRequest**

(continued from last page)

PROPERTY_PLAYLIST_REQUEST_DELEGATE

```
public static final java.lang.String PROPERTY_PLAYLIST_REQUEST_DELEGATE
```

DVR Property "dvrPlaylistRequestDelegate": used to over-ride the class that generates a playlist request.

The delegate should extend DvrBasePlaylistRequestFactory

If unspecified, the standard DVR-time based delegate [DEFAULT_PLAYLIST_REQUEST_DELEGATE](#) is used

Add this to Application/DVR/Properties section of Application.xml

Constant value: **dvrPlaylistRequestDelegate**

DEFAULT_PLAYLIST_REQUEST_DELEGATE

```
public static final java.lang.String DEFAULT_PLAYLIST_REQUEST_DELEGATE
```

Constant value: **com.wowza.wms.dvr.impl.DvrStartDurationPlaylistRequestDelegate**

PROPERTY_ENCRYPTION_INFO_DELEGATE

```
public static final java.lang.String PROPERTY_ENCRYPTION_INFO_DELEGATE
```

DVR Property "dvrPlaylistEncryptionInfoDelegate": used to over-ride the encryption info on the playback side.

The specified delegate should extend com.wowza.wms.dvr.DvrBaseEncryptionInfoDelegate

Add this to Application/DVR/Properties section of Application.xml

Constant value: **dvrPlaylistEncryptionInfoDelegate**

PROPERTY_STREAM_ONLY_LIVE_STREAMS

```
public static final java.lang.String PROPERTY_STREAM_ONLY_LIVE_STREAMS
```

DVR Property "dvrStreamOnlyLiveStreams": used to allow only streaming of 'live' DVR streams. This means the DVR stream must actively be recording to be streamed. If not live, the streaming session will timeout when connecting.

Add this to Application/DVR/Properties section of Application.xml

Constant value: **dvrStreamOnlyLiveStreams**

PROPERTY_SANJOSE_PLAYLIST_MIMETYPE

```
public static final java.lang.String PROPERTY_SANJOSE_PLAYLIST_MIMETYPE
```

DVR Property "dvrSanJosePlaylistMimeType": used to over-ride the mime type for DVR San Jose F4m playlists.

Default value is "video/mp4"

Add this to Application/DVR/Properties section of Application.xml

Constant value: **dvrSanJosePlaylistMimeType**

PROPERTY_SANJOSE_PLAYLIST_DELIVERYTYPE

```
public static final java.lang.String PROPERTY_SANJOSE_PLAYLIST_DELIVERYTYPE
```

DVR Property "dvrSanJosePlaylistDeliveryType": used to over-ride the mime type for DVR San Jose F4m playlists.

Default value is "streaming"

Add this to Application/DVR/Properties section of Application.xml

Constant value: **dvrSanJosePlaylistDeliveryType**

PROPERTY_SANJOSE_PLAYLIST_VERSION

```
public static final java.lang.String PROPERTY_SANJOSE_PLAYLIST_VERSION
```

DVR Property "dvrSanJosePlaylistVersion": used to over-ride the version of the San Jose f4m playlist.

Default value is "2.0". Valid values are "1.0" and "2.0".

Constant value: **dvrSanJosePlaylistVersion**

See Also:

[SANJOSE_F4M_VERSION_1_0](#)

[Add this to Application/DVR/Properties section of Application.xml](#)

PROPERTY_SANJOSE_PLAYLIST_RECORDED_STREAMTYPE

```
public static final java.lang.String PROPERTY_SANJOSE_PLAYLIST_RECORDED_STREAMTYPE
```

DVR Property "dvrSanJosePlaylistRecordedStreamType": used to over-ride the stream type for non-live (recorded) DVR in San Jose f4m playlists.

Default value is #SANJOSE_F4M_STREAMTYPE_RECORDED.*

Constant value: **dvrSanJosePlaylistRecordedStreamType**

See Also:

[SANJOSE_F4M_STREAMTYPE_DVR](#)

[SANJOSE_F4M_STREAMTYPE_LIVE](#)

[SANJOSE_F4M_STREAMTYPE_LIVEORRECORDED](#)

Add this to Application/DVR/Properties section of Application.xml

PROPERTY_SANJOSE_PLAYLIST_LIVE_STREAMTYPE

```
public static final java.lang.String PROPERTY_SANJOSE_PLAYLIST_LIVE_STREAMTYPE
```

DVR Property "dvrSanJosePlaylistLiveStreamType": used to over-ride the stream type for live DVR in San Jose f4m playlists.

Default value is #SANJOSE_F4M_STREAMTYPE_DVR.

Constant value: **dvrSanJosePlaylistLiveStreamType**

See Also:

[SANJOSE_F4M_STREAMTYPE_DVR](#)

[SANJOSE_F4M_STREAMTYPE_LIVE](#)

[SANJOSE_F4M_STREAMTYPE_LIVEORRECORDED](#)

Add this to Application/DVR/Properties section of Application.xml

SANJOSE_F4M_STREAMTYPE_DVR

```
public static final java.lang.String SANJOSE_F4M_STREAMTYPE_DVR
```

Constant for San Jose stream type "dvr".

Constant value: **dvr**

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SANJOSE_F4M_STREAMTYPE_RECORDED

```
public static final java.lang.String SANJOSE_F4M_STREAMTYPE_RECORDED
```

Constant for San Jose stream type "recorded".
Constant value: **recorded**

SANJOSE_F4M_STREAMTYPE_LIVE

```
public static final java.lang.String SANJOSE_F4M_STREAMTYPE_LIVE
```

Constant for San Jose stream type "live".
Constant value: **live**

SANJOSE_F4M_STREAMTYPE_LIVEORRECORDED

```
public static final java.lang.String SANJOSE_F4M_STREAMTYPE_LIVEORRECORDED
```

Constant for San Jose stream type "liveOrRecorded".
Constant value: **liveOrRecorded**

SANJOSE_F4M_VERSION_1_0

```
public static final java.lang.String SANJOSE_F4M_VERSION_1_0
```

Constant for San Jose f4m version "1.0".
Constant value: **1.0**

SANJOSE_F4M_VERSION_2_0

```
public static final java.lang.String SANJOSE_F4M_VERSION_2_0
```

Constant for San Jose f4m version "2.0".
Constant value: **2.0**

SANJOSE_F4M_STREAMINGTYPE_STREAMING

```
public static final java.lang.String SANJOSE_F4M_STREAMINGTYPE_STREAMING
```

Constant for San Jose streaming type "streaming".
Constant value: **streaming**

MIMETYPE_VIDEO_MP4

```
public static final java.lang.String MIMETYPE_VIDEO_MP4
```

Constant for mime type "video/mp4".
Constant value: **video/mp4**

PROPERTY_SANJOSE_ABST_TIMESCALE

```
public static final java.lang.String PROPERTY_SANJOSE_ABST_TIMESCALE
```

DVR Property "dvrSanJosePlaylistAbstTimescale": used to over-ride the time-scale for abst files.

Default value is #SANJOSE_ABST_DEFAULT_TIMESCALE (1000), which means milliseconds.

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrSanJosePlaylistAbstTimescale**

PROPERTY_SANJOSE_ABST_DURATION_TOLERANCE

```
public static final java.lang.String PROPERTY_SANJOSE_ABST_DURATION_TOLERANCE
```

DVR Property "dvrSanJosePlaylistAbstDurationEqualityTolerance": used to over-ride the tolerance when determining equal chunks lengths.

Default value is #SANJOSE_ABST_DEFAULT_DURATION_EQUALITY_TOLERANCE (50), which means 50 milliseconds.

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrSanJosePlaylistAbstDurationTolerance**

DEFAULT_PROPERTY_SANJOSE_ABST_TIMESCALE

```
public static final int DEFAULT_PROPERTY_SANJOSE_ABST_TIMESCALE
```

Default value for property "dvrSanJosePlaylistAbstTimescale" #see [PROPERTY_SANJOSE_ABST_TIMESCALE](#)
Constant value: **1000**

DEFAULT_PROPERTY_SANJOSE_ABST_DURATION_TOLERANCE

```
public static final int DEFAULT_PROPERTY_SANJOSE_ABST_DURATION_TOLERANCE
```

Default value for property "dvrSanJosePlaylistAbstDurationTolerance" #see [PROPERTY_SANJOSE_ABST_DURATION_TOLERANCE](#)
Constant value: **4**

PROPERTY_CUPERTINO_PLAYLIST_FORCE_LIVE

```
public static final java.lang.String PROPERTY_CUPERTINO_PLAYLIST_FORCE_LIVE
```

DVR Property "dvrCupertinoPlaylistForceLive": used to override playlist request delegate logic that determines if playlist is live.

Default value is false

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrCupertinoPlaylistForceLive**

PROPERTY_CUPERTINO_PLAYLIST_FORCE_NONLIVE

```
public static final java.lang.String PROPERTY_CUPERTINO_PLAYLIST_FORCE_NONLIVE
```

DVR Property "dvrCupertinoPlaylistForceLive": used to override playlist request delegate logic that determines if playlist is live versus non-live.

Default value is false

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrCupertinoPlaylistForceNonLive**

PROPERTY_CUPERTINO_PLAYLIST_USE_GZIP

```
public static final java.lang.String PROPERTY_CUPERTINO_PLAYLIST_USE_GZIP
```

DVR Property "dvrCupertinoPlaylistUseGzip": used to force Cupertino playlist to use gzip if it is accepted

Default value is true

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrCupertinoPlaylistUseGzip**

PROPERTY_CUPERTINO_PLAYLIST_GZIP_THRESHOLD

```
public static final java.lang.String PROPERTY_CUPERTINO_PLAYLIST_GZIP_THRESHOLD
```

DVR Property "dvrCupertinoPlaylistGzipThreshold": when playlist is larger than this number of bytes, and gzip is enabled and accepted, the playlist will be compressed

Default value is [DEFAULT_CUPERTINO_PLAYLIST_GZIP_THRESHOLD](#)

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrCupertinoPlaylistGzipThreshold**

DEFAULT_CUPERTINO_PLAYLIST_GZIP_THRESHOLD

```
public static final int DEFAULT_CUPERTINO_PLAYLIST_GZIP_THRESHOLD
```

Default value for property "dvrCupertinoPlaylistGzipThreshold" #see
[PROPERTY_CUPERTINO_PLAYLIST_GZIP_THRESHOLD](#)
Constant value: **4000**

PROPERTY_CUPERTINO_ON_CHUNK_START_RESET_COUNTER

```
public static final java.lang.String PROPERTY_CUPERTINO_ON_CHUNK_START_RESET_COUNTER
```

DVR Property "dvrCupertinoOnChunkStartResetCounter": when a new chunk starts, reset internal tsPacketizer counters

Default value is false

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrCupertinoOnChunkStartResetCounter**

PROPERTY_CUPERTINO_PLAYLIST_ALLOW_CACHING

```
public static final java.lang.String PROPERTY_CUPERTINO_PLAYLIST_ALLOW_CACHING
```

DVR Property "dvrCupertinoPlaylistAllowCaching": used to force Cupertino playlist to set #EXT-X-ALLOW-CACHE: value

Default value is false

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrCupertinoPlaylistAllowCaching**

PROPERTY_CUPERTINO_PUT_END_TAG_BEFORE_CHUNKS

```
public static final java.lang.String PROPERTY_CUPERTINO_PUT_END_TAG_BEFORE_CHUNKS
```

DVR Property "dvrCupertinoPutEndTagBeforeChunks": if set to true, puts the EXT-X-ENDLIST before the DVR chunks.

Default value is false

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrCupertinoPutEndTagBeforeChunks**

PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_SEEK

```
public static final java.lang.String PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_SEEK
```

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DVR Property "dvrSmoothManifestLiveCanSeek": used to determine is CanSeek is enabled in smooth Manifest.

Default value is #DEFAULT_PROPERTY_SMOOTH_LIVE_CAN_SEEK, which is set to true.

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrSmoothManifestLiveCanSeek**

DEFAULT_PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_SEEK

```
public static final boolean DEFAULT_PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_SEEK
```

Constant value: **true**

PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_PAUSE

```
public static final java.lang.String PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_PAUSE
```

DVR Property "dvrSmoothManifestLiveCanPause": used to determine is CanPause is enabled in smooth Manifest.

Default value is #DEFAULT_PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_PAUSE, which is set to true.

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrSmoothManifestLiveCanPause**

DEFAULT_PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_PAUSE

```
public static final boolean DEFAULT_PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_PAUSE
```

Constant value: **true**

PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_SEEK

```
public static final java.lang.String PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_SEEK
```

DVR Property "dvrSmoothManifestRecordedCanSeek": used to determine is CanSeek is enabled in smooth Manifest.

Default value is #DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_SEEK, which is set to true.

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrSmoothManifestRecordedCanSeek**

DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_SEEK

```
public static final boolean DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_SEEK
```

Constant value: **true**

PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_PAUSE

```
public static final java.lang.String PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_PAUSE
```

DVR Property "dvrSmoothManifestRecordedCanPause": used to determine is CanPause is enabled in smooth Manifest.

Default value is #DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_PAUSE, which is set to true.

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrSmoothManifestRecordedCanPause**

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DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_PAUSE

```
public static final boolean DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_PAUSE
```

Constant value: **true**

PROPERTY_SMOOTH_MANIFEST_RECORDED_SPECIFY_DURATION

```
public static final java.lang.String  
PROPERTY_SMOOTH_MANIFEST_RECORDED_SPECIFY_DURATION
```

DVR Property "dvrSmoothManifestRecordedSpecifyDuration": used to determine if duration is specified. If not duration of zero is shown.

Default value is #DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_SPECIFY_DURATION, which is set to true.

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrSmoothManifestRecordedSpecifyDuration**

DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_SPECIFY_DURATION

```
public static final boolean DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_SPECIFY_DURATION
```

Constant value: **true**

PROPERTY_SMOOTH_MANIFEST_MAJOR_VERSION

```
public static final java.lang.String PROPERTY_SMOOTH_MANIFEST_MAJOR_VERSION
```

DVR Property "dvrSmoothManifestMajorVersion": used to determine Smooth manifest major version

Default value is #DEFAULT_PROPERTY_SMOOTH_MANIFEST_MAJOR_VERSION.

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrSmoothManifestMajorVersion**

DEFAULT_PROPERTY_SMOOTH_MANIFEST_MAJOR_VERSION

```
public static final int DEFAULT_PROPERTY_SMOOTH_MANIFEST_MAJOR_VERSION
```

Constant value: **2**

PROPERTY_SMOOTH_MANIFEST_MINOR_VERSION

```
public static final java.lang.String PROPERTY_SMOOTH_MANIFEST_MINOR_VERSION
```

DVR Property "dvrSmoothManifestMinorVersion": used to determine Smooth manifest major version

Default value is #DEFAULT_PROPERTY_SMOOTH_MANIFEST_MINOR_VERSION.

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrSmoothManifestMinorVersion**

DEFAULT_PROPERTY_SMOOTH_MANIFEST_MINOR_VERSION

```
public static final int DEFAULT_PROPERTY_SMOOTH_MANIFEST_MINOR_VERSION
```

(continued from last page)

Constant value: **1**

PROPERTY_SMOOTH_MANIFEST_VERBOSE_DURATION

```
public static final java.lang.String PROPERTY_SMOOTH_MANIFEST_VERBOSE_DURATION
```

DVR Property "dvrSmoothManifestVerboseDuration": used to force Smooth Manifest to include durations for each record

Default value is false

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrSmoothManifestVerboseDuration**

PROPERTY_SMOOTH_MANIFEST_H264_CODEC

```
public static final java.lang.String PROPERTY_SMOOTH_MANIFEST_H264_CODEC
```

DVR Property "dvrSmoothManifestH264Codec": used to force Smooth Manifest to use this as its FourCC H264 codec info.

Default value is set by Smooth Streaming

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrSmoothManifestH264Codec**

PROPERTY_STREAM_DATA

```
public static final java.lang.String PROPERTY_STREAM_DATA
```

Constant value: **dvrStreamRecordedData**

PROPERTY_CUPERTINO_ENABLE_DATE_EVENTS

```
public static final java.lang.String PROPERTY_CUPERTINO_ENABLE_DATE_EVENTS
```

HTTP Streamer Property "dvrCupertinoEnableDataEvents": used to stream ID3 data for HLS DVR streams

Default value is true

Add this to Application/HTTPStreamer/Properties section of Application.xml
Constant value: **dvrCupertinoEnableDataEvents**

PROPERTY_CUPERTINO_PLAYLIST_DISC_AT_ALTERNATES

```
public static final java.lang.String PROPERTY_CUPERTINO_PLAYLIST_DISC_AT_ALTERNATES
```

HTTP Streamer Property "dvrCupertinoPlaylistDiscontinuityAtAlternates": used to insert discontinuity tags into HLS stream if DVR store switches mid-playlist. The DVR store switches when alternates are pulled from other renditions to fill gaps.

Default value is true

Add this to Application/HTTPStreamer/Properties section of Application.xml
Constant value: **dvrCupertinoPlaylistDiscontinuityAtAlternates**

com.wowza.wms.dvr Class IDvrConstants.DvrTimeScale

```

java.lang.Object
  |
  +- java.lang.Enum
      |
      +- com.wowza.wms.dvr.IDvrConstants.DvrTimeScale
  
```

All Implemented Interfaces:

java.io.Serializable, Comparable

```

public static final class IDvrConstants.DvrTimeScale
extends Enum
  
```

Field Summary

public static final	DVR_TIME
public static final	PACKET_TIME
public static final	UTC_TIME

Method Summary

static IDvrConstants.DvrTimeScale	valueOf (String name)
static IDvrConstants.DvrTimeScale[]	values ()

Methods inherited from class java.lang.Enum

clone, compareTo, equals, finalize, getDeclaringClass, hashCode, name, ordinal, toString, valueOf

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.lang.Comparable

compareTo

Fields

(continued from last page)

DVR_TIME

```
public static final com.wowza.wms.dvr.IDvrConstants.DvrTimeScale DVR_TIME
```

PACKET_TIME

```
public static final com.wowza.wms.dvr.IDvrConstants.DvrTimeScale PACKET_TIME
```

UTC_TIME

```
public static final com.wowza.wms.dvr.IDvrConstants.DvrTimeScale UTC_TIME
```

Methods

values

```
public static IDvrConstants.DvrTimeScale\[\] values()
```

valueOf

```
public static IDvrConstants.DvrTimeScale valueOf(String name)
```

com.wowza.wms.dvr Interface IDvrEncryptionInfo

All Known Implementing Classes:

[CencInfo](#)

public interface **IDvrEncryptionInfo**
extends Cloneable

Interface for persisting encryption information for DVR.

Field Summary

public static final	ENCRYPTION_TYPE_CENC Common Encryption encryption type. Value: 3
public static final	ENCRYPTION_TYPE_CUPERTINO Cupertino AES encryption type. Value: 1
public static final	ENCRYPTION_TYPE_PLAYREADY Playready encryption type. Value: 2

Method Summary

Object	clone()
int	getEncryptionType() Serialize encryption info.
int	getSerializeSize() Return number of bytes required to serialize this encryption info.
byte[]	serialize() Serialize the encryption info, returning a byte buffer containing the serialized data.
int	serialize(byte[] buffer, int pos) Serialize the encryption info into buffer starting at position 'pos'.

Fields

ENCRYPTION_TYPE_CUPERTINO

public static final int **ENCRYPTION_TYPE_CUPERTINO**

Cupertino AES encryption type.
Constant value: **1**

(continued from last page)

ENCRYPTION_TYPE_PLAYREADY

```
public static final int ENCRYPTION_TYPE_PLAYREADY
```

Playready encryption type.
Constant value: **2**

ENCRYPTION_TYPE_CENC

```
public static final int ENCRYPTION_TYPE_CENC
```

Common Encryption encryption type.
Constant value: **3**

Methods

getSerializeSize

```
public int getSerializeSize()
```

Return number of bytes required to serialize this encryption info.

Returns:

number of bytes to serialize.

getEncryptionType

```
public int getEncryptionType()
```

Serialize encryption info.

The encryption should consist of the following:

- version (1 byte)
- encryption type (1 byte)
- length of 'blob' (2 bytes)
- byte blob (n bytes)

Returns:

encryption type (constants defined in this class)

serialize

```
public int serialize(byte[] buffer,  
                    int pos)
```

Serialize the encryption info into buffer starting at position 'pos'.

Parameters:

buffer - buffer to serialize to
pos - position to start serializing

Returns:

new position into buffer

(continued from last page)

serialize

```
public byte[] serialize()
```

Serialize the encryption info, returning a byte buffer containing the serialized data.

Returns:

byte buffer of serialized data

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.dvr Interface IDvrManifest

public interface **IDvrManifest**
extends

Interface for a DVR Store manifest. A DVR manifest collects type-specific manifest info, including:

- Audio manifest
- Video manifest
- data manifest
- time map manifest, to map DVR, packet and real time
- codec manifest to track codec information
- onMetadata manifest

The difference between retrieving 'recorded entries' and 'live entries' is an important one. Recorded Entries means every current manifest entry. Live Entries refers to a subset of these because a playlist will not include the very last entries, as some chunks must be available for buffering.

Field Summary	
public static final	CODEC_TYPE Constant for codec manifest type. Value: 999
public static final	MANIFEST_TAGNAME_CAN_PLAY Value: CanPlay
public static final	MANIFEST_TAGNAME_CAN_RECORD Value: CanRecord
public static final	MANIFEST_TAGNAME_CHUNK_GROUPING Value: ChunkGrouping
public static final	MANIFEST_TAGNAME_CURRENT_TIME Value: CurrentTime
public static final	MANIFEST_TAGNAME_HAS_ENCRYPTION Value: HasEncryption
public static final	MANIFEST_TAGNAME_PURGE_TIME Value: PurgeTime
public static final	ON_METADATA_TYPE Constant for 'onMetadata' manifest type. Value: 0
public static final	TIME_MAP_TYPE Constant for time map manifest type. Value: 998

Method Summary

void	addToManifest (java.util.List entries) Add manifest entries to the manifest
void	deserialize (byte[] bytes) Deserialize the manifest.
long	expandEndTime (int type, long dvrEndTime)
long	expandStartTime (int type, long dvrStartTime)
IDvrChunkIDHandler	getChunkIDHandler () Get the Chunk ID handler for this manifest
long	getClosestStartTime (int type, long dvrTime) Given a dvrTime and a manifest type, find the closest chunk starting time.
DvrManifestCodecEntry	getCodecEntryForTime (long dvrTime) Return most recent codec entry for a given DVR time.
long	getDvrTime (int type)
DvrManifestEntryRangeGroup	getEntriesToPurge (long purgeTime) Given a purge time, return a group of manifest ranges to purge.
DvrManifestEntry	getFirstEntry (int type) Given manifest type, get the first playlist manifest entry.
DvrManifestEntry	getLastLiveEntry (int type) Given manifest type, get the last playlist manifest entry.
DvrManifestEntry	getLastRecordedEntry (int type) Given manifest type and DVR time, get last entry.
int	getLastRecordedIndex (int type) Return last index of DVR entry for given type.
long	getLiveDuration (int type) Given manifest type, return DVR live duration in seconds
java.util.List	getLiveEntries (int type, long dvrStart) Given manifest type and DVR time, get a list of the live entries.
java.util.List	getLiveEntriesWithLimit (int type, long dvrTime, int limit) Given manifest type and DVR time, get a list of the live entries limiting number of returned items.
DvrChannelManifest	getManifestChannel (int type) For a given manifest type, return the channel manifest.
DvrManifestOnMetadataEntry	getMetadataEntryForTime (long dvrTime) Return most recent metadataEntry for a given DVR time.
int	getNextChunkIndex (String streamName, DvrPacketHolder vPackets, DvrPacketHolder aPackets)
int	getNextCodecIndex ()

int	getNextMetadataIndex()
int	getNextTimeMapIndex()
int	getNumberLiveEntries(int type, long dvrStart) Given manifest type and DVR time, get the number of live entries at the given time.
int	getNumberLiveEntries(int type, long dvrStart, long dvrEnd) Given manifest type and DVR time, get the number of live entries at the given time.
int	getNumberRecordedEntries(int type, long dvrStart) Given manifest type and DVR time, get the number of entries at the given time.
int	getNumberRecordedEntries(int type, long dvrStart, long dvrEnd) Given manifest type and DVR time, get the number of live entries at the given time.
long	getRecordedDuration(int type) Given manifest type, return DVR recorded duration in seconds
java.util.List	getRecordedEntries(int type) Get a copy of all manifest entries of a given type.
java.util.List	getRecordedEntries(int type, long dvrStartTime) Given manifest type and DVR time, get a list of recorded entries.
java.util.List	getRecordedEntries(int type, long dvrStartTime, long dvrEndTime) Given manifest type and DVR time, get a list of recorded entries.
java.util.List	getRecordedEntriesInRange(DvrManifestEntryRange range) Given a DvrManifestEntryRange, get a list of recorded entries in this range.
java.util.Map	getRecordedEntriesMap(int type) Get a copy of all manifest entries of a given type as a Map of indices.
java.util.List	getRecordedEntriesWithLimit(int type, long dvrTime, int limit) Given manifest type and DVR time, get a list of recorded entries limiting number of returned items.
DvrManifestEntry	getRecordedEntryByIndex(int type, int index) Get the manifest entry given a manifest type and an index.
DvrManifestEntry	getRecordedEntryByTimeKey(int type, long dvrTime) Get the manifest entry given a manifest type and a time (in DVR units)
IDvrTimeMap	getTimeMap()
boolean	hasAudio() Does manifest contain audio.
boolean	hasCodecData() Does manifest contain codec data.
boolean	hasData() Does manifest contain data.
boolean	hasOnMetadata() Does manifest contain onMetadata.

boolean	hasTimeMapData() Does manifest contain time map info.
boolean	hasVideo() Does manifest contain video.
void	importManifest(IDvrManifest manifest, boolean persist) Import the specified manifest into this manifest
void	initialize() Initialize the manifest.
java.util.List	purgeEntries(DvrManifestEntryRangeGroup ranges) Given a group of ranges, purge the manifest entries.
void	refreshManifest() Refresh the manifest.
byte[]	serialize(boolean ignoreEntries) Serialize the manifest.

Fields

ON_METADATA_TYPE

```
public static final int ON_METADATA_TYPE
```

Constant for 'onMetadata' manifest type.
Constant value: **0**

CODEC_TYPE

```
public static final int CODEC_TYPE
```

Constant for codec manifest type.
Constant value: **999**

TIME_MAP_TYPE

```
public static final int TIME_MAP_TYPE
```

Constant for time map manifest type.
Constant value: **998**

MANIFEST_TAGNAME_CAN_RECORD

```
public static final java.lang.String MANIFEST_TAGNAME_CAN_RECORD
```

Constant value: **CanRecord**

MANIFEST_TAGNAME_CAN_PLAY

```
public static final java.lang.String MANIFEST_TAGNAME_CAN_PLAY
```

Constant value: **CanPlay**

MANIFEST_TAGNAME_HAS_ENCRYPTION

```
public static final java.lang.String MANIFEST_TAGNAME_HAS_ENCRYPTION
```

Constant value: **HasEncryption**

MANIFEST_TAGNAME_CHUNK_GROUPING

```
public static final java.lang.String MANIFEST_TAGNAME_CHUNK_GROUPING
```

Constant value: **ChunkGrouping**

MANIFEST_TAGNAME_PURGE_TIME

```
public static final java.lang.String MANIFEST_TAGNAME_PURGE_TIME
```

Constant value: **PurgeTime**

MANIFEST_TAGNAME_CURRENT_TIME

```
public static final java.lang.String MANIFEST_TAGNAME_CURRENT_TIME
```

Constant value: **CurrentTime**

Methods

initialize

```
public void initialize()
```

Initialize the manifest. Called after the previous storage has been loaded but before any chunks are added.

refreshManifest

```
public void refreshManifest()
```

Refresh the manifest.

getChunkIDHandler

```
public IDvrChunkIDHandler getChunkIDHandler()
```

Get the Chunk ID handler for this manifest

Returns:

chunk id handler

addToManifest

```
public void addToManifest(java.util.List entries)
```

Add manifest entries to the manifest

Parameters:

(continued from last page)

entries - list of entries.

getRecordedEntries

```
public java.util.List getRecordedEntries(int type)
```

Get a copy of all manifest entries of a given type. Valid types include: [IVHost.CONTENTTYPE_AUDIO](#), [IVHost.CONTENTTYPE_VIDEO](#), [IVHost.CONTENTTYPE_DATA](#), [ON_METADATA_TYPE](#), [CODEC_TYPE](#), or [TIME_MAP_TYPE](#)

Parameters:

type - The manifest type.

Returns:

list of entries

getRecordedEntriesMap

```
public java.util.Map getRecordedEntriesMap(int type)
```

Get a copy of all manifest entries of a given type as a Map of indices. Valid types include: [IVHost.CONTENTTYPE_AUDIO](#), [IVHost.CONTENTTYPE_VIDEO](#), [IVHost.CONTENTTYPE_DATA](#), [ON_METADATA_TYPE](#), [CODEC_TYPE](#), or [TIME_MAP_TYPE](#)

Parameters:

type - the manifest type.

Returns:

map of entries

getRecordedEntriesInRange

```
public java.util.List getRecordedEntriesInRange(DvrManifestEntryRange range)
```

Given a [DvrManifestEntryRange](#), get a list of recorded entries in this range.

Parameters:

range - a range (which consists of a manifest type and a start and end index)

Returns:

list of entries

getLastRecordedEntry

```
public DvrManifestEntry getLastRecordedEntry(int type)
```

Given manifest type and DVR time, get last entry.

"Recorded Entries" includes those entries after the end of the playlist.

Parameters:

type - the manifest type.

Returns:

manifest entry

getRecordedEntryByTimeKey

```
public DvrManifestEntry getRecordedEntryByTimeKey(int type,  
long dvrTime)
```


(continued from last page)

Get the manifest entry given a manifest type and a time (in DVR units)

Parameters:

type - the manifest type.
dvrTime - DVR time

Returns:

manifest entry

getRecordedEntryByIndex

```
public DvrManifestEntry getRecordedEntryByIndex(int type,  
int index)
```

Get the manifest entry given a manifest type and an index.

Parameters:

type - the manifest type.
index - the index into the manifest

Returns:

manifest entry

getEntriesToPurge

```
public DvrManifestEntryRangeGroup getEntriesToPurge(long purgeTime)
```

Given a purge time, return a group of manifest ranges to purge. This method ensures that the purge entries are aligned by index so that audio and video always remain index aligned.

Parameters:

purgeTime - The DVR time to purge

Returns:

a group of ranges.

purgeEntries

```
public java.util.List purgeEntries(DvrManifestEntryRangeGroup ranges)
```

Given a group of ranges, purge the manifest entries.

Parameters:

ranges - Group of ranges

Returns:

A list of the purged items.

getMetadataEntryForTime

```
public DvrManifestOnMetadataEntry getMetadataEntryForTime(long dvrTime)
```

Return most recent metadataEntry for a given DVR time. The manifest for metadata entries is sparse-- it only stores items periodically. So for a given time t, the returned entry will exist at or before time t.

Parameters:

dvrTime - DVR time

Returns:

(continued from last page)

onMetadata Entry

getCodecEntryForTime

```
public DvrManifestCodecEntry getCodecEntryForTime(long dvrTime)
```

Return most recent codec entry for a given DVR time. The manifest for codec entries is sparse-- it only stores items periodically. So for a given time t, the returned entry will exist at or before time t.

Parameters:

dvrTime - DVR time

Returns:

Codec Entry

getNumberLiveEntries

```
public int getNumberLiveEntries(int type,  
    long dvrStart)
```

Given manifest type and DVR time, get the number of live entries at the given time.

"Live Entries" means that a couple of the last entries will not be included as they are too close to the live point to be part of the playlist.

Parameters:

type - the manifest type.

dvrStart - DVR time

Returns:

number of entries.

getNumberLiveEntries

```
public int getNumberLiveEntries(int type,  
    long dvrStart,  
    long dvrEnd)
```

Given manifest type and DVR time, get the number of live entries at the given time.

"Live Entries" means that a couple of the last entries will not be included as they are too close to the live point to be part of the playlist.

Parameters:

type - the manifest type.

dvrStart - DVR time

dvrEnd - end DVR time

Returns:

number of entries.

getNumberRecordedEntries

```
public int getNumberRecordedEntries(int type,  
    long dvrStart)
```

Given manifest type and DVR time, get the number of entries at the given time.

"Recorded Entries" includes those entries after the end of the playlist.

Parameters:

(continued from last page)

type - the manifest type.
dvrStart - DVR time

Returns:

number of entries.

getNumberRecordedEntries

```
public int getNumberRecordedEntries(int type,  
    long dvrStart,  
    long dvrEnd)
```

Given manifest type and DVR time, get the number of live entries at the given time.

"Recorded Entries" includes those entries after the end of the playlist.

Parameters:

type - the manifest type.
dvrStart - DVR time
dvrEnd - end DVR time

Returns:

number of entries.

getFirstEntry

```
public DvrManifestEntry getFirstEntry(int type)
```

Given manifest type, get the first playlist manifest entry.

Parameters:

type - the manifest type.

Returns:

manifest entry

getLastLiveEntry

```
public DvrManifestEntry getLastLiveEntry(int type)
```

Given manifest type, get the last playlist manifest entry.

"Live Entries" means that a couple of the last entries will not be included as they are too close to the live point to be part of the playlist.

Parameters:

type - the manifest type.

Returns:

manifest entry

getLiveEntries

```
public java.util.List getLiveEntries(int type,  
    long dvrStart)
```

Given manifest type and DVR time, get a list of the live entries.

"Live Entries" means that a couple of the last entries will not be included as they are too close to the live point to be part of the playlist.

(continued from last page)

Parameters:

type - the manifest type.
dvrStart - DVR time

Returns:

list of entries.

getLiveEntriesWithLimit

```
public java.util.List getLiveEntriesWithLimit(int type,  
        long dvrTime,  
        int limit)
```

Given manifest type and DVR time, get a list of the live entries limiting number of returned items.

"Live Entries" means that a couple of the last entries will not be included as they are too close to the live point to be part of the playlist.

Parameters:

type - the manifest type.
dvrTime - DVR time
limit - maximum number of returned items

Returns:

list of entries.

getRecordedEntriesWithLimit

```
public java.util.List getRecordedEntriesWithLimit(int type,  
        long dvrTime,  
        int limit)
```

Given manifest type and DVR time, get a list of recorded entries limiting number of returned items.

"Recorded Entries" includes those entries after the end of the playlist.

Parameters:

type - the manifest type.
dvrTime - DVR time
limit - maximum number of returned items

Returns:

list of entries.

getRecordedEntries

```
public java.util.List getRecordedEntries(int type,  
        long dvrStartTime)
```

Given manifest type and DVR time, get a list of recorded entries.

"Recorded Entries" includes those entries after the end of the playlist.

Parameters:

type - the manifest type.
dvrStartTime - DVR time

Returns:

list of entries.

getRecordedEntries

```
public java.util.List getRecordedEntries(int type,  
    long dvrStartTime,  
    long dvrEndTime)
```

Given manifest type and DVR time, get a list of recorded entries.

"Recorded Entries" includes those entries after the end of the playlist.

Parameters:

type - the manifest type.
dvrStartTime - DVR time
dvrEndTime - DVR end time

Returns:

list of entries.

getRecordedDuration

```
public long getRecordedDuration(int type)
```

Given manifest type, return DVR recorded duration in seconds

"Recorded Entries" includes those entries after the end of the "live" playlist.

Parameters:

type - the manifest type.

Returns:

duration in seconds

getLiveDuration

```
public long getLiveDuration(int type)
```

Given manifest type, return DVR live duration in seconds

"Recorded Entries" includes those entries after the end of the "live" playlist.

Parameters:

type - the manifest type.

Returns:

duration in seconds

getDvrTime

```
public long getDvrTime(int type)
```

getLastRecordedIndex

```
public int getLastRecordedIndex(int type)
```

Return last index of DVR entry for given type.

Parameters:

(continued from last page)

type

Returns:

index, or -1 if type does not exist

getNextChunkIndex

```
public int getNextChunkIndex(String streamName,  
    DvrPacketHolder vPackets,  
    DvrPacketHolder aPackets)
```

getNextMetadataIndex

```
public int getNextMetadataIndex()
```

getNextCodecIndex

```
public int getNextCodecIndex()
```

getNextTimeMapIndex

```
public int getNextTimeMapIndex()
```

getManifestChannel

```
public DvrChannelManifest getManifestChannel(int type)
```

For a given manifest type, return the channel manifest.

Parameters:

type

Returns:

channel manifest

importManifest

```
public void importManifest(IDvrManifest manifest,  
    boolean persist)
```

Import the specified manifest into this manifest

Parameters:manifest
persist

getClosestStartTime

```
public long getClosestStartTime(int type,  
    long dvrTime)
```

(continued from last page)

Given a dvrTime and a manifest type, find the closest chunk starting time.

Parameters:

type - manifest type
dvrTime - DVR time

Returns:

time that corresponds to the closest start time of the given manifest type

expandEndTime

```
public long expandEndTime(int type,  
    long dvrEndTime)
```

expandStartTime

```
public long expandStartTime(int type,  
    long dvrStartTime)
```

hasVideo

```
public boolean hasVideo()
```

Does manifest contain video.

Returns:

true if it contains video.

hasAudio

```
public boolean hasAudio()
```

Does manifest contain audio.

Returns:

true if it contains audio.

hasData

```
public boolean hasData()
```

Does manifest contain data.

Returns:

true if it contains data.

hasOnMetadata

```
public boolean hasOnMetadata()
```

Does manifest contain onMetadata.

Returns:

true if it contains onMetadata.

hasCodecData

```
public boolean hasCodecData()
```

Does manifest contain codec data.

Returns:

true if it contains codec data

hasTimeMapData

```
public boolean hasTimeMapData()
```

Does manifest contain time map info.

Returns:

true if it contains time map info.

serialize

```
public byte[] serialize(boolean ignoreEntries)
```

Serialize the manifest.

Parameters:

`ignoreEntries` - If true, the individual manifest entries are not serialized.

Returns:

byte array of serialized data

deserialize

```
public void deserialize(byte[] bytes)
```

Deserialize the manifest. Should be called after default constructor for manifest has been called.

Parameters:

`bytes` - buffer of bytes to deserialize

getTimeMap

```
public IDvrTimeMap getTimeMap()
```


com.wowza.wms.dvr Interface IDvrPacketConverter

public interface **IDvrPacketConverter**
extends

Interface for creating DVR chunks from a set of packets.

Method Summary

DvrChunk	createDvrAudioChunk (long dvrTime, int index, int duration, DvrPacketHolder holder) Create audio chunk from set of packets.
DvrChunk	createDvrDataChunk (long dvrTime, int index, int duration, DvrPacketHolder holder) Create data chunk from set of packets.
DvrChunk	createDvrOnMetadataChunk (long dvrTime, long pt, AMFPacket metaPacket) Create onMetadata chunk from set of packets.
DvrChunk	createDvrVideoChunk (long dvrTime, int index, int duration, DvrPacketHolder holder) Create video chunk from set of packets.

Methods

createDvrAudioChunk

```
public DvrChunk createDvrAudioChunk(long dvrTime,
    int index,
    int duration,
    DvrPacketHolder holder)
```

Create audio chunk from set of packets.

Parameters:

dvrTime - DVR start time in milliseconds
index - index of DVR chunk
duration - Duration in milliseconds
holder - packet holder

Returns:

the created chunk or null if chunk not created.

createDvrVideoChunk

```
public DvrChunk createDvrVideoChunk(long dvrTime,
    int index,
    int duration,
    DvrPacketHolder holder)
```

Create video chunk from set of packets.

Parameters:

(continued from last page)

dvrTime - DVR start time in milliseconds
index - index of DVR chunk
duration - Duration in milliseconds
holder - packet holder

Returns:

the created chunk or null if chunk not created.

createDvrDataChunk

```
public DvrChunk createDvrDataChunk(long dvrTime,  
    int index,  
    int duration,  
    DvrPacketHolder holder)
```

Create data chunk from set of packets.

Parameters:

dvrTime - DVR start time in milliseconds
index - index of DVR chunk
duration - Duration in milliseconds
holder - packet holder

Returns:

the created chunk or null if chunk not created.

createDvrOnMetadataChunk

```
public DvrChunk createDvrOnMetadataChunk(long dvrTime,  
    long pt,  
    AMFPacket metaPacket)
```

Create onMetadata chunk from set of packets.

Parameters:

dvrTime - DVR start time in milliseconds
pt - Packet time
metaPacket - metadata packet

Returns:

the created chunk or null if chunk not created.

com.wowza.wms.dvr Interface IDvrPacketWriter

public interface **IDvrPacketWriter**
extends

Interface for chunking and storing packets for DVR.

Method Summary

void	addToChunk (DvrPacketHolder holder)
boolean	canRecordAudio ()
boolean	canRecordData ()
boolean	canRecordVideo ()
void	endChunk (long videoEndTime, long audioEndTime)
void	resetStream ()
void	sendOnMetadata (long pt, AMFPacket metaPacket)
void	setCodecInfoAudio (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	setCodecInfoVideo (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	startChunk (int streamMode, int videoCodecId, int audioCodecId, long timecode, long utcTimecode)

Methods

sendOnMetadata

```
public void sendOnMetadata(long pt,
    AMFPacket metaPacket)
```

startChunk

```
public void startChunk(int streamMode,
    int videoCodecId,
    int audioCodecId,
    long timecode,
    long utcTimecode)
```

(continued from last page)

addToChunk

```
public void addToChunk(DvrPacketHolder holder)
```

endChunk

```
public void endChunk(long videoEndTime,  
                    long audioEndTime)
```

setCodecInfoAudio

```
public void setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
codecInfoAudio)
```

setCodecInfoVideo

```
public void setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo)
```

resetStream

```
public void resetStream()
```

canRecordAudio

```
public boolean canRecordAudio()
```

canRecordVideo

```
public boolean canRecordVideo()
```

canRecordData

```
public boolean canRecordData()
```

com.wowza.wms.dvr Interface IDvrPlayerAdapter

public interface **IDvrPlayerAdapter**
extends

Field Summary

public static final	QUERY_PARAM_DVR Value: DVR
---------------------	--

Method Summary

int	calcBitrate (IDvrStreamStore store, int type, long t)
String	determineStreamVersion (IDvrStreamManager dvrMgr, String baseStreamName)
DvrPlaylistRequest	getDvrPlaylistRequest (IHTTPStreamerApplicationContext appContext, IDvrStreamStore store, java.util.Map queryMap)
DvrPlaylistRequest	getDvrPlaylistRequest (IHTTPStreamerApplicationContext appContext, java.util.List stores, java.util.Map queryMap)
IDvrMbrPlaylistAlignm ent	getPlaylistAlignment (IHTTPStreamerSession httpStreamerSession)
boolean	isPlaylistReady (IDvrStreamStore store, DvrPlaylistRequest playlistRequest)
boolean	isPlaylistReady (java.util.List stores, DvrPlaylistRequest dvrPlaylistRequest)
void	setEnabledDataEvents (boolean enableDataEvents)

Fields

QUERY_PARAM_DVR

public static final java.lang.String **QUERY_PARAM_DVR**

Constant value: **DVR**

Methods

(continued from last page)

isPlaylistReady

```
public boolean isPlaylistReady(IDvrStreamStore store,  
    DvrPlaylistRequest playlistRequest)
```

isPlaylistReady

```
public boolean isPlaylistReady(java.util.List stores,  
    DvrPlaylistRequest dvrPlaylistRequest)
```

determineStreamVersion

```
public String determineStreamVersion(IDvrStreamManager dvrMgr,  
    String baseStreamName)
```

calcBitrate

```
public int calcBitrate(IDvrStreamStore store,  
    int type,  
    long t)
```

getDvrPlaylistRequest

```
public DvrPlaylistRequest getDvrPlaylistRequest(IHTTPStreamerApplicationContext  
    appContext,  
    IDvrStreamStore store,  
    java.util.Map queryMap)
```

getDvrPlaylistRequest

```
public DvrPlaylistRequest getDvrPlaylistRequest(IHTTPStreamerApplicationContext  
    appContext,  
    java.util.List stores,  
    java.util.Map queryMap)
```

getPlaylistAlignment

```
public IDvrMbrPlaylistAlignment getPlaylistAlignment(IHTTPStreamerSession  
    httpStreamerSession)
```

setEnabledDataEvents

```
public void setEnabledDataEvents(boolean enableDataEvents)
```

com.wowza.wms.dvr Interface IDvrPrivateConstants

All Subinterfaces:

[IDvrConstants](#)

public interface **IDvrPrivateConstants**
extends

Internal and public constants. Public constants are contained in [IDvrConstants](#). Undocumented/Private in this file. To make the constant public (and documented in javadocs, simply move to [IDvrConstants](#))

Field Summary	
public static final	CHUNK_FILENAME_FORMAT_AUDIO Value: A-%04d_%02d_%02d_%03d.m4fa
public static final	CHUNK_FILENAME_FORMAT_DATA Value: D-%04d_%02d_%02d_%03d.m4fd
public static final	CHUNK_FILENAME_FORMAT_METADATA Value: M-%04d_%02d_%02d_%03d.m4fm
public static final	CHUNK_FILENAME_FORMAT_VIDEO Value: V-%04d_%02d_%02d_%03d.m4fv
public static final	CHUNK_FOLDER_FORMAT Value: %04d_%02d_%02d
public static final	DEFAULT_PROPERTY_AUDIO_GROUP_COUNT Default value for DVR Property "dvrAudioGroupCount". Value: 3
public static final	DEFAULT_PROPERTY_MANIFEST_PURGE_SIZE Default value for DVR Property "dvrManifestPurgeCacheSize". Value: 10
public static final	DEFAULT_PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION Default value for DVR Property "dvrMaxAllowableChunkDuration". Value: 120000
public static final	DEFAULT_PROPERTY_MAX_SAVE HOLDER_SIZE Value: 500
public static final	DEFAULT_PROPERTY_MINIMUM_AVAILABLE_CHUNKS Default value for DVR Property "dvrMinimumAvailableChunks". Value: 3
public static final	DEFAULT_PROPERTY_PLAYLIST_CHUNKS_HELD_BACK Default value for DVR Property "dvrPlaylistChunksHeldBack". Value: 2

public static final	DEFAULT_PROPERTY_PURGE_CONTROL_CLASS Default value for DVR Property "dvrPurgeControlClass". Value: com.wowza.wms.dvr.impl.DvrPurgeController
public static final	DEFAULT_PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER Default value for DVR Property "dvrRecalcDurationMaxAVStartDifference". Value: 500
public static final	DEFAULT_PROPERTY_RECALC_DURATION_TRIGGER_SIZE Default value for DVR Property "dvrRecalcDurationMaxChunkSize". Value: 60000
public static final	DEFAULT_PROPERTY_STREAM_IDLE_TIMEOUT Default value for DVR Property "streamTimeout". Value: 300000
public static final	DEFAULT_PROPERTY_STREAM_STARTUP_TIMEOUT Default value for DVR Property "streamStartupTimeout". Value: 60000
public static final	DEFAULT_PROPERTY_UTC_ALIGN_TO_AUDIO Default value for DVR Property "dvrUtcAlignToAudio". Value: true
public static final	DEFAULT_PROPERTY_UTC_USE_WOWZA_PACKET_ARRIVAL Default value for DVR Property "dvrUtcUseWowzaPacketArrivalTime". Value: false
public static final	DEFAULT_PROPERTY_WAIT_FOR_CODEC_TIME Default value for DVR Property "dvrWaitForCodecTime". Value: 8000
public static final	PROPERTY_AUDIO_GROUP_COUNT DVR Property "dvrAudioGroupCount": for number of audio packets to group together. Value: dvrAudioGroupCount
public static final	PROPERTY_DEBUG_MBR_RESOLVER Value: dvrDebugMbrResolver
public static final	PROPERTY_DEBUG_MBR_RESOLVER_GAP_DETAILS Value: dvrDebugMbrResolverGapDetails
public static final	PROPERTY_DEBUG_MBR_RESOLVER_INTERSECTION_DETAILS Value: dvrDebugMbrResolverIntersectionDetails
public static final	PROPERTY_INTERCEPTOR_CHUNK_DELEGATE DVR Property "dvrChunkInterceptorDelegate": for specifying a delegate that determines if DVR chunk should be stored or not. Value: dvrChunkInterceptorDelegate
public static final	PROPERTY_MANIFEST_PURGE_CACHE_SIZE DVR Property "dvrManifestPurgeCacheSize": for specifying how many purged chunks are kept around just in case they are requested. Value: dvrManifestPurgeCacheSize

public static final	PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION DVR Property "dvrMaxAllowableChunkDuration": for setting maximum chunk duration. Value: dvrMaxAllowableChunkDuration
public static final	PROPERTY_MAX_SAVE HOLDER_SIZE Value: dvrMaxSaveHolderSize
public static final	PROPERTY_MBR_USE_SIMPLEALIGNMENT HTTP Streamer Property "dvrMbrUseSimpleAligner": for defaulting to a simple mbr aligner Value: dvrMbrUseSimpleAligner
public static final	PROPERTY_MINIMUM_AVAILABLE_CHUNKS DVR Property "dvrMinimumAvailableChunks": for specifying how many chunks must be available in order to play back the DVR recording. Value: dvrMinimumAvailableChunks
public static final	PROPERTY_PLAYLIST_CHUNKS_HELD_BACK DVR Property "dvrPlaylistChunksHeldBack": for specifying how many chunks are held back must be available in order to play back the DVR recording. Value: dvrPlaylistChunksHeldBack
public static final	PROPERTY_PURGE_CONTROL_CLASS DVR Property "dvrPurgeControlClass": for controlling the class responsible for determining which chunks to purge Value: dvrPurgeControlClass
public static final	PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER DVR Property "dvrRecalcDurationMaxAVStartDifference": for triggering recalculation of DVR chunk duration by examining each packet Value: dvrRecalcDurationMaxAVStartDifference
public static final	PROPERTY_RECALC_DURATION_TRIGGER_SIZE DVR Property "dvrRecalcDurationMaxChunkSize": for triggering recalculation of DVR chunk duration by examining each packet Value: dvrRecalcDurationMaxChunkSize
public static final	PROPERTY_UTC_ALIGN_TO_AUDIO DVR Property "dvrUtcAlignToAudio": determines if calculated Utc time gets aligned to audio or video. Value: dvrUtcAlignToAudio
public static final	PROPERTY_UTC_DELEGATE_CLASS DVR Property "dvrUtcTimeDelegate": for specifying a delegate that the utc time for a given chunk. Value: dvrUtcTimeDelegate
public static final	PROPERTY_UTC_USE_WOWZA_PACKET_ARRIVAL DVR Property "dvrUtcUseWowzaPacketArrivalTime": determines if Utc times are based on the time the packet reaches Wowza or the time the chunks reach DVR (default). Value: dvrUtcUseWowzaPacketArrivalTime
public static final	PROPERTY_VERIFY_CHUNK_EXISTENCE_ON_MANIFEST_LOAD Value: dvrVerifyChunkExistenceOnManifestLoad

```
public static final
```

```
PROPERTY\_WAIT\_FOR\_CODEC\_TIME
```

DVR Property "dvrWaitForCodecTime": for how long DVR will wait to get the codec information.

Value: **dvrWaitForCodecTime**

Fields

PROPERTY_INTERCEPTOR_CHUNK_DELEGATE

```
public static final java.lang.String PROPERTY_INTERCEPTOR_CHUNK_DELEGATE
```

DVR Property "dvrChunkInterceptorDelegate": for specifying a delegate that determines if DVR chunk should be stored or not. It's only here to allow a backdoor method of testing mbr streams that have gaps.

Constant value: **dvrChunkInterceptorDelegate**

PROPERTY_UTC_DELEGATE_CLASS

```
public static final java.lang.String PROPERTY_UTC_DELEGATE_CLASS
```

DVR Property "dvrUtcTimeDelegate": for specifying a delegate that the utc time for a given chunk. Currently in private constants until article is written.

Constant value: **dvrUtcTimeDelegate**

PROPERTY_UTC_ALIGN_TO_AUDIO

```
public static final java.lang.String PROPERTY_UTC_ALIGN_TO_AUDIO
```

DVR Property "dvrUtcAlignToAudio": determines if calculated Utc time gets aligned to audio or video. Note: Currently in private constants until article is written.

Constant value: **dvrUtcAlignToAudio**

DEFAULT_PROPERTY_UTC_ALIGN_TO_AUDIO

```
public static final boolean DEFAULT_PROPERTY_UTC_ALIGN_TO_AUDIO
```

Default value for DVR Property "dvrUtcAlignToAudio". Default value is true.

Constant value: **true**

See Also:

[PROPERTY_UTC_ALIGN_TO_AUDIO](#)

PROPERTY_UTC_USE_WOWZA_PACKET_ARRIVAL

```
public static final java.lang.String PROPERTY_UTC_USE_WOWZA_PACKET_ARRIVAL
```

DVR Property "dvrUtcUseWowzaPacketArrivalTime": determines if Utc times are based on the time the packet reaches Wowza or the time the chunks reach DVR (default). Note: Currently in private constants until article is written.

Constant value: **dvrUtcUseWowzaPacketArrivalTime**

DEFAULT_PROPERTY_UTC_USE_WOWZA_PACKET_ARRIVAL

```
public static final boolean DEFAULT_PROPERTY_UTC_USE_WOWZA_PACKET_ARRIVAL
```

Default value for DVR Property "dvrUtcUseWowzaPacketArrivalTime". Default value is false.

Constant value: **false**

See Also:

(continued from last page)

[PROPERTY_UTC_USE_WOWZA_PACKET_ARRIVAL](#)

PROPERTY_MINIMUM_AVAILABLE_CHUNKS

```
public static final java.lang.String PROPERTY_MINIMUM_AVAILABLE_CHUNKS
```

DVR Property "dvrMinimumAvailableChunks": for specifying how many chunks must be available in order to play back the DVR recording.

It is not recommended to have this set to less than three, as players typically require this many chunks.

Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrMinimumAvailableChunks**

See Also:

[DEFAULT_PROPERTY_MINIMUM_AVAILABLE_CHUNKS](#)

DEFAULT_PROPERTY_MINIMUM_AVAILABLE_CHUNKS

```
public static final int DEFAULT_PROPERTY_MINIMUM_AVAILABLE_CHUNKS
```

Default value for DVR Property "dvrMinimumAvailableChunks".

Default value is 3.

Constant value: **3**

See Also:

[PROPERTY_MINIMUM_AVAILABLE_CHUNKS](#)

PROPERTY_PLAYLIST_CHUNKS_HELD_BACK

```
public static final java.lang.String PROPERTY_PLAYLIST_CHUNKS_HELD_BACK
```

DVR Property "dvrPlaylistChunksHeldBack": for specifying how many chunks are held back must be available in order to play back the DVR recording. Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrPlaylistChunksHeldBack**

See Also:

[PROPERTY_PLAYLIST_CHUNKS_HELD_BACK](#)

DEFAULT_PROPERTY_PLAYLIST_CHUNKS_HELD_BACK

```
public static final int DEFAULT_PROPERTY_PLAYLIST_CHUNKS_HELD_BACK
```

Default value for DVR Property "dvrPlaylistChunksHeldBack".

Default value is 2.

Constant value: **2**

See Also:

[PROPERTY_PLAYLIST_CHUNKS_HELD_BACK](#)

PROPERTY_MANIFEST_PURGE_CACHE_SIZE

```
public static final java.lang.String PROPERTY_MANIFEST_PURGE_CACHE_SIZE
```

(continued from last page)

DVR Property "dvrManifestPurgeCacheSize": for specifying how many purged chunks are kept around just in case they are requested.

When purging chunks occurs, the DVR keeps a few chunks around that normally would have been purged just in case they are requested.

Add the property to Application/DVR/Properties section of Application.xml.
Constant value: **dvrManifestPurgeCacheSize**

See Also:

[DEFAULT_PROPERTY_MANIFEST_PURGE_SIZE](#)

DEFAULT_PROPERTY_MANIFEST_PURGE_SIZE

```
public static final int DEFAULT_PROPERTY_MANIFEST_PURGE_SIZE
```

Default value for DVR Property "dvrManifestPurgeCacheSize".

Default value is 10.
Constant value: **10**

See Also:

[PROPERTY_MANIFEST_PURGE_CACHE_SIZE](#)

PROPERTY_VERIFY_CHUNK_EXISTENCE_ON_MANIFEST_LOAD

```
public static final java.lang.String PROPERTY_VERIFY_CHUNK_EXISTENCE_ON_MANIFEST_LOAD
```

Constant value: **dvrVerifyChunkExistenceOnManifestLoad**

PROPERTY_PURGE_CONTROL_CLASS

```
public static final java.lang.String PROPERTY_PURGE_CONTROL_CLASS
```

DVR Property "dvrPurgeControlClass": for controlling the class responsible for determining which chunks to purge

The class must implement [IDvrPurgeController](#) and may sub-class DvrPurgeControllerBase

Add the property to Application/DVR/Properties section of Application.xml.
Constant value: **dvrPurgeControlClass**

See Also:

[IDvrPurgeController](#)

[DEFAULT_PROPERTY_PURGE_CONTROL_CLASS](#)

DEFAULT_PROPERTY_PURGE_CONTROL_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_PURGE_CONTROL_CLASS
```

Default value for DVR Property "dvrPurgeControlClass".

Default value is "com.wowza.wms.dvr.impl.DvrPurgeController".
Constant value: **com.wowza.wms.dvr.impl.DvrPurgeController**

See Also:

[PROPERTY_PURGE_CONTROL_CLASS](#)

PROPERTY_MBR_USE_SIMPLEALIGNMENT

```
public static final java.lang.String PROPERTY_MBR_USE_SIMPLEALIGNMENT
```

(continued from last page)

HTTP Streamer Property "dvrMbrUseSimpleAligner": for defaulting to a simple mbr aligner

Add the property to Application/HTTPStreamer/Properties section of Application.xml.

Constant value: **dvrMbrUseSimpleAligner**

PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION

```
public static final java.lang.String PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION
```

DVR Property "dvrMaxAllowableChunkDuration": for setting maximum chunk duration.

Add the property to Application/DVR/Properties section of Application.xml

Constant value: **dvrMaxAllowableChunkDuration**

See Also:

[DEFAULT_PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION](#)

DEFAULT_PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION

```
public static final int DEFAULT_PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION
```

Default value for DVR Property "dvrMaxAllowableChunkDuration".

Default value is 120000 ms (120 seconds).

Constant value: **120000**

See Also:

[PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION](#)

PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER

```
public static final java.lang.String  
PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER
```

DVR Property "dvrRecalcDurationMaxAVStartDifference": for triggering recalculation of DVR chunk duration by examining each packet

This is a fallback setting for when the aligned audio and video packets differ their start times. When this happens, fallback logic is triggered which examines the actual packets and tries to adjust the packet times and duration accordingly.

Add the property to Application/DVR/Properties section of Application.xml

Constant value: **dvrRecalcDurationMaxAVStartDifference**

See Also:

[DEFAULT_PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER](#)

DEFAULT_PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER

```
public static final int DEFAULT_PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER
```

Default value for DVR Property "dvrRecalcDurationMaxAVStartDifference".

Default value is 500 ms.

Constant value: **500**

See Also:

[PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER](#)

PROPERTY_RECALC_DURATION_TRIGGER_SIZE

```
public static final java.lang.String PROPERTY_RECALC_DURATION_TRIGGER_SIZE
```

(continued from last page)

DVR Property "dvrRecalcDurationMaxChunkSize": for triggering recalculation of DVR chunk duration by examining each packet

This is a fallback setting for when the DVR packetizer determines the chunk is quite large, usually because the incoming packet times have done something odd like suddenly diverged. When this happens, a some fallback logic is triggered which examines the actual packets and tries to adjust the duration accordingly.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrRecalcDurationMaxChunkSize**

See Also:

[DEFAULT_PROPERTY_RECALC_DURATION_TRIGGER_SIZE](#)

DEFAULT_PROPERTY_RECALC_DURATION_TRIGGER_SIZE

```
public static final int DEFAULT_PROPERTY_RECALC_DURATION_TRIGGER_SIZE
```

Default value for DVR Property "dvrRecalcDurationMaxChunkSize".

Default value is 60000 ms (60 seconds).
Constant value: **60000**

See Also:

[PROPERTY_RECALC_DURATION_TRIGGER_SIZE](#)

PROPERTY_MAX_SAVE HOLDER_SIZE

```
public static final java.lang.String PROPERTY_MAX_SAVE HOLDER_SIZE
```

Constant value: **dvrMaxSaveHolderSize**

DEFAULT_PROPERTY_MAX_SAVE HOLDER_SIZE

```
public static final int DEFAULT_PROPERTY_MAX_SAVE HOLDER_SIZE
```

Constant value: **500**

PROPERTY_WAIT_FOR_CODEC_TIME

```
public static final java.lang.String PROPERTY_WAIT_FOR_CODEC_TIME
```

DVR Property "dvrWaitForCodecTime": for how long DVR will wait to get the codec information.

Amount of time Wowza nDVR will wait to receive audio and video codec information after streaming has begun. The unit is in ms. The default value is 8000 ms.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrWaitForCodecTime**

See Also:

[DEFAULT_PROPERTY_WAIT_FOR_CODEC_TIME](#)

DEFAULT_PROPERTY_WAIT_FOR_CODEC_TIME

```
public static final int DEFAULT_PROPERTY_WAIT_FOR_CODEC_TIME
```

Default value for DVR Property "dvrWaitForCodecTime".

Default value is 8000 ms.
Constant value: **8000**

(continued from last page)

See Also:

[PROPERTY_WAIT_FOR_CODEC_TIME](#)

PROPERTY_AUDIO_GROUP_COUNT

```
public static final java.lang.String PROPERTY_AUDIO_GROUP_COUNT
```

DVR Property "dvrAudioGroupCount": for number of audio packets to group together.

Default is 3. @see [DEFAULT_PROPERTY_AUDIO_GROUP_COUNT](#)

Constant value: **dvrAudioGroupCount**

DEFAULT_PROPERTY_AUDIO_GROUP_COUNT

```
public static final int DEFAULT_PROPERTY_AUDIO_GROUP_COUNT
```

Default value for DVR Property "dvrAudioGroupCount".

Default value is 3.

Constant value: **3**

See Also:

[PROPERTY_AUDIO_GROUP_COUNT](#)

DEFAULT_PROPERTY_STREAM_IDLE_TIMEOUT

```
public static final int DEFAULT_PROPERTY_STREAM_IDLE_TIMEOUT
```

Default value for DVR Property "streamTimeout".

Default value is 300000 ms (5 minutes).

Constant value: **300000**

DEFAULT_PROPERTY_STREAM_STARTUP_TIMEOUT

```
public static final int DEFAULT_PROPERTY_STREAM_STARTUP_TIMEOUT
```

Default value for DVR Property "streamStartupTimeout".

Default value is 60000 ms (60 seconds).

Constant value: **60000**

PROPERTY_DEBUG_MBR_RESOLVER

```
public static final java.lang.String PROPERTY_DEBUG_MBR_RESOLVER
```

Constant value: **dvrDebugMbrResolver**

PROPERTY_DEBUG_MBR_RESOLVER_GAP_DETAILS

```
public static final java.lang.String PROPERTY_DEBUG_MBR_RESOLVER_GAP_DETAILS
```

Constant value: **dvrDebugMbrResolverGapDetails**

PROPERTY_DEBUG_MBR_RESOLVER_INTERSECTION_DETAILS

```
public static final java.lang.String PROPERTY_DEBUG_MBR_RESOLVER_INTERSECTION_DETAILS
```

(continued from last page)

Constant value: **dvrDebugMbrResolverIntersectionDetails**

CHUNK_FILENAME_FORMAT_METADATA

public static final java.lang.String **CHUNK_FILENAME_FORMAT_METADATA**

Constant value: **M-%04d_%02d_%02d_%03d.m4fm**

CHUNK_FILENAME_FORMAT_VIDEO

public static final java.lang.String **CHUNK_FILENAME_FORMAT_VIDEO**

Constant value: **V-%04d_%02d_%02d_%03d.m4fv**

CHUNK_FILENAME_FORMAT_AUDIO

public static final java.lang.String **CHUNK_FILENAME_FORMAT_AUDIO**

Constant value: **A-%04d_%02d_%02d_%03d.m4fa**

CHUNK_FILENAME_FORMAT_DATA

public static final java.lang.String **CHUNK_FILENAME_FORMAT_DATA**

Constant value: **D-%04d_%02d_%02d_%03d.m4fd**

CHUNK_FOLDER_FORMAT

public static final java.lang.String **CHUNK_FOLDER_FORMAT**

Constant value: **%04d_%02d_%02d**

com.wowza.wms.dvr Interface IDvrPurgeController

public interface **IDvrPurgeController**
extends

Interface for controlling DVR chunk purging. The purge controller is instantiated using a factory class DvrPurgeControllerFactory.
See Also:

[com.wowza.wms.dvr.impl.DvrPurgeControllerFactory](#),
[IDvrPrivateConstants.PROPERTY_PURGE_CONTROL_CLASS](#)

Method Summary

long	getCurrentTime() Get current DVR time.
long	getLastPurgeTime() Get the DVR time when the last purge occurred.
void	init(IDvrStreamStore store) Initialize the controller.
boolean	isPurgingEnabled() Is Purging enabled for this controller.
void	setCurrentDvrTime(long newDvrTime) Set the current DVR time and perform purge if necessary.

Methods

init

public void **init**([IDvrStreamStore](#) store)

Initialize the controller.

Parameters:

store - the DVR stream store

isPurgingEnabled

public boolean **isPurgingEnabled**()

Is Purging enabled for this controller.

Returns:

true if purging is active, false otherwise.

setCurrentDvrTime

public void **setCurrentDvrTime**(long newDvrTime)

Set the current DVR time and perform purge if necessary. This method checks the DVR time against its internal rules for purging and performs the purge. It is also responsible for setting the last purge time and the next purge time.

(continued from last page)

Parameters:

newDvrTime

getCurrentTime

```
public long getCurrentTime()
```

Get current DVR time. The store is responsible for setting the DVR time via setCurrentDvrTime.

Returns:

current DVR time.

getLastPurgeTime

```
public long getLastPurgeTime()
```

Get the DVR time when the last purge occurred.

Returns:

DVR time of last purge

com.wowza.wms.dvr Interface IDvrRawChunkProvider

All Subinterfaces:

[IDvrChunkMemoryCache](#)

public interface **IDvrRawChunkProvider**
extends

Interface for providing raw DVR chunks based on a DVR manifest entry.

Method Summary

DvrChunk	retrieveRawChunk (DvrManifestChunkEntry entry) Given the specified manifest entry, return the raw DVR chunk.
----------	--

Methods

retrieveRawChunk

public DvrChunk **retrieveRawChunk**([DvrManifestChunkEntry](#) entry)

Given the specified manifest entry, return the raw DVR chunk.

Parameters:

entry - The DVR manifest entry

Returns:

the DVR chunk or null if not able to return the chunk.

com.wowza.wms.dvr Interface IDvrRecordingListener

public interface **IDvrRecordingListener**
extends

Listener for DVR Recording events.

See Also:

[IDvrStreamManager.addDvrRecordingListener\(IDvrRecordingListener\)](#),
[IDvrStreamManager.removeDvrRecordingListener\(IDvrRecordingListener\)](#)

Method Summary

void	recordingPaused (IDvrStreamStore store)	Callback when DVR moves to paused state.
void	recordingReset (IDvrStreamStore store)	Callback when DVR gets reset.
void	recordingResumed (IDvrStreamStore store)	Callback when DVR moves out of paused state.
void	recordingStarted (IDvrStreamStore store)	Callback when DVR moves to recording state.
void	recordingStopped (IDvrStreamStore store)	Callback when DVR recording stops
void	timeReset (IDvrStreamStore store, long oldDvrTime, long oldPacketTime, TimeMapRecord newTime)	Callback when DVR time is adjusted.

Methods

recordingStarted

public void **recordingStarted**([IDvrStreamStore](#) store)

Callback when DVR moves to recording state.

Parameters:

store - stream store

recordingPaused

public void **recordingPaused**([IDvrStreamStore](#) store)

Callback when DVR moves to paused state.

Parameters:

store - stream store

(continued from last page)

recordingResumed

```
public void recordingResumed(IDvrStreamStore store)
```

Callback when DVR moves out of paused state.

Parameters:

store - stream store

recordingReset

```
public void recordingReset(IDvrStreamStore store)
```

Callback when DVR gets reset. For example, if the incoming stream resets.

Parameters:

store - stream store

recordingStopped

```
public void recordingStopped(IDvrStreamStore store)
```

Callback when DVR recording stops

Parameters:

store - stream store

timeReset

```
public void timeReset(IDvrStreamStore store,  
    long oldDvrTime,  
    long oldPacketTime,  
    TimeMapRecord newTime)
```

Callback when DVR time is adjusted.

Parameters:

store - stream store

oldDvrTime

oldPacketTime - old packet time associated to oldDvrTime

newTime

com.wowza.wms.dvr Interface IDvrRecordingsLoader

public interface **IDvrRecordingsLoader**
extends

Interface for loading recordings during DVR Stream Manager initialization.

See Also:

[com.wowza.wms.dvr.impl.DvrRecordingsLoaderFactory](#),
[IDvrConstants.PROPERTY_RECORDINGS_LOADER_CLASS](#)

Method Summary

void	init (IDvrStreamManager dvrMgr) Initialize recordings loader
void	loadArchivedRecordings () Discover and load archived recording
boolean	shouldLoadStream (String streamName, java.util.SortedSet versions) Should the given archived streams be laoded.
boolean	shouldLoadStreamVersion (String streamName, Integer version, java.util.SortedSet versions) Should the given archived stream of specific version be laoded.

Methods

init

public void **init**([IDvrStreamManager](#) dvrMgr)

Initialize recordings loader

Parameters:

dvrMgr - the DVR Stream Manager

loadArchivedRecordings

public void **loadArchivedRecordings**()

Discover and load archived recording

shouldLoadStream

public boolean **shouldLoadStream**(String streamName,
java.util.SortedSet versions)

Should the given archived streams be laoded. The method contains logic which determines if all versions of the given stream Name should be loaded or not.

Parameters:

streamName - Stream name (unversioned)
versions - sorted set of available versions of this stream

(continued from last page)

Returns:

true if one or more of the streams should be loaded, false otherwise.

shouldLoadStreamVersion

```
public boolean shouldLoadStreamVersion(String streamName,  
    Integer version,  
    java.util.SortedSet versions)
```

Should the given archived stream of specific version be loaded. The method contains logic which determines if all versions of the given stream Name should be loaded or not.

Parameters:

streamName - Stream name (unversioned)

version - the specific version of the stream we are determining if we should load

versions - sorted set of all available versions of this stream

Returns:

true if one or more of the streams should be loaded, false otherwise.

com.wowza.wms.dvr Interface IDvrStoreChunkListener

public interface **IDvrStoreChunkListener**
extends

Listener for DVR Store chunk events.

Note that this listener traffic is very high.

See Also:

[IDvrStreamStore.addDvrChunkListener\(IDvrStoreChunkListener\)](#),
[IDvrStreamStore.removeDvrChunkListener\(IDvrStoreChunkListener\)](#)

Method Summary

void	postChunkAdded (IDvrStreamStore store) Callback after a chunk is written to DVR store
void	postChunksPurged (IDvrStreamStore store, DvrManifestEntryRangeGroup entries, java.util.List deletedEntries) Callback after DVR store performs a purge
void	preChunkAdded (IDvrStreamStore store) Callback before a chunk is written to DVR store
void	preChunksPurged (IDvrStreamStore store, DvrManifestEntryRangeGroup entries) Callback before DVR store performs a purge

Methods

preChunkAdded

public void **preChunkAdded**([IDvrStreamStore](#) store)

Callback before a chunk is written to DVR store

Parameters:

store - the stream store

postChunkAdded

public void **postChunkAdded**([IDvrStreamStore](#) store)

Callback after a chunk is written to DVR store

Parameters:

store - the stream store

preChunksPurged

public void **preChunksPurged**([IDvrStreamStore](#) store,
[DvrManifestEntryRangeGroup](#) entries)

(continued from last page)

Callback before DVR store performs a purge

Parameters:

store - the stream store
entries - list of DVR chunks to be purged

postChunksPurged

```
public void postChunksPurged(IDvrStreamStore store,  
    DvrManifestEntryRangeGroup entries,  
    java.util.List deletedEntries)
```

Callback after DVR store performs a purge

Parameters:

store - the stream store
entries - list of DVR chunks purged
deletedEntries - list of entries deleted

com.wowza.wms.dvr Interface IDvrStoreListener

public interface **IDvrStoreListener**
extends

Listener for DVR Store lifecycle events.

See Also:

[IDvrStreamManager.addDvrStoreListener\(IDvrStoreListener\)](#),
[IDvrStreamManager.removeDvrStoreListener\(IDvrStoreListener\)](#)

Method Summary

void	dvrStreamStorageDeleted (IDvrStreamStore store, IDvrFileSystem FileSystem, boolean success) Callback after DVR store is deleted from disk.
void	dvrStreamStorageLoaded (IDvrStreamManager dvrMgr, IDvrStreamStore store) Callback after DVR store is loaded from disk.
void	dvrStreamStoreCreate (IDvrStreamStore store) Callback after DVR stream store is created.
void	dvrStreamStoreDestroy (IDvrStreamStore store) Callback after DVR stream store is destroyed.
void	dvrStreamStoreInit (IDvrStreamStore store) Callback after DVR stream store is initialized.

Methods

dvrStreamStoreCreate

public void **dvrStreamStoreCreate**([IDvrStreamStore](#) store)

Callback after DVR stream store is created.

Parameters:

store - stream store

dvrStreamStoreInit

public void **dvrStreamStoreInit**([IDvrStreamStore](#) store)

Callback after DVR stream store is initialized.

Parameters:

store - stream store

dvrStreamStoreDestroy

public void **dvrStreamStoreDestroy**([IDvrStreamStore](#) store)

Callback after DVR stream store is destroyed.

(continued from last page)

Parameters:

store - stream store

dvrStreamStorageLoaded

```
public void dvrStreamStorageLoaded(IDvrStreamManager dvrMgr,  
    IDvrStreamStore store)
```

Callback after DVR store is loaded from disk.

Parameters:

dvrMgr - DVR Application Store Manager

store - stream store

dvrStreamStorageDeleted

```
public void dvrStreamStorageDeleted(IDvrStreamStore store,  
    IDvrFileSystem fileSystem,  
    boolean success)
```

Callback after DVR store is deleted from disk.

Parameters:

store

fileSystem - stream store file system

success - whether delete succeeded or failed

com.wowza.wms.dvr Interface IDvrStreamManager

All Superinterfaces:

[ILiveStreamPacketizer](#)

public interface **IDvrStreamManager**
extends [ILiveStreamPacketizer](#)

DVR Stream manager. Manages a live stream and associated DVR stores.

Method Summary	
void	addDvrRecordingListener (IDvrRecordingListener listener) Add listener to DVR recording events.
void	addDvrStoreListener (IDvrStoreListener listener) Add listener to DVR store lifecycle events.
void	addManifestEntries (String vStreamName, java.util.List entries, String serverGuid) Add to stream stores manifest.
void	addRepeaterHeartBeatItem ()
boolean	canRecord () Is this stream able to record.
void	deleteArchivedStore (String vStreamName) Delete archived stream store.
String	getArchiveStrategy () Get the DVR archive strategy.
String	getContextStr () Get stream context string, useful for logging.
IHTTPStreamerCupertinoLivePacketizerDataHandler	getDataHandler ()
IDvrStreamStore	getDefaultStreamingStore () Get the store to be used for streaming.
String	getDvrFileSystemClass () Get the class used for the DVR file system.
String	getDvrStorageDir () Get the storage directory.
int	getDvrStorageWindowSeconds () Get DVR window size.
DvrBaseEncryptionInfoDelegate	getEncryptionDelegate () Get the encryption delegate for providing streaming side encryption info objects.

String	getEncryptionRepeaterSharedSecret() Get the DVR encryption shared secret.
IDvrStreamStore	getHighestVersionedStore() Return stream store that is highest known version.
void	getInitialRepeaterItems() (java.util.List items) Get initial repeater items to send to repeater receiver.
int	getMinimumAvailableChunks() Return number of chunks that must be available to stream.
String	getPacketizerName() Get live stream packetizer name.
IDvrStreamStore	getRecordingStreamStore() Get current recording store
void	getRepeaterItemsDvr() (java.util.List items, long lastSeq)
String	getStreamBaseName() Get input streamName (no version info).
IDvrStreamStore	getStreamStore() (String vStreamName) Given a stream name containing version info, return the associated stream store.
java.util.List	getStreamStores() Get list of all stream stores known to this stream manager.
IDvrStreamVersionHandler	getStreamVersionHandler() Get the stream version handler object.
void	initialAttributes() (String vStreamName, int dvrWindow)
void	initialManifest() (String vStreamName, IDvrManifest manifest)
void	initialManifestEnd() (String vStreamName)
boolean	isRecording() Is this stream currently recording.
boolean	isRecordingPaused() Is this stream currently paused from recording.
IDvrStreamStore	loadArchivedStore() (String vStreamName, DvrManifestHolder manifestHolder) Load archived stream store.
void	notifyDvrStreamStorageDeleted() (IDvrStreamStore store, IDvrFileSystem fileSystem, boolean success)
void	notifyDvrStreamStoreCreate() (IDvrStreamStore store)
void	notifyDvrStreamStoreDestroy() (IDvrStreamStore store)
void	notifyDvrStreamStoreInit() (IDvrStreamStore store)

void	notifyDvrStreamStoreLoaded (IDvrStreamStore store)
void	notifyTimeReset (IDvrStreamStore store, long oldDvrTime, long oldPacketTime, TimeMapRecord newTimeMapRecord)
IDvrStreamStore	pauseRecording () Request that stream recording pause.
void	purgeManifestEntries (String vStreamName, DvrManifestEntryRangeGroup rangeGroup) Purge entries from store
void	removeDvrRecordingListener (IDvrRecordingListener listener) Remove listener to DVR recording events.
void	removeDvrStoreListener (IDvrStoreListener listener) Remove listener of DVR store lifecycle events.
void	removeStreamStore (String vStreamName)
void	resetStream () Reset the stream.
IDvrStreamStore	resumeRecording () Request that stream recording resume.
void	setDataHandler (IHTTPStreamerCupertinoLivePacketizerDataHandler dataHandler)
void	setDefaultStreamingStore (IDvrStreamStore store) Set the store to be used for streaming.
void	setRecordingStreamStore (IDvrStreamStore store) Set the store used for recording.
void	setStreamVersionHandler (IDvrStreamVersionHandler handler) Set the stream version handler object.
IDvrStreamStore	startRecording () Request that stream recording start.
void	stateChange (String vStreamName, DvrStreamStoreState state)
IDvrStreamStore	stopRecording () Request that stream recording stop.
DvrChunkStorageInfo	storeChunks (int vDuration, DvrPacketHolder vPackets, int aDuration, DvrPacketHolder aPackets, int dDuration, DvrPacketHolder dPackets)
boolean	storeOnMetadata (long pt, long utc, AMFPacket metaPacket)

Methods inherited from interface [com.wowza.wms.stream.livepacketizer.ILiveStreamPacketizer](#)

```
getAndSetStartStream, getApplicationInstance, getLiveStreamPacketizerId,  
getProperties, getRepeaterLastSequence, handlePacket, init, isActive,  
isPacketizeAudio, isPacketizeData, isPacketizeVideo, isRepeaterEdge, resetStream,  
setLiveStreamPacketizerId, setPacketizeAudio, setPacketizeData, setPacketizeVideo,  
setRepeaterEdge, shutdown, startStream, touch
```

Methods

getContextStr

```
public String getContextStr()
```

Get stream context string, useful for logging.

Returns:

stream context string

getStreamBaseName

```
public String getStreamBaseName()
```

Get input streamName (no version info).

Returns:

unversioned incoming stream name

getStreamStore

```
public IDvrStreamStore getStreamStore(String vStreamName)
```

Given a stream name containing version info, return the associated stream store.

Parameters:

vStreamName - versioned stream name

Returns:

store or null

getPacketizerName

```
public String getPacketizerName()
```

Get live stream packetizer name.

Returns:

live stream packetizer name

getStreamStores

```
public java.util.List getStreamStores()
```

Get list of all stream stores known to this stream manager.

Returns:

list of stream stores.

getHighestVersionedStore

```
public IDvrStreamStore getHighestVersionedStore()
```

Return stream store that is highest known version.

Returns:

stream store

getMinimumAvailableChunks

```
public int getMinimumAvailableChunks()
```

Return number of chunks that must be available to stream.

Returns:

minimum available chunks

setRecordingStreamStore

```
public void setRecordingStreamStore(IDvrStreamStore store)
```

Set the store used for recording.

Parameters:

store - stream store, or null

getRecordingStreamStore

```
public IDvrStreamStore getRecordingStreamStore()
```

Get current recording store

Returns:

current recording store (may be null)

setDefaultStreamingStore

```
public void setDefaultStreamingStore(IDvrStreamStore store)
```

Set the store to be used for streaming.

Parameters:

store - store to stream.

getDefaultStreamingStore

```
public IDvrStreamStore getDefaultStreamingStore()
```

Get the store to be used for streaming.

Returns:

store to stream.

getDvrStorageWindowSeconds

```
public int getDvrStorageWindowSeconds()
```

(continued from last page)

Get DVR window size.

Returns:

window size in seconds (0 means infinite window size)

getDvrStorageDir

```
public String getDvrStorageDir()
```

Get the storage directory.

Returns:

storage directory

getDvrFileSystemClass

```
public String getDvrFileSystemClass()
```

Get the class used for the DVR file system.

Returns:

fully qualified class name

getArchiveStrategy

```
public String getArchiveStrategy()
```

Get the DVR archive strategy.

Returns:

The archive strategy

getEncryptionRepeaterSharedSecret

```
public String getEncryptionRepeaterSharedSecret()
```

Get the DVR encryption shared secret.

Returns:

shared secret.

getEncryptionDelegate

```
public DvrBaseEncryptionInfoDelegate getEncryptionDelegate()
```

Get the encryption delegate for providing streaming side encryption info objects.

Returns:

delegate

getStreamVersionHandler

```
public IDvrStreamVersionHandler getStreamVersionHandler()
```

Get the stream version handler object.

Returns:

stream version handler object.

setStreamVersionHandler

```
public void setStreamVersionHandler(IDvrStreamVersionHandler handler)
```

Set the stream version handler object. Must be called after the stream manager is created and before it is initialized.

Parameters:

handler - stream version handler object.

resetStream

```
public void resetStream()
```

Reset the stream.

canRecord

```
public boolean canRecord()
```

Is this stream able to record.

Returns:

true if this stream is recordable.

isRecording

```
public boolean isRecording()
```

Is this stream currently recording. If this stream is not recordable, the method returns false.

Returns:

true if has a recording stream and it is recording.

isRecordingPaused

```
public boolean isRecordingPaused()
```

Is this stream currently paused from recording. If this stream is not recording and not paused, the method returns false.

Returns:

true if has a recording is paused.

startRecording

```
public IDvrStreamStore startRecording()
```

Request that stream recording start.

Used internally. Clients should call [ILiveStreamDvrRecorder.startRecording\(\)](#). Note that this call places the DVR stream store in the recording state. If the stream store is in the paused state, DVR recording will not occur.

If there is not currently a stream store for recording, one will attempt to be created. A successful start will result in registered [IDvrRecordingListeners](#) to have their [IDvrRecordingListener.recordingStarted\(IDvrStreamStore\)](#) method called.

Success only occurs if the stream canRecord [IDvrStreamStore.canRecord\(\)](#) and the stream is not already in the recording state.

Returns:

(continued from last page)

store if successful. null otherwise.

stopRecording

```
public IDvrStreamStore stopRecording()
```

Request that stream recording stop.

Used internally. Clients should call [ILiveStreamDvrRecorder.stopRecording\(\)](#). Note that this call places the DVR stream in the *not* recording state.

A successful stop will result in registered [IDvrRecordingListeners](#) to have their [IDvrRecordingListener.recordingStopped\(IDvrStreamStore\)](#) method called.

Success only occurs if the stream is already in the recording state [IDvrStreamStore.isRecording\(\)](#).

Returns:

store if successful. null otherwise.

pauseRecording

```
public IDvrStreamStore pauseRecording()
```

Request that stream recording pause.

Used internally. Clients should call [ILiveStreamDvrRecorder.pauseRecording\(\)](#). The stream does not have to be actively recording to be paused. For example, it could be paused before packets start flowing.

A successful pause will result in registered [IDvrRecordingListeners](#) to have their [IDvrRecordingListener.recordingPaused\(IDvrStreamStore\)](#) method called.

Returns:

store if successful. null otherwise.

resumeRecording

```
public IDvrStreamStore resumeRecording()
```

Request that stream recording resume.

Used internally. Clients should call [ILiveStreamDvrRecorder.resumeRecording\(\)](#). The stream does not have to be actively recording to be resumed. For example, it could have been paused before the stream started, and this call would move it out of the paused state.

A successful resume will result in registered [IDvrRecordingListeners](#) to have their [IDvrRecordingListener.recordingResumed\(IDvrStreamStore\)](#) method called.

Returns:

store if successful. null otherwise.

loadArchivedStore

```
public IDvrStreamStore loadArchivedStore(String vStreamName,  
    DvrManifestHolder manifestHolder)
```

Load archived stream store.

Parameters:

vStreamName - versioned stream Name (e.g. myStream.0)

manifestHolder - manifest holder containing list of manifest properties

Returns:

(continued from last page)

stream store

deleteArchivedStore

```
public void deleteArchivedStore(String vStreamName)
```

Delete archived stream store.

Parameters:

vStreamName - versioned stream Name (e.g. myStream.0)

addManifestEntries

```
public void addManifestEntries(String vStreamName,  
    java.util.List entries,  
    String serverGuid)
```

Add to stream stores manifest.

Parameters:

vStreamName - versioned stream Name (e.g. myStream.0)
entries - list of manifest entries.
serverGuid

purgeManifestEntries

```
public void purgeManifestEntries(String vStreamName,  
    DvrManifestEntryRangeGroup rangeGroup)
```

Purge entries from store

Parameters:

vStreamName - versioned stream Name (e.g. myStream.0)
rangeGroup - set of ranges for purging

storeChunks

```
public DvrChunkStorageInfo storeChunks(int vDuration,  
    DvrPacketHolder vPackets,  
    int aDuration,  
    DvrPacketHolder aPackets,  
    int dDuration,  
    DvrPacketHolder dPackets)
```

storeOnMetadata

```
public boolean storeOnMetadata(long pt,  
    long utc,  
    AMFPacket metaPacket)
```

addDvrStoreListener

```
public void addDvrStoreListener(IDvrStoreListener listener)
```

Add listener to DVR store lifecycle events.

(continued from last page)

Parameters:

listener - listener

removeDvrStoreListener

```
public void removeDvrStoreListener(IDvrStoreListener listener)
```

Remove listener of DVR store lifecycle events.

Parameters:

listener - listener

addDvrRecordingListener

```
public void addDvrRecordingListener(IDvrRecordingListener listener)
```

Add listener to DVR recording events.

Parameters:

listener - listener

removeDvrRecordingListener

```
public void removeDvrRecordingListener(IDvrRecordingListener listener)
```

Remove listener to DVR recording events.

Parameters:

listener - listener

notifyDvrStreamStoreCreate

```
public void notifyDvrStreamStoreCreate(IDvrStreamStore store)
```

notifyDvrStreamStoreInit

```
public void notifyDvrStreamStoreInit(IDvrStreamStore store)
```

notifyDvrStreamStoreDestroy

```
public void notifyDvrStreamStoreDestroy(IDvrStreamStore store)
```

notifyDvrStreamStoreLoaded

```
public void notifyDvrStreamStoreLoaded(IDvrStreamStore store)
```

(continued from last page)

notifyDvrStreamStorageDeleted

```
public void notifyDvrStreamStorageDeleted(IDvrStreamStore store,  
    IDvrFileSystem fileSystem,  
    boolean success)
```

notifyTimeReset

```
public void notifyTimeReset(IDvrStreamStore store,  
    long oldDvrTime,  
    long oldPacketTime,  
    TimeMapRecord newTimeMapRecord)
```

getInitialRepeaterItems

```
public void getInitialRepeaterItems(java.util.List items)
```

Get initial repeater items to send to repeater receiver.

When an edge initially requests the items, instead of sending the entire manifest and all repeater items up until that point, the player sends a `DvrRepeaterHolder.REPEATER_INITIAL_MANIFEST` event followed by several `DvrRepeaterHolder.REPEATER_ADD_MANIFEST_ENTRIES` events.

This allows us to not bother sending any purged manifest entries.

Parameters:

items

getRepeaterItemsDvr

```
public void getRepeaterItemsDvr(java.util.List items,  
    long lastSeq)
```

initialManifest

```
public void initialManifest(String vStreamName,  
    IDvrManifest manifest)
```

initialManifestEnd

```
public void initialManifestEnd(String vStreamName)
```

initialAttributes

```
public void initialAttributes(String vStreamName,  
    int dvrWindow)
```

(continued from last page)

stateChange

```
public void stateChange(String vStreamName,  
    DvrStreamStoreState state)
```

removeStreamStore

```
public void removeStreamStore(String vStreamName)
```

addRepeaterHeartBeatItem

```
public void addRepeaterHeartBeatItem()
```

setDataHandler

```
public void setDataHandler(IHTTPStreamerCupertinoLivePacketizerDataHandler  
dataHandler)
```

getDataHandler

```
public IHTTPStreamerCupertinoLivePacketizerDataHandler getDataHandler()
```

com.wowza.wms.dvr Interface IDvrStreamStore

public interface **IDvrStreamStore**
extends

Method Summary

void	addDvrChunkListener (IDvrStoreChunkListener listener) Add (very fine) listener for chunk events.
void	addManifestEntries (java.util.List entries)
boolean	canPlay () Is this store capable of playing.
boolean	canRecord () Is this store capable of recording.
IApplicationInstance	getAppInstance () Get associated application instance.
IDvrChunker	getChunker ()
long	getClosestStartTime (int type, long t)
String	getContextStr () Get stream context string, useful for logging.
DvrChunk	getDvrChunkAtTime (int fragmentType, long t)
DvrChunk	getDvrChunkByIndex (int fragmentType, int index)
DvrChunk	getDvrChunkNearTime (int fragmentType, long t, long delta)
IDvrStreamManager	getDvrManager () Get DVR Stream Manager
int	getDvrStorageWindowSeconds () Get DVR window size.
IDvrFileSystem	getFileSystem ()
IDvrManifest	getManifest () Get manifest
WMSProperties	getProperties () Get stream store properties.
IDvrPurgeController	getPurgeController () Get purge controller for stream store.

java.util.List	getRecordedEntriesWithLimit (int fragmentType, long t, int limit)
DvrManifestEntry	getRecordedEntryByIndex (int fragmentType, int index)
DvrManifestEntry	getRecordedEntryByTime (int fragmentType, long t)
String	getStreamName () Get versioned stream name.
DvrTimeMapper	getTimeMapper () Get time mapper, which maps between DVR, real and packet time.
boolean	hasAudio () Does this store have audio.
boolean	hasData () Does this store have data.
boolean	hasEncryption () Does this store contain encryption information
boolean	hasOnMetadata () Does this store have on metadata.
boolean	hasVideo () Does this store have video.
void	init () Initialize DVR stream store.
boolean	isLive () Is store currently live For an origin, isRecording() and isLive() will typically return the same result.
boolean	isLoading ()
boolean	isRecording () Is store currently recording.
boolean	isRecordingPaused () Is store currently paused while recording.
boolean	pauseRecording () Request that stream recording pause.
void	purgeEntries (DvrManifestEntryRangeGroup rangeGroup) Purge entries from store
void	removeDvrChunkListener (IDvrStoreChunkListener listener) Remove (very fine) listener for chunk events.
void	reset ()
boolean	resumeRecording () Request that stream recording resume.

void	setCanPlay (boolean canPlay) Set the Stream Stores ability to play.
void	setCanRecord (boolean canRecord) Set the Stream Stores ability to record.
void	setHasEncryption (boolean hasEncryption) Set whether the store has encryption.
void	shutdown ()
boolean	startRecording () Request that recording start.
boolean	stopRecording () Request that stream recording stop.
DvrChunkStorageInfo	storeChunks (int vDuration, DvrPacketHolder vPackets, int aDuration, DvrPacketHolder aPackets, int dDuration, DvrPacketHolder dPackets)
boolean	storeOnMetadata (long pt, long utc, AMFPacket metaPacket)

Methods

init

```
public void init()
```

Initialize DVR stream store.

reset

```
public void reset()
```

shutdown

```
public void shutdown()
```

getProperties

```
public WMSProperties getProperties()
```

Get stream store properties.

Returns:

properties

getDvrStorageWindowSeconds

```
public int getDvrStorageWindowSeconds()
```

(continued from last page)

Get DVR window size. This may be set by setting the IDvrStreamStore's property [IDvrConstants.PROPERTY_WINDOW_DURATION](#) after the store is created and before it is initialized by using the [IDvrStoreListener.dvrStreamStoreCreate\(IDvrStreamStore\)](#)

Returns:

window size in seconds (0 means infinite window size)

getStreamName

```
public String getStreamName()
```

Get versioned stream name.

Returns:

(versioned) stream name

getContextStr

```
public String getContextStr()
```

Get stream context string, useful for logging.

Returns:

stream context string

getDvrManager

```
public IDvrStreamManager getDvrManager()
```

Get DVR Stream Manager

Returns:

DVR Stream Manager

getAppInstance

```
public IApplicationInstance getAppInstance()
```

Get associated application instance.

Returns:

application instance.

getManifest

```
public IDvrManifest getManifest()
```

Get manifest

Returns:

manifest

getTimeMapper

```
public DvrTimeMapper getTimeMapper()
```

Get time mapper, which maps between DVR, real and packet time.

Returns:

(continued from last page)

time mapper

getPurgeController

```
public IDvrPurgeController getPurgeController()
```

Get purge controller for stream store.

Returns:

purge controller

getFileSystem

```
public IDvrFileSystem getFileSystem()
```

getChunker

```
public IDvrChunker getChunker()
```

canRecord

```
public boolean canRecord()
```

Is this store capable of recording.

Returns:

true if store can record

isLoaded

```
public boolean isLoaded()
```

setCanRecord

```
public void setCanRecord(boolean canRecord)
```

Set the Stream Stores ability to record.

Note: Must be called when stream is not recording.

Parameters:

canRecord

canPlay

```
public boolean canPlay()
```

Is this store capable of playing.

Returns:

true if store can play

setCanPlay

```
public void setCanPlay(boolean canPlay)
```

Set the Stream Stores ability to play.

Note: Must be called when stream is not playing.

Parameters:

canPlay

setHasEncryption

```
public void setHasEncryption(boolean hasEncryption)
```

Set whether the store has encryption. Used internally.

Note: Must be called when stream is not playing.

Parameters:

hasEncryption - if store has encryption

hasEncryption

```
public boolean hasEncryption()
```

Does this store contain encryption information

Returns:

true if store contains encryption

hasVideo

```
public boolean hasVideo()
```

Does this store have video.

Returns:

true if store contains video, false otherwise.

hasAudio

```
public boolean hasAudio()
```

Does this store have audio.

Returns:

true if store contains audio, false otherwise.

hasData

```
public boolean hasData()
```

Does this store have data.

Returns:

true if store contains data, false otherwise.

(continued from last page)

hasOnMetadata

```
public boolean hasOnMetadata()
```

Does this store have on metadata.

Returns:

true if store contains on metadata, false otherwise.

startRecording

```
public boolean startRecording()
```

Request that recording start.

Used internally. Clients should call [ILiveStreamDvrRecorder.startRecording\(\)](#).

Success occurs if the stream canRecord [canRecord\(\)](#) and the stream is not already in the recording state [isRecording\(\)](#).

Returns:

true if successful.

pauseRecording

```
public boolean pauseRecording()
```

Request that stream recording pause.

Used internally. Clients should call [ILiveStreamDvrRecorder.pauseRecording\(\)](#).

Success occurs if the stream is not already paused.

Returns:

true if successful.

resumeRecording

```
public boolean resumeRecording()
```

Request that stream recording resume.

Used internally. Clients should call [ILiveStreamDvrRecorder.resumeRecording\(\)](#).

Success occurs if the stream was previously paused.

Returns:

true if successful.

stopRecording

```
public boolean stopRecording()
```

Request that stream recording stop. This shuts down saving of chunks

Used internally. Clients should call [ILiveStreamDvrRecorder.stopRecording\(\)](#).

Success only occurs if the stream is already in the recording state [isRecording\(\)](#).

Returns:

true if successful.

isRecordingPaused

```
public boolean isRecordingPaused()
```

Is store currently paused while recording.

Returns:

true if recording is paused.

isRecording

```
public boolean isRecording()
```

Is store currently recording. This will always be false for an edge.

Returns:

true if recording

isLive

```
public boolean isLive()
```

Is store currently live For an origin, [isRecording\(\)](#) and [isLive\(\)](#) will typically return the same result. On an origin, [isRecording\(\)](#) will always be false. But [isLive\(\)](#) will reflect the status of the repeated stream.

Returns:

true if live

storeChunks

```
public DvrChunkStorageInfo storeChunks(int vDuration,  
    DvrPacketHolder vPackets,  
    int aDuration,  
    DvrPacketHolder aPackets,  
    int dDuration,  
    DvrPacketHolder dPackets)
```

storeOnMetadata

```
public boolean storeOnMetadata(long pt,  
    long utc,  
    AMFPacket metaPacket)
```

purgeEntries

```
public void purgeEntries(DvrManifestEntryRangeGroup rangeGroup)
```

Purge entries from store

Parameters:

rangeGroup - s set of ranges for purging

(continued from last page)

addManifestEntries

```
public void addManifestEntries(java.util.List entries)
```

addDvrChunkListener

```
public void addDvrChunkListener(IDvrStoreChunkListener listener)
```

Add (very fine) listener for chunk events.

Parameters:

listener - listener

removeDvrChunkListener

```
public void removeDvrChunkListener(IDvrStoreChunkListener listener)
```

Remove (very fine) listener for chunk events.

Parameters:

listener - listener

getRecordedEntriesWithLimit

```
public java.util.List getRecordedEntriesWithLimit(int fragmentType,  
long t,  
int limit)
```

getRecordedEntryByIndex

```
public DvrManifestEntry getRecordedEntryByIndex(int fragmentType,  
int index)
```

getRecordedEntryByTime

```
public DvrManifestEntry getRecordedEntryByTime(int fragmentType,  
long t)
```

getDvrChunkByIndex

```
public DvrChunk getDvrChunkByIndex(int fragmentType,  
int index)
```

getDvrChunkAtTime

```
public DvrChunk getDvrChunkAtTime(int fragmentType,  
long t)
```

getDvrChunkNearTime

```
public DvrChunk getDvrChunkNearTime(int fragmentType,  
    long t,  
    long delta)
```

getClosestStartTime

```
public long getClosestStartTime(int type,  
    long t)
```

com.wowza.wms.dvr Interface IDvrStreamVersionHandler

All Known Implementing Classes:

[DefaultDvrStreamVersionHandler](#)

public interface **IDvrStreamVersionHandler**
extends

Callback to manage (archival) versions of DVR stream stores

Method Summary

IDvrStreamStore	determineExistingStoreForPlaying (IDvrStreamManager dvrManager, String baseStreamName) When a session requests a stream store w/o specifying the version, we need gto determine the version of the stream to store.
IDvrStreamStore	determineExistingStoreForRecording (IDvrStreamManager dvrManager, String baseStreamName) After a set of versioned streams are loaded from disk, one of them may be designated the stream that will be recorded to (i.e.
String	getArchiveStrategy (IDvrStreamManager dvrManager, String baseStreamName) Determine the archive strategy for a given set of streams.
boolean	handleArchivedStream (IDvrStreamManager dvrManager, String baseStreamName, String version, java.util.SortedSet versions, DvrManifestHolder manifest) When a stream group inits, the file system is checked for older versions of the streams.
boolean	shouldDeleteArchivedStream (IDvrStreamManager dvrManager, IDvrStreamStore store) Determine if a given stream store version should be deleted.
boolean	shouldLoadArchivedStream (IDvrStreamManager dvrManager, String baseStreamName, String version, java.util.SortedSet versions, DvrManifestHolder manifest) Determine if a given stream store version should be loaded into WMS.

Methods

determineExistingStoreForRecording

```
public IDvrStreamStore determineExistingStoreForRecording(IDvrStreamManager
dvrManager,
    String baseStreamName)
```

After a set of versioned streams are loaded from disk, one of them may be designated the stream that will be recorded to (i.e. append mode).

The default implementation says that if append mode, then the highest versioned stream that has canRecord set to true is used. But this API, allows for a more detailed logic.

Parameters:

dvrManager - The DVR Stream Manager

(continued from last page)

`baseStreamName` - The base stream name (no version info). e.g. `myStream`

Returns:

stream store to append to, null if no stream in the stream group is to be appended to.

See Also:

[DefaultDvrStreamVersionHandler](#)

determineExistingStoreForPlaying

```
public IDvrStreamStore determineExistingStoreForPlaying(IDvrStreamManager dvrManager,  
String baseStreamName)
```

When a session requests a stream store w/o specifying the version, we need to determine the version of the stream to store.

The default implementation first checks the recording stream. If it `canPlay()`, it is returned. Otherwise, the highest versioned stream that canRecord set to true is used.

Parameters:

`dvrManager` - The DVR Stream Manager

`baseStreamName` - The base stream name (no version info). e.g. `myStream`

Returns:

stream store to stream, null if no stream in the stream group can be played.

See Also:

[DefaultDvrStreamVersionHandler](#)

getArchiveStrategy

```
public String getArchiveStrategy(IDvrStreamManager dvrManager,  
String baseStreamName)
```

Determine the archive strategy for a given set of streams.

Typically, this returns the archive strategy as specified in `Application.xml`, but this API provides a hook for more detailed logic in determining the strategy.

Parameters:

`dvrManager` - The DVR App Instance Manager

`baseStreamName` - The base stream name (no version info). e.g. `myStream`

Returns:

the archive strategy

See Also:

[DefaultDvrStreamVersionHandler](#)

[IDvrConstants.ARCHIVE_STRATEGY_APPEND](#)

[IDvrConstants.ARCHIVE_STRATEGY_DELETE](#)

[IDvrConstants.ARCHIVE_STRATEGY_VERSION](#)

handleArchivedStream

```
public boolean handleArchivedStream(IDvrStreamManager dvrManager,  
String baseStreamName,  
String version,  
java.util.SortedSet versions,  
DvrManifestHolder manifest)
```

(continued from last page)

When a stream group inits, the file system is checked for older versions of the streams. This method is called to handle the streams.

Typically, 3 things can happen: The stream is ignored, loaded, or deleted.

Parameters:

dvrManager - The DVR Stream Manager
baseStreamName - The base stream name (no version info). e.g. myStream
version - The version of the stream to be loaded.
versions - A sorted set of all the versions that are attempting to be loaded
manifest - The main manifest info of the stream

Returns:

true if handled in some manner, false if ignored (unhandled)

See Also:

[DefaultDvrStreamVersionHandler](#)

shouldLoadArchivedStream

```
public boolean shouldLoadArchivedStream(IDvrStreamManager dvrManager,  
    String baseStreamName,  
    String version,  
    java.util.SortedSet versions,  
    DvrManifestHolder manifest)
```

Determine if a given stream store version should be loaded into WMS.

Parameters:

dvrManager - The DVR Stream Manager
baseStreamName - The base stream name (no version info). e.g. myStream
version - The version of the stream to be loaded.
versions - A sorted set of all the versions that are attempting to be loaded
manifest - The main manifest info of the stream

Returns:

true if should be loaded. false if not.

See Also:

[DefaultDvrStreamVersionHandler](#)

shouldDeleteArchivedStream

```
public boolean shouldDeleteArchivedStream(IDvrStreamManager dvrManager,  
    IDvrStreamStore store)
```

Determine if a given stream store version should be deleted.

Parameters:

dvrManager - The DVR Stream Manager
store - The DVR store

Returns:

true if should be deleted. false if not.

See Also:

[DefaultDvrStreamVersionHandler](#)

com.wowza.wms.dvr Interface IDvrTextReader

All Superinterfaces:
[ITextReader](#)

public interface **IDvrTextReader**
extends [ITextReader](#)

Method Summary

void	init (IApplicationInstance appInstance, IMediaStream stream, IDvrFileSystem fileSystem, String artifactName)
------	---

Methods inherited from interface [com.wowza.io.ITextReader](#)

[close](#), [exists](#), [getBasePath](#), [getMediaName](#), [getPath](#), [init](#), [isOpen](#), [lastModified](#),
[length](#), [open](#), [read](#), [ready](#)

Methods

init

```
public void init(IApplicationInstance appInstance,  
                IMediaStream stream,  
                IDvrFileSystem fileSystem,  
                String artifactName)
```

com.wowza.wms.dvr Interface IDvrTextWriter

All Superinterfaces:
[ITextWriter](#)

public interface **IDvrTextWriter**
extends [ITextWriter](#)

Method Summary

void	init (IApplicationInstance appInstance, IMediaStream stream, IDvrFileSystem fileSystem, String artifactName)
void	init (IApplicationInstance appInstance, IMediaStream stream, IDvrFileSystem fileSystem, String artifactName, IDvrStreamStore store)

Methods inherited from interface [com.wowza.io.ITextWriter](#)

[close](#), [exists](#), [getBasePath](#), [getMediaName](#), [getPath](#), [init](#), [isAppend](#), [isOpen](#),
[lastModified](#), [length](#), [open](#), [setAppend](#), [write](#), [write](#), [write](#), [write](#)

Methods

init

```
public void init(IApplicationInstance appInstance,
    IMediaStream stream,
    IDvrFileSystem fileSystem,
    String artifactName)
```

init

```
public void init(IApplicationInstance appInstance,
    IMediaStream stream,
    IDvrFileSystem fileSystem,
    String artifactName,
    IDvrStreamStore store)
```

com.wowza.wms.dvr Interface IDvrTimeMap

All Superinterfaces:

[IDvrChannelManifest](#)

public interface **IDvrTimeMap**

extends [IDvrChannelManifest](#)

Method Summary

boolean	containsTime (long startTime, IDvrConstants.DvrTimeScale timeScale)
long	dvrToPt (long dt)
long	dvrToUtc (long dt)
java.util.List	getTimeMap ()
java.util.List	getTimeMapEntries ()
long	ptToDvr (long pt)
long	toDvr (long t, IDvrConstants.DvrTimeScale timeScale)
long	utcToDvr (long utc)

Methods inherited from interface [com.wowza.wms.dvr.IDvrChannelManifest](#)

[expandEndTime](#), [expandStartTime](#), [getClosestStartTime](#), [getFirstEntry](#), [getFirstIndex](#), [getIndexMap](#), [getLastLiveEntry](#), [getLastRecordedEntry](#), [getLastRecordedIndex](#), [getLiveDuration](#), [getLiveEntries](#), [getLiveEntries](#), [getLiveEntriesWithLimit](#), [getLiveRangeEndingBeforeTime](#), [getLiveRangeEndingBeforeTime](#), [getLiveTailEntries](#), [getNumberLiveEntries](#), [getNumberLiveEntries](#), [getNumberRecordedEntries](#), [getNumberRecordedEntries](#), [getRecordedDuration](#), [getRecordedEntries](#), [getRecordedEntries](#), [getRecordedEntries](#), [getRecordedEntriesInRange](#), [getRecordedEntriesWithLimit](#), [getRecordedEntryByIndex](#), [getRecordedEntryByTimeKey](#), [getRecordedEntryStartingBeforeTime](#), [getType](#), [isEmpty](#)

Methods

getTimeMap

public java.util.List **getTimeMap**()

(continued from last page)

getTimeMapEntries

```
public java.util.List getTimeMapEntries()
```

dvrToUtc

```
public long dvrToUtc(long dt)
```

dvrToPt

```
public long dvrToPt(long dt)
```

ptToDvr

```
public long ptToDvr(long pt)
```

utcToDvr

```
public long utcToDvr(long utc)
```

toDvr

```
public long toDvr(long t,  
    IDvrConstants.DvrTimeScale timeScale)
```

containsTime

```
public boolean containsTime(long startTime,  
    IDvrConstants.DvrTimeScale timeScale)
```

Package

com.wowza.wms.http

com.wowza.wms.http Class HTTPProvider2Base

java.lang.Object

└-com.wowza.wms.http.HTTPProvider2Base

└-com.wowza.wms.http.HTTPProvider2Base

All Implemented Interfaces:

[IHTTPProvider2](#)

public abstract class **HTTPProvider2Base**
extends HTTPProvider2Base

HTTPProvider2Base: public base class for implementing HTTP Providers.

Simple HTTPProvider class

```

package com.wowza.wms.plugin.test.http;

public class HTTPHelloWowza extends HTTPProvider2Base
{
    public void onBind(IVHost vhost, HostPort hostPort)
    {
        super.onBind(vhost, hostPort);
        // Called when the HTTP Provider is added to the VHost it is configured for.
    }

    public void onUnbind(IVHost vhost, HostPort hostPort)
    {
        // Called when the VHost is shutting down for the hostPort configured
    }

    public void onHTTPRequest(IVHost vhost, IHTTPRequest req, IHTTPResponse resp)
    {
        // If you omit this no authentication is checked regardless of the
configuration
        if (!doHTTPAuthentication(vhost, req, resp))
            return;

        String retStr = "<head><title>Hello Wowza</title></head><body>Hello
Wowza</body>";
        try
        {
            OutputStream out = resp.getOutputStream();
            byte[] outBytes = retStr.getBytes();
            out.write(outBytes);
        }
        catch (Exception e)
        {
            WMSLoggerFactory.getLogger(HTTPHelloWowza.class).error("HTTPHelloWowza ", e);
        }
    }
}

```

Can be added with the following HTTPProvider XML configuration

```

<httpprovider>

<baseclass>com.wowza.wms.plugin.test.http.HTTPHelloWowza</baseclass>
    <requestfilters>helloworld*</requestfilters>
    <authenticationmethod>none</authenticationmethod>
</httpprovider>

```

Fields inherited from class `com.wowza.wms.http.HTTPProvider2Base`

authenticateHandler, authenticateHTTPProviderHandler, authenticationMethod, corsHeaders, DATEFORMAT, DATEFORMAT_LOCALE, DATEFORMAT_LOCALE_COUNTRY, DATEFORMAT_LOCALE_LANGUAGE, DATEFORMAT_ZONE, DATEHEADER_ENABLE, dateHeaderFormat, dateHeaderLocale, dateHeaderLocaleString, dateHeaderZone, enableDate, fastDateFormat, filters, properties, PROPERTY_DATE_HEADER_ENABLE, PROPERTY_DATE_HEADER_FORMAT, PROPERTY_DATE_HEADER_LOCALE, PROPERTY_DATE_HEADER_ZONE, requestFilters, websocketSessions

Constructor Summary

public [HTTPProvider2Base\(\)](#)

Methods inherited from class `com.wowza.wms.http.HTTPProvider2Base`

addCORSHeaders, addDateHeader, addWebSocketSession, broadcastWebSocketMessage, canHandle, doHTTPAuthentication, getAuthenticationMethod, getPath, getRequestFilters, getWebSocketSessionCount, getWebSocketSessions, init, onBind, onUnbind, removeWebSocketSession, setAuthenticationMethod, setProperties, setRequestFilters, validatePath

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.http.IHTTPProvider2](#)

[canHandle](#), [getAuthenticationMethod](#), [getRequestFilters](#), [init](#), [setAuthenticationMethod](#), [setRequestFilters](#)

Methods inherited from interface [com.wowza.wms.http.IHTTPProvider](#)

[addCORSHeaders](#), [addDateHeader](#), [addWebSocketSession](#), [broadcastWebSocketMessage](#), [getWebSocketSessionCount](#), [getWebSocketSessions](#), [onBind](#), [onHTTPRequest](#), [onUnbind](#), [removeWebSocketSession](#), [setProperties](#), [validatePath](#)

Constructors

HTTPProvider2Base

public `HTTPProvider2Base()`

com.wowza.wms.http Interface IHTTPProvider

All Subinterfaces:

[IHTTPProvider2](#)

public interface **IHTTPProvider**

extends

IHTTPProvider: HTTP provider class for a given HostPort definition. Receive all HTTP requests that are not RTMPT requests. See IHTTPProvider2 for the extended version of this interface.

Method Summary

void	addCORSHeaders (IHTTPResponse resp) Called to provide CORS Headers to the output
void	addDateHeader (IHTTPResponse resp) Called to provide Date Header to the output
void	addWebSocketSession (IWebSocketSession webSocketSession) Add WebSocket session
int	broadcastWebSocketMessage (WebSocketMessage message) Broadcast a WebSocket message to all connected WebSocket sessions.
int	getWebSocketSessionCount () Get total count of WebSocket sessions for this HTTPProvider
java.util.List	getWebSocketSessions () Get a list of all WebSocket sessions for this HTTPProvider
void	onBind (IVHost vhost, HostPort hostPort) Triggered after hostPort binds to socket
void	onHTTPRequest (IVHost vhost, IHTTPRequest req, IHTTPResponse resp) Triggered for each HTTP request to the given hostPort that is not an RTMPT request.
void	onUnbind (IVHost vhost, HostPort hostPort) Triggered after hostPort unbinds
boolean	removeWebSocketSession (IWebSocketSession webSocketSession) Remove WebSocket session
void	setProperty (WMSProperties properties) Called to provide properties set in configuration files
boolean	validatePath (String path) Called to check path request is within scope

Methods

(continued from last page)

onBind

```
public void onBind(IVHost vhost,  
                  HostPort hostPort)
```

Triggered after hostPort binds to socket

Parameters:

vhost - parent vhost
hostPort - host port definition

onHTTPRequest

```
public void onHTTPRequest(IVHost vhost,  
                          IHTTPRequest req,  
                          IHTTPResponse resp)
```

Triggered for each HTTP request to the given hostPort that is not an RTMPT request.

Parameters:

vhost - parent vhost
req - HTML request object
resp - HTML response object

onUnbind

```
public void onUnbind(IVHost vhost,  
                    HostPort hostPort)
```

Triggered after hostPort unbinds

Parameters:

vhost - parent vhost
hostPort - host port definition

setProperty

```
public void setProperty(WMSProperties properties)
```

Called to provide properties set in configuration files

addCORSHeaders

```
public void addCORSHeaders(IHTTPResponse resp)
```

Called to provide CORS Headers to the output

Parameters:

resp

addDateHeader

```
public void addDateHeader(IHTTPResponse resp)
```

Called to provide Date Header to the output

Parameters:

resp

validatePath

```
public boolean validatePath(String path)
```

Called to check path request is within scope

Parameters:

path

Returns:

addWebSocketSession

```
public void addWebSocketSession(IWebSocketSession websocketSession)
```

Add WebSocket session

Parameters:

websocketSession - WebSocket session

removeWebSocketSession

```
public boolean removeWebSocketSession(IWebSocketSession websocketSession)
```

Remove WebSocket session

Parameters:

websocketSession - WebSocket session

Returns:

true, if session removed

getWebSocketSessions

```
public java.util.List getWebSocketSessions()
```

Get a list of all WebSocket sessions for this HTTPProvider

Returns:

list of all WebSocket sessions

getWebSocketSessionCount

```
public int getWebSocketSessionCount()
```

Get total count of WebSocket sessions for this HTTPProvider

Returns:

total count of WebSocket sessions for this HTTPProvider

broadcastWebSocketMessage

```
public int broadcastWebSocketMessage(WebSocketMessage message)
```

Broadcast a WebSocket message to all connected WebSocket sessions.

(continued from last page)

Parameters:

message - message to broadcast

Returns:

number of sessions the message was sent to

com.wowza.wms.http Interface IHTTPProvider2

All Superinterfaces:

[IHTTPProvider](#)

public interface **IHTTPProvider2**
extends [IHTTPProvider](#)

IHTTPProvider2: Extension of IHTTPProvider that adds support for multiple HTTPProviders attached to a single HostPort along with authentication. Multiple HTTPProviders can be added to a HostPort definition. They are configured as follows:

```
<HTTPProvider>
  <BaseClass>com.wowza.wms.http.HTTPServerVersion</BaseClass>
  <RequestFilters>*serverversion</RequestFilters>
  <AuthenticationMethod>none</AuthenticationMethod>
</HTTPProvider>
```

Below is an sample implementation of the HTTPServerVersion provider:

```

import java.io.*;

import com.wowza.wms.server.*;
import com.wowza.wms.stream.*;
import com.wowza.wms.vhost.*;
import com.wowza.wms.logging.*;

public class HTTPServerVersion extends HTTPProvider2Base
{
    public void onHTTPRequest(IVHost vhost, IHTTPRequest req, IHTTPResponse resp)
    {
        if (!doHTTPAuthentication(vhost, req, resp))
            return;

        String version = MediaStreamBase.p+" "+ReleaseInfo.getVersion()+"
build"+ReleaseInfo.getBuildNumber();
        String retStr =
"<html><head><title>"+version+"</title></head><body>"+version+"</body></html>";
        try
        {
            OutputStream out = resp.getOutputStream();
            byte[] outBytes = retStr.getBytes();
            out.write(outBytes);
        }
        catch (Exception e)
        {
            WMSLoggerFactory.getLogger(HTTPServerVersion.class).error("HTMLServerVersion ", e);
        }
    }
}

```

Method Summary

boolean	canHandle (String path)
String	getAuthenticationMethod ()
String	getRequestFilters ()
void	init ()
void	setAuthenticationMethod (String authenticationMethod)
void	setRequestFilters (String requestFilters)

Methods inherited from interface [com.wowza.wms.http.IHTTPProvider](#)

[addCORSHeaders](#), [addDateHeader](#), [addWebSocketSession](#), [broadcastWebSocketMessage](#),
[getWebSocketSessionCount](#), [getWebSocketSessions](#), [onBind](#), [onHTTPRequest](#), [onUnbind](#),
[removeWebSocketSession](#), [setProperties](#), [validatePath](#)

Methods

canHandle

```
public boolean canHandle(String path)
```

setRequestFilters

```
public void setRequestFilters(String requestFilters)
```

getRequestFilters

```
public String getRequestFilters()
```

init

```
public void init()
```

getAuthenticationMethod

```
public String getAuthenticationMethod()
```

setAuthenticationMethod

```
public void setAuthenticationMethod(String authenticationMethod)
```

com.wowza.wms.http Interface IHttpRequest

public interface **IHttpRequest**
extends

Method Summary

int	getContentLength() Get the content length of the body of the message
String	getContentType() Get the request content type
String	getHeader(String name) Get a HTTP header value such as 'Content-Length'
byte[]	getHeaderBytes() Returns the header as bytes
java.util.Map	getHeaderMap() Get a copy of the HTTP request header map
java.util.Set	getHeaderNames() Get a Set of the header names
java.io.InputStream	getInputStream() Get the body of the message as an input stream
int	getIntHeader(String name) Get a HTTP header value such as 'Content-Length' and return as int
java.util.Locale	getLocale() Get locale of request (Example: en-us)
String	getMethod() Get the method invocation method: GET, POST, HEAD
byte[]	getMsgBytes() Return the message bytes
String	getParameter(String name) Get a parameter value
java.util.Map	getParameterMap() Get the entire parameter Map
java.util.Set	getParameterNames() Get a Set of parameter names
String[]	getParameterValues(String name) Get a multi-value parameter as an array of String
String	getPath() Returns the HTTP path element of the request

String	getProtocol() Get the request protocol (example: HTTP/1.1)
String	getQueryString() Get the query string part of the url (everything after the ?)
String	getRemoteAddr() Get the remote ip address of the request
String	getRemoteHost() Get the remote host name (if known) if not return ip address
String	getRequestURI() Get the full request URI
String	getRequestURL() Get the request url (same as URI minus the query string)
String	getScheme() Get the request scheme (Example "http")
String	getServerName() Get the name of the server (Example: "Wowza Streaming Engine")
int	getServerPort() Get the port this request was received on
boolean	isHeadRequest() Returns true if the request is a HEAD request
boolean	isSecure() Returns true is the request is protected by SSL
boolean	isUpgradeRequest() Returns true if upgrade request (WebSocket,...)
void	parseBodyForParams() If the body of the message contains parameter data (data in name value pairs separated by & character) call this routine to decode those parameters and add them to the parameter map.
void	parseBodyForParams(boolean doDecode) If the body of the message contains parameter data (data in name value pairs separated by & character) call this routine to decode those parameters and add them to the parameter map.

Methods

getHeaderMap

```
public java.util.Map getHeaderMap()
```

Get a copy of the HTTP request header map

Returns:

copy of the HTTP request header map

(continued from last page)

getHeader

```
public String getHeader(String name)
```

Get a HTTP header value such as 'Content-Length'

Parameters:

name - header name

Returns:

header value

getIntHeader

```
public int getIntHeader(String name)
```

Get a HTTP header value such as 'Content-Length' and return as int

Parameters:

name - header name

Returns:

header value

getHeaderNames

```
public java.util.Set getHeaderNames()
```

Get a Set of the header names

Returns:

Set of header names

getMethod

```
public String getMethod()
```

Get the method invocation method: GET, POST, HEAD

Returns:

method

getQueryString

```
public String getQueryString()
```

Get the query string part of the url (everything after the ?)

Returns:

query string

getContentLength

```
public int getContentLength()
```

Get the content length of the body of the message

Returns:

(continued from last page)

content length of the body of the message

getRequestURI

```
public String getRequestURI()
```

Get the full request URI

Returns:

full request URI

getRequestURL

```
public String getRequestURL()
```

Get the request url (same as URI minus the query string)

Returns:

request url

getContentType

```
public String getContentType()
```

Get the request content type

Returns:

request content type

parseBodyForParams

```
public void parseBodyForParams(boolean doDecode)
```

If the body of the message contains parameter data (data in name value pairs separated by & character) call this routine to decode those parameters and add them to the parameter map.

Parameters:

doDecode - true to decode the params as though they are url params

parseBodyForParams

```
public void parseBodyForParams()
```

If the body of the message contains parameter data (data in name value pairs separated by & character) call this routine to decode those parameters and add them to the parameter map.

getParameter

```
public String getParameter(String name)
```

Get a parameter value

Parameters:

name - parameter name

Returns:

parameter value

(continued from last page)

getParameterNames

```
public java.util.Set getParameterNames()
```

Get a Set of parameter names

Returns:

Set of parameter names

getParameterValues

```
public String[] getParameterValues(String name)
```

Get a multi-value parameter as an array of String

Parameters:

name - parameter name

Returns:

multi-value parameter as an array of String

getParameterMap

```
public java.util.Map getParameterMap()
```

Get the entire parameter Map

Returns:

parameter Map

getInputStream

```
public java.io.InputStream getInputStream()
```

Get the body of the message as an input stream

Returns:

body of the message as an input stream

getProtocol

```
public String getProtocol()
```

Get the request protocol (example: HTTP/1.1)

Returns:

request protocol

getScheme

```
public String getScheme()
```

Get the request scheme (Example "http")

Returns:

request scheme

(continued from last page)

getServerName

```
public String getServerName()
```

Get the name of the server (Example: "Wowza Streaming Engine")

Returns:

name of the server

getServerPort

```
public int getServerPort()
```

Get the port this request was received on

Returns:

the port this request was received on

getRemoteAddr

```
public String getRemoteAddr()
```

Get the remote ip address of the request

Returns:

remote ip address of the request

getRemoteHost

```
public String getRemoteHost()
```

Get the remote host name (if known) if not return ip address

Returns:

remote host name

getLocale

```
public java.util.Locale getLocale()
```

Get locale of request (Example: en-us)

Returns:

locale of request

isSecure

```
public boolean isSecure()
```

Returns true is the request is protected by SSL

Returns:

true is the request is protected by SSL

getPath

```
public String getPath()
```

(continued from last page)

Returns the HTTP path element of the request

Returns:

HTTP path element of the request

getHeaderBytes

```
public byte[] getHeaderBytes()
```

Returns the header as bytes

Returns:

header as bytes

getMsgBytes

```
public byte[] getMsgBytes()
```

Return the message bytes

Returns:

message bytes

isHeadRequest

```
public boolean isHeadRequest()
```

Returns true if the request is a HEAD request

Returns:

true if the request is a HEAD request

isUpgradeRequest

```
public boolean isUpgradeRequest()
```

Returns true if upgrade request (WebSocket,...)

Returns:

Returns true if upgrade request

com.wowza.wms.http Interface IHTTPResponse

public interface **IHTTPResponse**
extends

Field Summary

public static final	UPGRADE_PROTOCOL_WEBSOCKETS Value: 1
---------------------	--

Method Summary

boolean	containsHeader (String name) Returns true if response header contains parameter name
String	getHeader (String name) Get header value
java.util.Map	getHeaders () Get the current response headers as a map
int	getHeaderSize () Get the size in bytes of the HTTP header
int	getIntHeader (String name) Get header value as int
java.io.OutputStream	getOutputStream () Get the output stream for the response.
int	getUpgradeRequestProtocol () Get the upgrade request protocol, -1 means no upgrade, see UPGRADE_PROTOCOL_*
boolean	isHeadResponse () returns true if the response is due to a HEAD request
void	removeHeader (String name) Remove header value
void	setHeader (String name, String value) Set header value
void	setHeadResponse (boolean isHeadResponse) indicates if the response is a response to a HEAD request
void	setIntHeader (String name, int value) Set header value as int
void	setResponseCode (int responseCode) Set the HTTP response code

void	<code>setUpgradeRequestProtocol(int upgradeRequestProtocol, IWebSocketEventNotify listener)</code> Set the upgrade request protocol, -1 means no upgrade, see UPGRADE_PROTOCOL_*
------	---

Fields

UPGRADE_PROTOCOL_WEBSOCKETS

```
public static final int UPGRADE_PROTOCOL_WEBSOCKETS
```

Constant value: **1**

Methods

getOutputStream

```
public java.io.OutputStream getOutputStream()
```

Get the output stream for the response. You can then write directly into the output stream.

Returns:

output stream for the response

containsHeader

```
public boolean containsHeader(String name)
```

Returns true if response header contains parameter name

Parameters:

name - header parameter name

Returns:

true if header contains value

setHeader

```
public void setHeader(String name, String value)
```

Set header value

Parameters:

name - header parameter name

value - parameter value

removeHeader

```
public void removeHeader(String name)
```

Remove header value

Parameters:

name - name

setIntHeader

```
public void setIntHeader(String name,  
                        int value)
```

Set header value as int

Parameters:

name - header parameter name
value - parameter value

getHeaders

```
public java.util.Map getHeaders()
```

Get the current response headers as a map

Returns:

current response headers as a map

getHeader

```
public String getHeader(String name)
```

Get header value

Parameters:

name - header parameter name

Returns:

parameter value

getIntHeader

```
public int getIntHeader(String name)
```

Get header value as int

Parameters:

name - header parameter name

Returns:

parameter value

setResponseCode

```
public void setResponseCode(int responseCode)
```

Set the HTTP response code

Parameters:

responseCode - HTTP response code

getHeaderSize

```
public int getHeaderSize()
```

Get the size in bytes of the HTTP header

(continued from last page)

Returns:

header size in bytes

setHeadResponse

```
public void setHeadResponse(boolean isHeadResponse)
```

indicates if the response is a response to a HEAD request

Parameters:

isHeadResponse - indicating if this is a response to a HEAD request

isHeadResponse

```
public boolean isHeadResponse()
```

returns true if the response is due to a HEAD request

Returns:

true if the response is due to a HEAD request

getUpgradeRequestProtocol

```
public int getUpgradeRequestProtocol()
```

Get the upgrade request protocol, -1 means no upgrade, see UPGRADE_PROTOCOL_*

Returns:

upgrade request protocol

setUpgradeRequestProtocol

```
public void setUpgradeRequestProtocol(int upgradeRequestProtocol,  
IWebSocketEventNotify listener)
```

Set the upgrade request protocol, -1 means no upgrade, see UPGRADE_PROTOCOL_*

Parameters:

upgradeRequestProtocol - upgrade request protocol

listener - event listener

Package

com.wowza.wms.httpstreamer.cupertinostreaming.file

com.wowza.wms.httpstreamer.cupertinoStreaming.file Interface IHTTPStreamerCupertinoIndex

public interface IHTTPStreamerCupertinoIndex
extends

Method Summary

int	addItem(IHTTPStreamerCupertinoIndexItem item)
int	addIndexKeyFrameItem(IHTTPStreamerCupertinoIndexItem item)
void	close()
void	fillChunk(IHTTPStreamerCupertinoIndexItem item, LiveStreamPacketizerCupertinoChunk chunk, CupertinoStreamingRendition rendition, long bitrate, boolean isByteRangeRequest)
IHTTPStreamerApplicationContext	getApplicationContext()
int	getAudioBitrate()
int	getAudioCodec()
TimedTextRequest	getCaptionRequest()
ITimedTextProviderCEA608	getCEA608CaptionProvider()
LiveStreamPacketizerCupertinoChunk	getChunk(String filename, CupertinoStreamingRendition rendition, long bitrate, boolean isByteRangeRequest)
com.wowza.wms.media.model.MediaCodecInfoAudio	getCodecInfoAudio()
com.wowza.wms.media.model.MediaCodecInfoVideo	getCodecInfoVideo()
String	getCodecsAudioStr(int codecStrFormatId)
String	getCodecsStr(int codecStrFormatId)
String	getCodecsVideoStr(int codecStrFormatId)
double	getDuration()
CupertinoEncInfo	getEncInfo()

CupertinoEncInfo	getEncKeyFrameInfo()
String	getEncKeyFrameURL()
String	getEncURL()
IHTTPStreamerSession	getHttpStreamerSession()
int	getID3Bitrate (CupertinoStreamingRendition rendition)
ID3Frames	getID3FramesFooter()
ID3Frames	getID3FramesFooterAudio()
ID3Frames	getID3FramesHeader()
ID3Frames	getID3FramesHeaderAudio()
int	getIndexCount()
IHTTPStreamerCupertinoIndexItem	getIndexItem (int index)
int	getIndexKeyFrameCount()
IHTTPStreamerCupertinoIndexItem	getIndexKeyFrameItem (int index)
int	getKeyFrameOnlyBitrate()
long	getPlayDuration()
String	getPlaylistStr (CupertinoStreamingRendition rendition)
long	getPlaySeek()
long	getPlayStart()
WMSProperties	getProperties()
String	getResolutionStr()
java.util.List	getStreamBitrates()
int	getStreamMode()
String	getStreamName()
String	getStreamNameByBitrate (long bitrate)

String	getStreamNameByBitrate (long bitrate, String languageStr, String titleStr)
java.util.List	getStreamNames ()
java.util.List	getStreamNamesRaw ()
String	getSubtitleChunk (String filename, String languageID, boolean isByteRangeRequest)
String	getSubtitleListStr (String languageID, HTTPStreamerAdapterCupertinoStreamer.RequestInfo requestInfo)
String	getTitleStr ()
int	getVideoBitrateAverage ()
int	getVideoBitratePeak ()
String	getVODTranscodeNGRP ()
com.wowza.wms.timedtext.webvtt.ITimedTextProviderWebVTT	getWebVTTCaptionProvider ()
void	indexFile (IHTTPStreamerSession httpStreamerSession)
void	init (IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName, long playStart, long playDuration, long playSeek, TimedTextRequest timedTextRequest, String vodTranscodeNGRP)
boolean	isCreateKeyFrameOnlyPlaylist ()
boolean	isDoEncryption ()
boolean	isDoKeyFrameEncryption ()
boolean	isReloadMediaList ()
boolean	isUseWebVTTForVODCaptions ()
void	open ()
void	setAudioBitrate (int audioBitrate)
void	setAudioCodec (int audioCodec)
void	setCaptionRequest (TimedTextRequest request)

void	setCEA608CaptionProvider (ITimedTextProviderCEA608 captionProviderCEA608)
void	setDuration (double duration)
void	setKeyFrameOnlyBitrate (int keyFrameOnlyBitrate)
void	setPlayDuration (long playDuration)
void	setPlaySeek (long playSeek)
void	setPlayStart (long playStart)
void	setStreamMode (int streamMode)
void	setTitleStr (String titleStr)
void	setUseWebVTTForVODCaptions (boolean useWebVTTForCaption)
void	setVideoBitrateAverage (int videoBitrate)
void	setVideoBitratePeak (int videoBitrate)
void	setVODTranscodeNGRP (String vodTranscodeNGRP)
void	setWebVTTCaptionProvider (com.wowza.wms.timedtext.webvtt.ITimedTextProviderWebVTT captionProviderWebVTT)

Methods

getPlaylistStr

```
public String getPlaylistStr(CupertinoStreamingRendition rendition)
```

init

```
public void init(IHTTPStreamerApplicationContext appContext,
IHTTPStreamerSession httpStreamerSession,
String rawStreamName,
String streamExt,
String streamName,
long playStart,
long playDuration,
long playSeek,
TimedTextRequest timedTextRequest,
String vodTranscodeNGRP)
```

(continued from last page)

indexFile

```
public void indexFile(IHTTPStreamerSession httpStreamerSession)
```

close

```
public void close()
```

open

```
public void open()
```

addIndexItem

```
public int addIndexItem(IHTTPStreamerCupertinoIndexItem item)
```

addIndexKeyFrameItem

```
public int addIndexKeyFrameItem(IHTTPStreamerCupertinoIndexItem item)
```

getIndexCount

```
public int getIndexCount()
```

getIndexKeyFrameCount

```
public int getIndexKeyFrameCount()
```

getIndexItem

```
public IHTTPStreamerCupertinoIndexItem getIndexItem(int index)
```

getIndexKeyFrameItem

```
public IHTTPStreamerCupertinoIndexItem getIndexKeyFrameItem(int index)
```

getTitleStr

```
public String getTitleStr()
```

(continued from last page)

setTitleStr

```
public void setTitleStr(String titleStr)
```

isDoEncryption

```
public boolean isDoEncryption()
```

isDoKeyFrameEncryption

```
public boolean isDoKeyFrameEncryption()
```

getEncURL

```
public String getEncURL()
```

getEncKeyFrameURL

```
public String getEncKeyFrameURL()
```

getEncInfo

```
public CupertinoEncInfo getEncInfo()
```

getEncKeyFrameInfo

```
public CupertinoEncInfo getEncKeyFrameInfo()
```

getChunk

```
public LiveStreamPacketizerCupertinoChunk getChunk(String filename,  
    CupertinoStreamingRendition rendition,  
    long bitrate,  
    boolean isByteRangeRequest)
```

(continued from last page)

fillChunk

```
public void fillChunk(IHTTPStreamerCupertinoIndexItem item,  
    LiveStreamPacketizerCupertinoChunk chunk,  
    CupertinoStreamingRendition rendition,  
    long bitrate,  
    boolean isByteRangeRequest)
```

getApplicationContext

```
public IHTTPStreamerApplicationContext getApplicationContext()
```

getHttpStreamerSession

```
public IHTTPStreamerSession getHttpStreamerSession()
```

getStreamName

```
public String getStreamName()
```

getStreamNames

```
public java.util.List getStreamNames()
```

getStreamBitrates

```
public java.util.List getStreamBitrates()
```

getStreamNamesRaw

```
public java.util.List getStreamNamesRaw()
```

getStreamMode

```
public int getStreamMode()
```

setStreamMode

```
public void setStreamMode(int streamMode)
```

(continued from last page)

getAudioBitrate

```
public int getAudioBitrate()
```

setAudioBitrate

```
public void setAudioBitrate(int audioBitrate)
```

getVideoBitrateAverage

```
public int getVideoBitrateAverage()
```

setVideoBitrateAverage

```
public void setVideoBitrateAverage(int videoBitrate)
```

getVideoBitratePeak

```
public int getVideoBitratePeak()
```

setVideoBitratePeak

```
public void setVideoBitratePeak(int videoBitrate)
```

getAudioCodec

```
public int getAudioCodec()
```

setAudioCodec

```
public void setAudioCodec(int audioCodec)
```

getID3Bitrate

```
public int getID3Bitrate(CupertinoStreamingRendition rendition)
```

getID3FramesHeader

```
public ID3Frames getID3FramesHeader()
```

(continued from last page)

getID3FramesFooter

```
public ID3Frames getID3FramesFooter()
```

getID3FramesHeaderAudio

```
public ID3Frames getID3FramesHeaderAudio()
```

getID3FramesFooterAudio

```
public ID3Frames getID3FramesFooterAudio()
```

getCodecInfoVideo

```
public com.wowza.wms.media.model.MediaCodecInfoVideo getCodecInfoVideo()
```

getCodecInfoAudio

```
public com.wowza.wms.media.model.MediaCodecInfoAudio getCodecInfoAudio()
```

getCodecsStr

```
public String getCodecsStr(int codecStrFormatId)
```

getCodecsAudioStr

```
public String getCodecsAudioStr(int codecStrFormatId)
```

getCodecsVideoStr

```
public String getCodecsVideoStr(int codecStrFormatId)
```

getResolutionStr

```
public String getResolutionStr()
```

(continued from last page)

getDuration

```
public double getDuration()
```

setDuration

```
public void setDuration(double duration)
```

getProperties

```
public WMSProperties getProperties()
```

getPlayStart

```
public long getPlayStart()
```

setPlayStart

```
public void setPlayStart(long playStart)
```

getPlayDuration

```
public long getPlayDuration()
```

setPlayDuration

```
public void setPlayDuration(long playDuration)
```

getPlaySeek

```
public long getPlaySeek()
```

setPlaySeek

```
public void setPlaySeek(long playSeek)
```

getStreamNameByBitrate

```
public String getStreamNameByBitrate(long bitrate)
```

(continued from last page)

getStreamNameByBitrate

```
public String getStreamNameByBitrate(long bitrate,  
    String languageStr,  
    String titleStr)
```

getVODTranscodeNGRP

```
public String getVODTranscodeNGRP()
```

setVODTranscodeNGRP

```
public void setVODTranscodeNGRP(String vodTranscodeNGRP)
```

getSubtitleListStr

```
public String getSubtitleListStr(String languageID,  
    HTTPStreamerAdapterCupertinoStreamer.RequestInfo requestInfo)
```

getCaptionRequest

```
public TimedTextRequest getCaptionRequest()
```

setCaptionRequest

```
public void setCaptionRequest(TimedTextRequest request)
```

setWebVTTCaptionProvider

```
public void  
setWebVTTCaptionProvider(com.wowza.wms.timedtext.webvtt.ITimedTextProviderWebVTT  
captionProviderWebVTT)
```

getWebVTTCaptionProvider

```
public com.wowza.wms.timedtext.webvtt.ITimedTextProviderWebVTT  
getWebVTTCaptionProvider()
```

setCEA608CaptionProvider

```
public void setCEA608CaptionProvider(ITimedTextProviderCEA608 captionProviderCEA608)
```

(continued from last page)

getCEA608CaptionProvider

```
public ITimedTextProviderCEA608 getCEA608CaptionProvider()
```

isUseWebVTTForVODCaptions

```
public boolean isUseWebVTTForVODCaptions()
```

setUseWebVTTForVODCaptions

```
public void setUseWebVTTForVODCaptions(boolean useWebVTTForCaption)
```

getSubtitleChunk

```
public String getSubtitleChunk(String filename,  
    String languageID,  
    boolean isByteRangeRequest)
```

isReloadMediaList

```
public boolean isReloadMediaList()
```

isCreateKeyFrameOnlyPlaylist

```
public boolean isCreateKeyFrameOnlyPlaylist()
```

getKeyFrameOnlyBitrate

```
public int getKeyFrameOnlyBitrate()
```

setKeyFrameOnlyBitrate

```
public void setKeyFrameOnlyBitrate(int keyFrameOnlyBitrate)
```

com.wowza.wms.httpstreamer.cupertinostreaming.file Interface IHTTPStreamerCupertinoIndexItem

public interface IHTTPStreamerCupertinoIndexItem
extends

Method Summary

CupertinoEncInfo	getEncInfo()
int	getIndex()
long	getStartTimecode()
long	getStopTimecode()
void	setEncInfo(CupertinoEncInfo encInfo)
void	setIndex(int index)
void	setStartTimecode(long startTimecode)
void	setStopTimecode(long stopTimecode)

Methods

getStartTimecode

```
public long getStartTimecode()
```

setStartTimecode

```
public void setStartTimecode(long startTimecode)
```

getStopTimecode

```
public long getStopTimecode()
```

setStopTimecode

```
public void setStopTimecode(long stopTimecode)
```

(continued from last page)

getIndex

```
public int getIndex()
```

setIndex

```
public void setIndex(int index)
```

getEncInfo

```
public CupertinoEncInfo getEncInfo()
```

setEncInfo

```
public void setEncInfo(CupertinoEncInfo encInfo)
```

com.wowza.wms.httpstreamer.cupertino.streaming.file Interface IMediaReaderCupertino

All Superinterfaces:

[IMediaReader](#)

public interface **IMediaReaderCupertino**

extends [IMediaReader](#)

Field Summary

public static final [MEDIAREADER_POSTFIX](#)

Value: **cupertino**

Fields inherited from interface [com.wowza.wms.stream.IMediaReader](#)

[CONTENTTYPE_MEDIA](#), [CONTENTTYPE_MEDIALIST](#), [DEFAULT_RANDOMACCESSREADER](#),
[DEFAULT_RANDOMACCESSREADEROPTIMIZER](#), [PLAYEVENT_AFTERBUFFERFILL](#), [PLAYEVENT_AFTERMETADATA](#),
[PLAYEVENT_BEFOREBUFFERFILL](#), [PLAYEVENT_BEFOREMETADATA](#), [PLAYEVENT_STARTPLAYBACK](#), [SEEK_EXACT](#),
[SEEK_KEYCLOSE](#), [SEEK_KEYDOWN](#), [SEEK_KEYUP](#), [SEEKTARGET_AUDIO](#), [SEEKTARGET_ENHANCED](#),
[SEEKTARGET_VIDEOKEYFRAME](#)

Method Summary

void [fillChunk](#)([HTTPStreamerApplicationContextCupertinoStreamer](#) appContext, [IHTTPStreamerCupertinoIndex](#) fileIndex, [IHTTPStreamerCupertinoIndexItem](#) item, [LiveStreamPacketizerCupertinoChunk](#) chunk, [CupertinoStreamingRendition](#) rendition, long bitrate, [ID3Frames](#) headerFrames, [ID3Frames](#) footerFrames, [ICupertinoEncryptor](#) encryptor, boolean isByteRangeRequest)

void [indexFile](#)([IHTTPStreamerCupertinoIndex](#) index)

Methods inherited from interface [com.wowza.wms.stream.IMediaReader](#)

[close](#), [getDuration](#), [getLength](#), [getMediaExtension](#), [getMetadata](#), [getPath](#),
[getStreamPosition](#), [init](#), [isOpen](#), [open](#), [rewind](#), [seek](#), [sendZeroLengthPacket](#),
[setMediaReaderItem](#), [setProperties](#), [setStreamPosition](#), [startPlayback](#),
[writeGeneratedKeyFrame](#), [writePackets](#), [writePackets](#)

Fields

MEDIAREADER_POSTFIX

public static final java.lang.String **MEDIAREADER_POSTFIX**

Constant value: **cupertino**

Methods

(continued from last page)

indexFile

```
public void indexFile(IHTTPStreamerCupertinoIndex index)
```

fillChunk

```
public void fillChunk(HTTPStreamerApplicationContextCupertinoStreamer appContext,  
    IHTTPStreamerCupertinoIndex fileIndex,  
    IHTTPStreamerCupertinoIndexItem item,  
    LiveStreamPacketizerCupertinoChunk chunk,  
    CupertinoStreamingRendition rendition,  
    long bitrate,  
    ID3Frames headerFrames,  
    ID3Frames footerFrames,  
    ICupertinoEncryptor encryptor,  
    boolean isByteRangeRequest)
```

Package

**com.wowza.wms.httpstreamer.cupertinostrea
ming.httpstreamer**

com.wowza.wms.httpstreamer.cupertinostreaming.httpstreamer Class HTTPStreamerSessionCupertino

java.lang.Object

└─ com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

└─

com.wowza.wms.httpstreamer.cupertinostreaming.httpstreamer.HTTPStreamerSessionCupertino

All Implemented Interfaces:

[IHTTPSessionNotify](#), [IHTTPStreamerSession](#)

```
public class HTTPStreamerSessionCupertino
extends HTTPStreamerSessionBase
implements IHTTPStreamerSession, IHTTPSessionNotify
```

Fields inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

acceptSession, appInstance, connectionHolder, cookieStr, corsHeaders, DATEFORMAT, elapsedTime, fastDateFormat, fileInfoMap, firstCheck, httpHeaders, httpStreamerAdapter, ioPerformanceCounter, ipAddress, isActive, isDelete, isHTTPOrigin, isPlayLogged, isSecure, lastRequest, liveStreamingPacketizer, lock, mediaCasterStreamLock, notifyCreate, playDuration, playSeek, playStart, properties, queryStr, redirectSession, redirectSessionBody, redirectSessionCode, redirectSessionContentType, redirectSessionURL, referrer, serverIp, serverPort, sessionId, sessionProtocol, sessionTimeout, sessionType, stream, streamDomainStrSet, streamExt, streamName, streamNamePartMap, streamPosition, timeoutSession, totalIOPerformance2Last, totalIOPerformanceLast, transcoderVODIndex, transcoderVODIndexDestinationsMap, transcoderVODIndexDestinationsOrder, transcoderVODListeners, transcoderVODSession, uri, userAgent, userHTTPHeaders, userManifestHeaders, userQueryStr, vhost, vodTranscodeNGRP

Fields inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[SESSIONPROTOCOL_COUNT](#), [SESSIONPROTOCOL_CUPERTINOSTREAMING](#), [SESSIONPROTOCOL_DIRECTSTREAMING](#), [SESSIONPROTOCOL_DVRCHUNKSTREAMING](#), [SESSIONPROTOCOL_MPEGDASHSTREAMING](#), [SESSIONPROTOCOL_SANJOSESTREAMING](#), [SESSIONPROTOCOL_SMOOTHSTREAMING](#), [SESSIONPROTOCOL_TSSTREAMING](#), [SESSIONPROTOCOL_UNKNOWN](#), [SESSIONPROTOCOL_WEBMSTREAMING](#), [SESSIONTYPE_LIVE](#), [SESSIONTYPE_LIVEDVR](#), [SESSIONTYPE_UNKNOWN](#), [SESSIONTYPE_VOD](#)

Constructor Summary

public	HTTPStreamerSessionCupertino()
--------	--

Method Summary

void	clearLoggingValues()
------	--------------------------------------

boolean	containsIndex (String streamName)
---------	---

IHTTPStreamerCupertinoIndex	getIndex(IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName, long playStart, long playDuration, long playSeek, TimedTextRequest captionRequest, String vodTranscodeNGRP)
java.util.concurrent.atomic.AtomicBoolean	getIsFirstChunk()
CupertinoUserManifestHeaders	getUserManifestHeaders()
CupertinoUserManifestHeaders	getUserManifestHeaders(CupertinoStreamingRendition rendition)
CupertinoUserManifestHeaders	getUserManifestHeadersAudio()
CupertinoUserManifestHeaders	getUserManifestHeadersVideo()
void	indexTranscoderVOD(IHTTPStreamerApplicationContext appContext, String vodTranscodeNGRP)
boolean	isAutoCreateMultibitratePlaylist()
void	logLiveChunk(LiveStreamPacketizerCupertinoChunk chunk)
void	logVODChunk(LiveStreamPacketizerCupertinoChunk chunk)
void	notifyHTTPSessionCreate(IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)
void	notifyHTTPSessionDestroy(IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)
void	setAutoCreateMultibitratePlaylist(boolean autoCreateMultibitratePlaylist)
void	shutdown()
void	updateLoggingValues()

Methods inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

acceptSession, addHTTPSessionToTCPSession, addIOPerformance, addIOPerformance2, addStreamDomainStr, addStreamDomainStrs, addTranscoderVODListener, addUserHTTPHeaders, checkAndSetPlayLogged, clearLoggingValues, containsStreamDomainStr, containsStreamNameParts, doSessionRedirect, doSessionRedirect, extractHTTPRequestInfo, getAndClearNotifyCreate, getAppInstance, getConnectionHolder, getCookieStr, getCORSHaders, getDvrSessionInfo, getElapsedTime, getFileInfo, getHTTPDate, getHTTPHeader, getHTTPHeaderMap, getHTTPHeaderNames, getHTTPIntHeader, getHTTPStreamerAdapter, getIOPerformanceCounter, getIpAddress, getLastRequest, getLiveStreamingPacketizer, getLock, getPlayDuration, getPlaySeek, getPlayStart, getProperties, getQueryStr, getRedirectSessionBody, getRedirectSessionCode, getRedirectSessionContentType, getRedirectSessionURL, getReferrer, getServerIp, getServerPort, getSessionId, getSessionProtocol, getSessionTimeout, getSessionType, getStream, getStreamDomainStr, getStreamDomainStrList, getStreamExt, getStreamName, getStreamNameParts, getStreamPosition, getTimeRunning, getTimeRunningSeconds, getTranscoderVODIndex, getTranscoderVODIndex, getTranscoderVODIndexDestinationsMap, getTranscoderVODIndexDestinationsOrder, getTranscoderVODSession, getUri, getUserAgent, getUserHTTPHeaders, getUserQueryStr, getVHost, getVODTranscodeNGRP, indexTranscoderVOD, isAcceptSession, isActive, isDelete, isDeleteSession, isFileInfo, isHTTPOrigin, isPlayLogged, isRedirectSession, isSecure, isTimeout, isTimeoutSession, isValidated, isValidStreamDomainStr, lockRepeaterStreams, notifyTranscoderVODFillChunkStart, notifyTranscoderVODFillChunkStop, notifyTranscoderVODFillChunkTranscode, putFileInfo, putStreamNameParts, redirectSession, redirectSession, rejectSession, removeStreamDomainStr, removeTranscoderVODListener, setAcceptSession, setActive, setAppInstance, setCookieStr, setDeleteSession, setDvrSessionInfo, setHTTPOrigin, setHTTPStreamerAdapter, setIpAddress, setLiveStreamingPacketizer, setPlayDuration, setPlayLogged, setPlaySeek, setPlayStart, setQueryStr, setRedirectSession, setRedirectSessionBody, setRedirectSessionCode, setRedirectSessionContentType, setRedirectSessionURL, setReferrer, setSecure, setServerIp, setServerPort, setSessionId, setSessionProtocol, setSessionTimeout, setSessionType, setStream, setStreamExt, setStreamName, setStreamPosition, setThreadContext, setTimeoutSession, setTranscoderVODIndex, setTranscoderVODSession, setUri, setUserAgent, setUserHTTPHeader, setUserQueryStr, setValidated, setVHost, setVODTranscodeNGRP, shutdown, shutdownLocked, touch, updateLoggingValues, validStreamDomainToString

Methods inherited from class [java.lang.Object](#)

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[acceptSession](#), [addHTTPSessionToTCPSession](#), [addIOPerformance](#), [addIOPerformance2](#),
[addStreamDomainStr](#), [addStreamDomainStrs](#), [addTranscoderVODListener](#),
[addUserHTTPHeaders](#), [checkAndSetPlayLogged](#), [clearLoggingValues](#),
[containsStreamDomainStr](#), [containsStreamNameParts](#), [doSessionRedirect](#),
[doSessionRedirect](#), [extractHTTPRequestInfo](#), [getAndClearNotifyCreate](#), [getAppInstance](#),
[getConnectionHolder](#), [getCookieStr](#), [getCORSHaders](#), [getDvrSessionInfo](#), [getElapsedTime](#),
[getFileInfo](#), [getHTTPHeader](#), [getHTTPHeaderMap](#), [getHTTPHeaderNames](#), [getHTTPIntHeader](#),
[getHTTPStreamerAdapter](#), [getIOPerformanceCounter](#), [getIpAddress](#), [getLastRequest](#),
[getLiveStreamingPacketizer](#), [getLock](#), [getPlayDuration](#), [getPlaySeek](#), [getPlayStart](#),
[getProperties](#), [getQueryStr](#), [getRedirectSessionBody](#), [getRedirectSessionCode](#),
[getRedirectSessionContentType](#), [getRedirectSessionURL](#), [getReferrer](#), [getServerIp](#),
[getServerPort](#), [getSessionId](#), [getSessionProtocol](#), [getSessionTimeout](#), [getSessionType](#),
[getStream](#), [getStreamExt](#), [getStreamName](#), [getStreamNameParts](#), [getStreamPosition](#),
[getTimeRunning](#), [getTimeRunningSeconds](#), [getTranscoderVODIndex](#), [getTranscoderVODIndex](#),
[getTranscoderVODIndexDestinationsMap](#), [getTranscoderVODIndexDestinationsOrder](#),
[getTranscoderVODSession](#), [getUri](#), [getUserAgent](#), [getUserHTTPHeaders](#), [getUserQueryStr](#),
[getVHost](#), [getVODTranscodeNGRP](#), [indexTranscoderVOD](#), [isAcceptSession](#), [isActive](#),
[isDelete](#), [isDeleteSession](#), [isFileInfo](#), [isHTTPOrigin](#), [isPlayLogged](#), [isRedirectSession](#),
[isSecure](#), [isTimeout](#), [isTimeoutSession](#), [isValidated](#), [isValidStreamDomainStr](#),
[lockRepeaterStreams](#), [notifyTranscoderVODFillChunkStart](#),
[notifyTranscoderVODFillChunkStop](#), [notifyTranscoderVODFillChunkTranscode](#), [putFileInfo](#),
[putStreamNameParts](#), [redirectSession](#), [redirectSession](#), [rejectSession](#),
[removeStreamDomainStr](#), [removeTranscoderVODListener](#), [setAcceptSession](#), [setActive](#),
[setAppInstance](#), [setCookieStr](#), [setDeleteSession](#), [setDvrSessionInfo](#), [setHTTPOrigin](#),
[setHTTPStreamerAdapter](#), [setIpAddress](#), [setLiveStreamingPacketizer](#), [setPlayDuration](#),
[setPlayLogged](#), [setPlaySeek](#), [setPlayStart](#), [setQueryStr](#), [setRedirectSession](#),
[setRedirectSessionBody](#), [setRedirectSessionCode](#), [setRedirectSessionContentType](#),
[setRedirectSessionURL](#), [setReferrer](#), [setSecure](#), [setServerIp](#), [setServerPort](#),
[setSessionId](#), [setSessionProtocol](#), [setSessionTimeout](#), [setSessionType](#), [setStream](#),
[setStreamExt](#), [setStreamName](#), [setStreamPosition](#), [setTimeoutSession](#),
[setTranscoderVODIndex](#), [setTranscoderVODSession](#), [setUri](#), [setUserAgent](#),
[setUserHTTPHeader](#), [setUserQueryStr](#), [setVHost](#), [setVODTranscodeNGRP](#), [shutdown](#), [touch](#),
[updateLoggingValues](#), [validStreamDomainToString](#)

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPSessionNotify](#)

[notifyHTTPSessionCreate](#), [notifyHTTPSessionDestroy](#)

Constructors

HTTPStreamerSessionCupertino

```
public HTTPStreamerSessionCupertino()
```

Methods

shutdown

```
public void shutdown()
```

(continued from last page)

containsIndex

```
public boolean containsIndex(String streamName)
```

getIndex

```
public IHTTPStreamerCupertinoIndex getIndex(IHTTPStreamerApplicationContext
appContext,
IHTTPStreamerSession httpStreamerSession,
String rawStreamName,
String streamExt,
String streamName,
long playStart,
long playDuration,
long playSeek,
TimedTextRequest captionRequest,
String vodTranscodeNGRP)
```

updateLoggingValues

```
public void updateLoggingValues()
```

clearLoggingValues

```
public void clearLoggingValues()
```

logLiveChunk

```
public void logLiveChunk(LiveStreamPacketizerCupertinoChunk chunk)
```

logVODChunk

```
public void logVODChunk(LiveStreamPacketizerCupertinoChunk chunk)
```

notifyHTTPSessionCreate

```
public void notifyHTTPSessionCreate(IApplicationInstance appInstance,
IHTTPStreamerSession httpStreamerSession)
```

notifyHTTPSessionDestroy

```
public void notifyHTTPSessionDestroy(IApplicationInstance appInstance,
IHTTPStreamerSession httpStreamerSession)
```

indexTranscoderVOD

```
public void indexTranscoderVOD(IHTTPStreamerApplicationContext appContext,  
    String vodTranscodeNGRP)
```

getIsFirstChunk

```
public java.util.concurrent.atomic.AtomicBoolean getIsFirstChunk()
```

isAutoCreateMultibitratePlaylist

```
public boolean isAutoCreateMultibitratePlaylist()
```

setAutoCreateMultibitratePlaylist

```
public void setAutoCreateMultibitratePlaylist(boolean autoCreateMultibitratePlaylist)
```

getUserManifestHeaders

```
public CupertinoUserManifestHeaders getUserManifestHeaders(CupertinoStreamingRendition  
    rendition)
```

getUserManifestHeaders

```
public CupertinoUserManifestHeaders getUserManifestHeaders()
```

getUserManifestHeadersAudio

```
public CupertinoUserManifestHeaders getUserManifestHeadersAudio()
```

getUserManifestHeadersVideo

```
public CupertinoUserManifestHeaders getUserManifestHeadersVideo()
```

com.wowza.wms.httpstreamer.cupertinostreaming.httpstreamer Interface IHTTPStreamerCupertinoVODActionNotify

All Subinterfaces:

[IHTTPStreamerCupertinoVODActionNotify2](#), [IHTTPStreamerCupertinoVODActionNotify3](#)

public interface **IHTTPStreamerCupertinoVODActionNotify**
extends

IHTTPStreamerCupertinoVODActionNotify: listener interface for video on demand iOS streaming. See
HTTPStreamerApplicationContextCupertinoStreamer.addVODActionListener(IHTTPStreamerCupertinoVODActionNotify listener)

Method Summary

void	<p>onCreate(IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName)</p> <p>Called when file index created</p>
void	<p>onDestroy(IHTTPStreamerCupertinoIndex fileIndex)</p> <p>Called after file index is destroyed</p>
void	<p>onFillChunkEnd(IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerCupertinoIndexItem item, LiveStreamPacketizerCupertinoChunk chunk, boolean audioOnly)</p> <p>Called after each chunk is filled.</p>
void	<p>onFillChunkStart(IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerCupertinoIndexItem item, LiveStreamPacketizerCupertinoChunk chunk, boolean audioOnly)</p> <p>Called each time a chunk is filled.</p>
void	<p>onIndex(IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName)</p> <p>Called after file is indexed</p>
void	<p>onInit(IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName)</p> <p>Called after initialized</p>
void	<p>onOpen(IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName)</p> <p>Called after open</p>

Methods

(continued from last page)

onCreate

```
public void onCreate(IHTTPStreamerCupertinoIndex fileIndex,  
    IHTTPStreamerApplicationContext appContext,  
    IHTTPStreamerSession httpStreamerSession,  
    String rawStreamName,  
    String streamExt,  
    String streamName)
```

Called when file index created

Parameters:

fileIndex - file index
appContext - HTTP application context
httpStreamerSession - HTTP streaming session
rawStreamName - stream name
streamExt - stream extension
streamName - adjusted stream name

onInit

```
public void onInit(IHTTPStreamerCupertinoIndex fileIndex,  
    IHTTPStreamerApplicationContext appContext,  
    IHTTPStreamerSession httpStreamerSession,  
    String rawStreamName,  
    String streamExt,  
    String streamName)
```

Called after initialized

Parameters:

fileIndex - file index
appContext - HTTP application context
httpStreamerSession - HTTP streaming session
rawStreamName - stream name
streamExt - stream extension
streamName - adjusted stream name

onOpen

```
public void onOpen(IHTTPStreamerCupertinoIndex fileIndex,  
    IHTTPStreamerApplicationContext appContext,  
    IHTTPStreamerSession httpStreamerSession,  
    String rawStreamName,  
    String streamExt,  
    String streamName)
```

Called after open

Parameters:

fileIndex - file index
appContext - HTTP application context
httpStreamerSession - HTTP streaming session
rawStreamName - stream name
streamExt - stream extension
streamName - adjusted stream name

(continued from last page)

onIndex

```
public void onIndex(IHTTPStreamerCupertinoIndex fileIndex,  
    IHTTPStreamerApplicationContext appContext,  
    IHTTPStreamerSession httpStreamerSession,  
    String rawStreamName,  
    String streamExt,  
    String streamName)
```

Called after file is indexed

Parameters:

fileIndex - file index
appContext - HTTP application context
httpStreamerSession - HTTP streaming session
rawStreamName - stream name
streamExt - stream extension
streamName - adjusted stream name

onFillChunkStart

```
public void onFillChunkStart(IHTTPStreamerCupertinoIndex fileIndex,  
    IHTTPStreamerCupertinoIndexItem item,  
    LiveStreamPacketizerCupertinoChunk chunk,  
    boolean audioOnly)
```

Called each time a chunk is filled. Can be used to add ID3 data to the header of a chunk.

Parameters:

fileIndex - file index
item - index item
chunk - chunk being filled
audioOnly - is audio-only chunk

onFillChunkEnd

```
public void onFillChunkEnd(IHTTPStreamerCupertinoIndex fileIndex,  
    IHTTPStreamerCupertinoIndexItem item,  
    LiveStreamPacketizerCupertinoChunk chunk,  
    boolean audioOnly)
```

Called after each chunk is filled. Can be used to add ID3 data to the end of a chunk.

Parameters:

fileIndex - file index
item - index item
chunk - chunk being filled
audioOnly - is audio-only chunk

onDestroy

```
public void onDestroy(IHTTPStreamerCupertinoIndex fileIndex)
```

Called after file index is destroyed

Parameters:

fileIndex - file index

com.wowza.wms.httpstreamer.cupertinostreaming.httpstreamer Interface IHTTPStreamerCupertinoVODActionNotify2

All Superinterfaces:

[IHTTPStreamerCupertinoVODActionNotify](#)

All Subinterfaces:

[IHTTPStreamerCupertinoVODActionNotify3](#)

public interface **IHTTPStreamerCupertinoVODActionNotify2**

extends [IHTTPStreamerCupertinoVODActionNotify](#)

Method Summary

void	onFillChunkDataPacket (IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerCupertinoIndexItem item, LiveStreamPacketizerCupertinoChunk chunk, boolean audioOnly, AMFPacket packet, ID3Frames id3Frames) Called when data packet is encountered.
------	---

Methods inherited from interface

[com.wowza.wms.httpstreamer.cupertinostreaming.httpstreamer.IHTTPStreamerCupertinoVODActionNotify](#)

[onCreate](#), [onDestroy](#), [onFillChunkEnd](#), [onFillChunkStart](#), [onIndex](#), [onInit](#), [onOpen](#)

Methods

onFillChunkDataPacket

```
public void onFillChunkDataPacket(IHTTPStreamerCupertinoIndex fileIndex,
    IHTTPStreamerCupertinoIndexItem item,
    LiveStreamPacketizerCupertinoChunk chunk,
    boolean audioOnly,
    AMFPacket packet,
    ID3Frames id3Frames)
```

Called when data packet is encountered. Used to convert AMF events into ID3 tags for iOS streaming

Parameters:

fileIndex - file index
 item - item
 chunk - chunk
 audioOnly - is audio-only chunk
 packet - amf packet
 id3Frames - ID3 frames

com.wowza.wms.httpstreamer.cupertinostreaming.httpstreamer Interface IHTTPStreamerCupertinoVODActionNotify3

All Superinterfaces:

[IHTTPStreamerCupertinoVODActionNotify2](#), [IHTTPStreamerCupertinoVODActionNotify](#)

public interface **IHTTPStreamerCupertinoVODActionNotify3**

extends [IHTTPStreamerCupertinoVODActionNotify2](#)

Method Summary

void	<p>onFillChunkDataPacket(IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerCupertinoIndexItem item, LiveStreamPacketizerCupertinoChunk chunk, CupertinoStreamingRendition rendition, AMFPacket packet, ID3Frames id3Frames)</p> <p>Called when data packet is encountered.</p>
void	<p>onFillChunkEnd(IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerCupertinoIndexItem item, LiveStreamPacketizerCupertinoChunk chunk, CupertinoStreamingRendition rendition)</p> <p>Called after each chunk is filled.</p>
void	<p>onFillChunkStart(IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerCupertinoIndexItem item, LiveStreamPacketizerCupertinoChunk chunk, CupertinoStreamingRendition rendition)</p> <p>Called each time a chunk is filled.</p>

Methods inherited from interface

[com.wowza.wms.httpstreamer.cupertinostreaming.httpstreamer.IHTTPStreamerCupertinoVODActionNotify2](#)

[onFillChunkDataPacket](#)

Methods inherited from interface

[com.wowza.wms.httpstreamer.cupertinostreaming.httpstreamer.IHTTPStreamerCupertinoVODActionNotify](#)

[onCreate](#), [onDestroy](#), [onFillChunkEnd](#), [onFillChunkStart](#), [onIndex](#), [onInit](#), [onOpen](#)

Methods

onFillChunkStart

```
public void onFillChunkStart(IHTTPStreamerCupertinoIndex fileIndex,
    IHTTPStreamerCupertinoIndexItem item,
    LiveStreamPacketizerCupertinoChunk chunk,
    CupertinoStreamingRendition rendition)
```

Called each time a chunk is filled. Can be used to add ID3 data to the header of a chunk.

Parameters:

fileIndex - file index

item - index item

(continued from last page)

chunk - chunk being filled
rendition - rendition (audioOnly, videoOnly...)

onFillChunkEnd

```
public void onFillChunkEnd(IHTTPStreamerCupertinoIndex fileIndex,  
    IHTTPStreamerCupertinoIndexItem item,  
    LiveStreamPacketizerCupertinoChunk chunk,  
    CupertinoStreamingRendition rendition)
```

Called after each chunk is filled. Can be used to add ID3 data to the end of a chunk.

Parameters:

fileIndex - file index
item - index item
chunk - chunk being filled
rendition - rendition (audioOnly, videoOnly...)

onFillChunkDataPacket

```
public void onFillChunkDataPacket(IHTTPStreamerCupertinoIndex fileIndex,  
    IHTTPStreamerCupertinoIndexItem item,  
    LiveStreamPacketizerCupertinoChunk chunk,  
    CupertinoStreamingRendition rendition,  
    AMFPacket packet,  
    ID3Frames id3Frames)
```

Called when data packet is encountered. Used to convert AMF events into ID3 tags for iOS streaming

Parameters:

fileIndex - file index
item - index item
chunk - chunk being filled
rendition - rendition (audioOnly, videoOnly...)
packet - amf packet
id3Frames - ID3 frames

Package

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer Interface ICupertinoChunkWriter

All Known Implementing Classes:

[LiveStreamPacketizerCupertino](#)

public interface **ICupertinoChunkWriter**
extends

Method Summary

void	addToChunk (CupertinoPacketHolder holder)
void	endChunk (long timecode)
boolean	isPacketizeAudio ()
boolean	isPacketizeData ()
boolean	isPacketizeVideo ()
void	resetStream ()
void	setCodecInfoAudio (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	setCodecInfoVideo (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	startChunk (int streamMode, int videoCodecId, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo, int audioCodecId, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio, long timecode, long timecode90)

Methods

startChunk

```
public void startChunk(int streamMode,
    int videoCodecId,
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo,
    int audioCodecId,
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio,
    long timecode,
    long timecode90)
```

(continued from last page)

endChunk

```
public void endChunk(long timecode)
```

addToChunk

```
public void addToChunk(CupertinoPacketHolder holder)
```

setCodecInfoAudio

```
public void setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
codecInfoAudio)
```

setCodecInfoVideo

```
public void setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo)
```

resetStream

```
public void resetStream()
```

isPacketizeAudio

```
public boolean isPacketizeAudio()
```

isPacketizeVideo

```
public boolean isPacketizeVideo()
```

isPacketizeData

```
public boolean isPacketizeData()
```

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer Interface ICupertinoTSMakeChunk

public interface **ICupertinoTSMakeChunk**
extends

Method Summary

void	makeChunk (java.util.List tsList)
------	---

Methods

makeChunk

public void **makeChunk**(java.util.List tsList)

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer Interface IHTTPStreamerCupertinoLivePacketizerDataHandler

public interface IHTTPStreamerCupertinoLivePacketizerDataHandler
extends

Interface for Cupertino live packetizer data events

This interface provides access to data being added to a chunk.

IHTTPStreamerCupertinoLivePacketizerDataHandler2 should be used in preference to this interface

Example implementation

```

public class Control extends ModuleBase
{

    public void onAppStart(IApplicationInstance appInstance)
    {
        appInstance.addLiveStreamPacketizerListener(new LiveStreamPacketizer());
    }

    class LiveStreamPacketizer implements ILiveStreamPacketizerActionNotify
    {
        public void onLiveStreamPacketizerCreate(ILiveStreamPacketizer
liveStreamPacketizer,
                                String streamName) { }
        public void onLiveStreamPacketizerDestroy(ILiveStreamPacketizer
liveStreamPacketizer) { }
        public void onLiveStreamPacketizerInit(ILiveStreamPacketizer
liveStreamPacketizer,
                                String streamName)
        {
            if ( liveStreamPacketizer instanceof LiveStreamPacketizerCupertino )
            {
                LiveStreamPacketizerCupertino cupertinoPacketizer =
                    (LiveStreamPacketizerCupertino)liveStreamPacketizer;
                cupertinoPacketizer.setDataHandler(new
CupertinoLivePacketizerDataHandler());
            }
        }

        class CupertinoLivePacketizerDataHandler implements
IHTTPStreamerCupertinoLivePacketizerDataHandler
        {
            public void onFillChunkDataPacket(CupertinoPacketHolder arg0, AMFPacket arg1,
ID3Frames arg2) { }
        }
    }
}

```

Method Summary

void	onFillChunkDataPacket (CupertinoPacketHolder holder, AMFPacket packet, ID3Frames id3Frames) This is called when a data packet is being processed.
------	--

Methods

(continued from last page)

onFillChunkDataPacket

```
public void onFillChunkDataPacket(CupertinoPacketHolder holder,  
    AMFPacket packet,  
    ID3Frames id3Frames)
```

This is called when a data packet is being processed. This provides access to the packet and ID3 frame object being populated with data

Parameters:

- holder
- packet
- id3Frames

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer Interface IHTTPStreamerCupertinoLivePacketizerDataHandler2

public interface **IHTTPStreamerCupertinoLivePacketizerDataHandler2**
extends

Interface for Cupertino live packetizer data events

This interface provides access to chunk start, end, data packet and media packet events when Cupertino chunks are being created.

It supersedes and should be used in preference to **IHTTPStreamerCupertinoLivePacketizerDataHandler**

Example implementation

```
public class Control extends ModuleBase
{

    public void onAppStart(IApplicationInstance appInstance)
    {
        appInstance.addLiveStreamPacketizerListener(new LiveStreamPacketizer());
    }

    class LiveStreamPacketizer implements ILiveStreamPacketizerActionNotify
    {
        public void onLiveStreamPacketizerCreate(ILiveStreamPacketizer
liveStreamPacketizer,
                                String streamName) { }
        public void onLiveStreamPacketizerDestroy(ILiveStreamPacketizer
liveStreamPacketizer) { }
        public void onLiveStreamPacketizerInit(ILiveStreamPacketizer
liveStreamPacketizer,
                                String streamName)
        {
            if ( liveStreamPacketizer instanceof LiveStreamPacketizerCupertino )
            {
                LiveStreamPacketizerCupertino cupertinoPacketizer =
                    (LiveStreamPacketizerCupertino)liveStreamPacketizer;
                cupertinoPacketizer.setDataHandler(new
CupertinoLivePacketizerDataHandler2());
            }
        }
    }

    class CupertinoLivePacketizerDataHandler2 implements
IHTTPStreamerCupertinoLivePacketizerDataHandler2
    {
        public void onFillChunkDataPacket( LiveStreamPacketizerCupertinoChunk arg0,
CupertinoPacketHolder arg1, AMFPacket arg2, ID3Frames
arg3) { }

        public void onFillChunkEnd(LiveStreamPacketizerCupertinoChunk arg0, long
arg1) { }

        public void onFillChunkMediaPacket(LiveStreamPacketizerCupertinoChunk arg0,
CupertinoPacketHolder arg1, AMFPacket arg2) { }

        public void onFillChunkStart(LiveStreamPacketizerCupertinoChunk arg0) { }
    }
}
```

Method Summary

void	onFillChunkDataPacket (LiveStreamPacketizerCupertinoChunk chunk, CupertinoPacketHolder holder, AMFPacket packet, ID3Frames id3Frames) This is called when a data packet is being processed.
void	onFillChunkEnd (LiveStreamPacketizerCupertinoChunk chunk, long timecode) This is called when a chunk has been filled with data.
void	onFillChunkMediaPacket (LiveStreamPacketizerCupertinoChunk chunk, CupertinoPacketHolder holder, AMFPacket packet) This is called when a media packet is being processed.
void	onFillChunkStart (LiveStreamPacketizerCupertinoChunk chunk) This is called when a chunk is about to be filled with data.

Methods

onFillChunkStart

```
public void onFillChunkStart (LiveStreamPacketizerCupertinoChunk chunk)
```

This is called when a chunk is about to be filled with data. The chunk could have audio or video or both. At this point there is no data in the chunk.

Parameters:

chunk

onFillChunkEnd

```
public void onFillChunkEnd (LiveStreamPacketizerCupertinoChunk chunk,  
long timecode)
```

This is called when a chunk has been filled with data. The chunk could have audio or video or both. In addition to the chunk the timecode for the chunk is accessible.

Parameters:

chunk

timecode

onFillChunkDataPacket

```
public void onFillChunkDataPacket (LiveStreamPacketizerCupertinoChunk chunk,  
CupertinoPacketHolder holder,  
AMFPacket packet,  
ID3Frames id3Frames)
```

This is called when a data packet is being processed. This provides access to the packet and ID3 frame object being populated with data

Parameters:

chunk

holder

packet

id3Frames

(continued from last page)

onFillChunkMediaPacket

```
public void onFillChunkMediaPacket(LiveStreamPacketizerCupertinoChunk chunk,  
    CupertinoPacketHolder holder,  
    AMFPacket packet)
```

This is called when a media packet is being processed. This provides access to the packets being pushed into this chunk from the stream.

Parameters:

- chunk
- holder
- packet

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer Interface IHTTPStreamerCupertinoLiveStreamPacketizerChunkIdHandler

public interface IHTTPStreamerCupertinoLiveStreamPacketizerChunkIdHandler
extends

Method Summary

void	init (LiveStreamPacketizerCupertino liveStreamPacketizer)
long	onAssignChunkId (HTTPStreamerCupertinoLiveStreamPacketizerChunkIdContext chunkIdContext)

Methods

init

public void **init**([LiveStreamPacketizerCupertino](#) liveStreamPacketizer)

onAssignChunkId

public long **onAssignChunkId**(HTTPStreamerCupertinoLiveStreamPacketizerChunkIdContext chunkIdContext)

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer Class LiveStreamPacketizerCupertino

java.lang.Object

└-com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase

└-

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer.LiveStreamPacketizerCupertino

All Implemented Interfaces:

[ICupertinoChunkWriter](#), [Runnable](#), [IdleNotify](#), [ILiveStreamPacketizer](#)

```
public class LiveStreamPacketizerCupertino
extends LiveStreamPacketizerBase
implements ILiveStreamPacketizer, IdleNotify, Runnable, ICupertinoChunkWriter
```

Field Summary

public static final	AUDIOGROUPCOUNT Value: 3
public static final	CHUNKDURATIONTARGET Value: 10000
public static final	CHUNKDURATIONTOLERANCE Value: 500
public static final	DEFAULT_ALWAYSSENDZEROPACKETLEN Value: false
public static final	DEFAULT_CHUNKDURATION_MAX Value: -1
public static final	DEFAULT_CHUNKDURATION_MIN Value: 0
public static final	DEFAULT_CHUNKDURATION_OVERFLOW_THRESHOLD Value: -1
public static final	DEFAULT_CREATEAUDIOONLYRENDITION Value: false
public static final	DEFAULT_ENABLEWEBVTTCAPTIONS Value: false
public static final	KEYFRAMEONLYDURATIONTARGET Value: 2000

public static final	MAXCHUNKCOUNT Value: 10
public static final	MAXCHUNKLOGCOUNT Value: 10
protected	originRepeaterContext
public static final	PLAYLISTCHUNKCOUNT Value: 3
public static final	PLAYSTARTTOLERANCE Value: 500
protected	randomSessionStr
public static final	REPEATERCHUNKCOUNT Value: -1
public static final	STREAMMODE_AAC Value: 3
public static final	STREAMMODE_AAC_FILEEXTENSION Value: .aac
public static final	STREAMMODE_AC3 Value: 4
public static final	STREAMMODE_AC3_FILEEXTENSION Value: .ac3
public static final	STREAMMODE_EC3 Value: 5
public static final	STREAMMODE_EC3_FILEEXTENSION Value: .ec3
public static final	STREAMMODE_MP3 Value: 2
public static final	STREAMMODE_MP3_FILEEXTENSION Value: .mp3
public static final	STREAMMODE_TS Value: 1
public static final	STREAMMODE_TS_FILEEXTENSION Value: .ts

public static final	WAITFORCODECTIME Value: 8000
---------------------	--

Fields inherited from class com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase

appInstance, captionDefaultLanguages, captionIngestType, captionsEnabled, captionUseStreamNameGroups, checkTimeoutInterval, DEFAULT_STREAMTIMEOUT, EVENT_PACKET, EVENT_RESETSTREAM, EVENT_STARTSTREAM, eventProcessCount, events, id, inProcessEvent, isActive, isRepeater, isRepeaterEdge, isRunning, lastCheckTime, lastEventProcessTC, lastStreamStartTime, lastStreamUpdate, liveStreamPacketizerItem, liveTimedTextProvider, maxEventCount, maxEventCountErrors, maxEventsPerRun, MAXEVENTSPERRUN, packetizeAudio, packetizeData, packetizerName, packetizeVideo, properties, runnerLock, startStream, streamName, streamStartupTimeout, streamTimeout, timeoutLock

Constructor Summary

public	LiveStreamPacketizerCupertino()
--------	---

Method Summary

String	addAdditionalManifestHeaders (java.util.Map userHeaders)
void	addToChunk (CupertinoPacketHolder holder)
void	addToChunkAudioTS (CupertinoTSHolder tsHolder)
void	addToChunkTS (CupertinoTSHolder tsHolder)
void	addToChunkVideoTS (CupertinoTSHolder tsHolder)
long	calculateChunkIndexForPlaylist (long chunkIndex, long timecode)
void	encryptAudioTS (CupertinoTSHolder tsHolder)
void	encryptTS (CupertinoTSHolder tsHolder)
void	encryptVideoTS (CupertinoTSHolder tsHolder)
void	endChunk (long timecode)
void	endChunkAudioTS (long timecode, java.util.Map userManifestHeaders, String programDateTime)
void	endChunkSubtitles (long timecode)
void	endChunkSubtitlesRepeater (LiveStreamPacketizerWebVTTChunk captions)
void	endChunkTS (long timecode, java.util.Map userManifestHeaders, String programDateTime)

void	endChunkVideoTS (long timecode, java.util.Map userManifestHeaders, String programDateTime)
long	getCalculatedAudioBitrateAverage ()
long	getCalculatedAudioBitratePeak ()
long	getCalculatedBitrateAverage ()
long	getCalculatedBitratePeak ()
long	getCalculatedVideoBitrateAverage ()
long	getCalculatedVideoBitratePeak ()
LiveStreamPacketizerCupertinoChunk	getChunkAudioByFilename (String filename)
LiveStreamPacketizerCupertinoChunk	getChunkAudioById (int index)
LiveStreamPacketizerCupertinoChunk	getChunkByFilename (String filename)
LiveStreamPacketizerCupertinoChunk	getChunkById (int index)
int	getChunkCount ()
int	getChunkDurationTarget ()
static int	getChunkDurationTarget (IApplicationInstance appInstance, String packetizer)
IHTTPStreamerCupertinoLiveStreamPacketizerChunkIdHandler	getChunkIdHandler ()
LiveStreamPacketizerCupertinoChunk	getChunkVideoByFilename (String filename)
LiveStreamPacketizerCupertinoChunk	getChunkVideoById (int index)
ICupertinoChunkWriter	getChunkWriter ()
String	getCodecsAudioStr (int codecStrFormatId)
String	getCodecsStr (int codecStrFormatId)
String	getCodecsVideoStr (int codecStrFormatId)
IHTTPStreamerCupertinoLivePacketizerDataHandler	getDataHandler ()

IHTTPStreamerCupertinoLivePacketizerDataHandler2	getDataHandler2()
CupertinoEncInfo	getEncryptionInfo()
int	getFirstChunkId()
ID3Frames	getID3FramesFooter()
ID3Frames	getID3FramesFooter(CupertinoStreamingRendition rendition)
ID3Frames	getID3FramesFooterAudio()
ID3Frames	getID3FramesFooterVideo()
ID3Frames	getID3FramesHeader()
ID3Frames	getID3FramesHeader(CupertinoStreamingRendition rendition)
ID3Frames	getID3FramesHeaderAudio()
ID3Frames	getID3FramesHeaderVideo()
int	getLastChunkId()
Object	getLock()
int	getMaxChunkDuration()
int	getMinChunkDuration()
String	getPlaylistAudioStr()
int	getPlaylistChunkCount()
Object	getPlaylistLock()
String	getPlaylistStr()
String	getPlaylistVideoStr()
String	getPlayReadySampleEncHeaderFromEarliestChunk()
String	getRandomSessionStr()
void	getRepeaterItems(java.util.List items, long seq)
long	getRepeaterLastSequence()

String	getResolutionStr()
String	getSubtitleChunk(String filename, String languageID, boolean isByteRangeRequest)
String	getSubtitleListStr(HTTPStreamerAdapterCupertinoStreamer.RequestInfo requestInfo, String languageID)
String	getTitleStr()
CupertinoUserManifest Headers	getUserManifestHeaders()
CupertinoUserManifest Headers	getUserManifestHeaders(CupertinoStreamingRendition rendition)
CupertinoUserManifest Headers	getUserManifestHeadersAudio()
CupertinoUserManifest Headers	getUserManifestHeadersVideo()
boolean	hasCaptionChunks()
void	init(String streamName, String packetizerName, IApplicationInstance appInstance, LiveStreamPacketizerItem liveStreamPacketizerItem)
void	internalHandlePacket(IMediaStream stream, AMFPacket packet)
void	internalResetStream(IMediaStream stream)
void	internalStartStream(IMediaStream stream)
boolean	isAudioOnlyRendition()
boolean	isAudioVideoRendition()
boolean	isAutoAdjustDurationIfOutOfBounds()
boolean	isCaptionTargetCEA608()
boolean	isCaptionTargetWebVTT()
boolean	isChunkIdFromRepeater()
boolean	isCustomChunkId()
boolean	isEmptyAllPlaylist()
boolean	isEmptyAudioPlaylist()
boolean	isEmptyPlaylist()

boolean	isEmptyVideoPlaylist()
boolean	isEnabledDataEvents()
boolean	isOnChunkStartResetCounter()
boolean	isPacketizeAllStreamsAsTS()
boolean	isVideoOnlyRendition()
void	mergeUserManifestHeaders(LiveStreamPacketizerCupertinoChunk chunk, java.util.Map userManifestHeaders)
void	resetStream()
void	sendECMBytesAudioTS(java.util.List ecmHolders)
void	sendECMBytesTS(java.util.List ecmHolders)
void	sendECMBytesVideoTS(java.util.List ecmHolders)
void	setAutoAdjustDurationIfOutOfBounds(boolean autoAdjustDurationIfOutOfBounds)
void	setChunkIdFromRepeater(boolean chunkIdFromRepeater)
void	setChunkIdHandler(IHTTPStreamerCupertinoLiveStreamPacketizerChunkIdHandler chunkIdHandler)
void	setChunkWriter(ICupertinoChunkWriter chunkWriter)
void	setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	setDataHandler(IHTTPStreamerCupertinoLivePacketizerDataHandler dataHandler)
void	setDataHandler(IHTTPStreamerCupertinoLivePacketizerDataHandler2 dataHandler)
void	setEnabledDataEvents(boolean enableDataEvents)
void	setMaxChunkDuration(int maxChunkDuration)
void	setMinChunkDuration(int minChunkDuration)
void	setOnChunkStartResetCounter(boolean onChunkStartResetCounter)

void	setPacketizeAllStreamsAsTS (boolean packetizeAllStreamsAsTS)
void	setTitleStr (String titleStr)
void	sortAudioTS (CupertinoTSHolder tsHolder, boolean doFlush)
void	sortTS (CupertinoTSHolder tsHolder, boolean doFlush)
void	sortVideoTS (CupertinoTSHolder tsHolder, boolean doFlush)
void	startChunk (int streamMode, int videoCodecId, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo, int audioCodecId, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio, long timecode, long timecode90)
void	startChunkAudioTS (int chunkId, long chunkIdForPlaylist, long discontinuitySeq, boolean isRepeater, int streamMode, int videoCodecId, int audioCodecId, long timecode, int encMethod, String encUrl, byte[] encRepeaterBytes, byte[] encIVBytes, boolean encIVBytesInChunklist, String encKeyFormat, String encKeyFormatVersion, String encPlayReadyHeader, String originRepeaterContext, java.util.Map userManifestHeaders)
void	startChunkTS (int chunkId, long chunkIdForPlaylist, long discontinuitySeq, boolean isRepeater, int streamMode, int videoCodecId, int audioCodecId, long timecode, int encMethod, String encUrl, byte[] encRepeaterBytes, byte[] encIVBytes, boolean encIVBytesInChunklist, String encKeyFormat, String encKeyFormatVersion, String encPlayReadyHeader, String originRepeaterContext, java.util.Map userManifestHeaders)
void	startChunkVideoTS (int chunkId, long chunkIdForPlaylist, long discontinuitySeq, boolean isRepeater, int streamMode, int videoCodecId, int audioCodecId, long timecode, int encMethod, String encUrl, byte[] encRepeaterBytes, byte[] encIVBytes, boolean encIVBytesInChunklist, String encKeyFormat, String encKeyFormatVersion, String encPlayReadyHeader, String originRepeaterContext, java.util.Map userManifestHeaders)

Methods inherited from class com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase

addPacketizerEvent, checkTimeout, getAndSetStartStream, getApplicationInstance, getCaptionProvider, getContextStr, getLiveStreamPacketizerId, getMaxEventCount, getProperties, getRepeaterItems, getRepeaterItemsSanJose, getRepeaterLastSequence, getStreamStartupTimeout, getStreamTimeout, handlePacket, init, initLiveCaptionIngestor, internalHandlePacket, internalResetStream, internalStartStream, isActive, isCEA608IngestModuleInstalled, isPacketizeAudio, isPacketizeData, isPacketizeVideo, isRepeaterEdge, onIdle, resetStream, run, setLiveStreamPacketizerId, setMaxEventCount, setPacketizeAudio, setPacketizeData, setPacketizeVideo, setRepeaterEdge, setStreamStartupTimeout, setStreamTimeout, shutdown, startStream, touch

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.livepacketizer.ILiveStreamPacketizer](#)

[getAndSetStartStream](#), [getApplicationInstance](#), [getLiveStreamPacketizerId](#), [getProperties](#), [getRepeaterLastSequence](#), [handlePacket](#), [init](#), [isActive](#), [isPacketizeAudio](#), [isPacketizeData](#), [isPacketizeVideo](#), [isRepeaterEdge](#), [resetStream](#), [setLiveStreamPacketizerId](#), [setPacketizeAudio](#), [setPacketizeData](#), [setPacketizeVideo](#), [setRepeaterEdge](#), [shutdown](#), [startStream](#), [touch](#)

Methods inherited from interface `com.wowza.wms.util.IIdleNotify`

`onIdle`

Methods inherited from interface `java.lang.Runnable`

`run`

Methods inherited from interface

[com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer.ICupertinoChunkWriter](#)

[addToChunk](#), [endChunk](#), [isPacketizeAudio](#), [isPacketizeData](#), [isPacketizeVideo](#), [resetStream](#), [setCodecInfoAudio](#), [setCodecInfoVideo](#), [startChunk](#)

Fields

DEFAULT_ENABLEWEBVTTCAPTIONS

public static final boolean **DEFAULT_ENABLEWEBVTTCAPTIONS**

Constant value: **false**

DEFAULT_CREATEAUDIOONLYRENDITION

public static final boolean **DEFAULT_CREATEAUDIOONLYRENDITION**

Constant value: **false**

DEFAULT_ALWAYSSENDZEROPACKETLEN

public static final boolean **DEFAULT_ALWAYSSENDZEROPACKETLEN**

Constant value: **false**

STREAMMODE_TS

public static final int **STREAMMODE_TS**

Constant value: **1**

STREAMMODE_MP3

public static final int **STREAMMODE_MP3**

(continued from last page)

Constant value: **2**

STREAMMODE_AAC

```
public static final int STREAMMODE_AAC
```

Constant value: **3**

STREAMMODE_AC3

```
public static final int STREAMMODE_AC3
```

Constant value: **4**

STREAMMODE_EC3

```
public static final int STREAMMODE_EC3
```

Constant value: **5**

STREAMMODE_TS_FILEEXTENSION

```
public static final java.lang.String STREAMMODE_TS_FILEEXTENSION
```

Constant value: **.ts**

STREAMMODE_MP3_FILEEXTENSION

```
public static final java.lang.String STREAMMODE_MP3_FILEEXTENSION
```

Constant value: **.mp3**

STREAMMODE_AAC_FILEEXTENSION

```
public static final java.lang.String STREAMMODE_AAC_FILEEXTENSION
```

Constant value: **.aac**

STREAMMODE_AC3_FILEEXTENSION

```
public static final java.lang.String STREAMMODE_AC3_FILEEXTENSION
```

Constant value: **.ac3**

STREAMMODE_EC3_FILEEXTENSION

```
public static final java.lang.String STREAMMODE_EC3_FILEEXTENSION
```

Constant value: **.ec3**

(continued from last page)

MAXCHUNKCOUNT

```
public static final int MAXCHUNKCOUNT
```

Constant value: **10**

MAXCHUNKLOGCOUNT

```
public static final int MAXCHUNKLOGCOUNT
```

Constant value: **10**

PLAYLISTCHUNKCOUNT

```
public static final int PLAYLISTCHUNKCOUNT
```

Constant value: **3**

REPEATERCHUNKCOUNT

```
public static final int REPEATERCHUNKCOUNT
```

Constant value: **-1**

CHUNKDURATIONTARGET

```
public static final int CHUNKDURATIONTARGET
```

Constant value: **10000**

KEYFRAMEONLYDURATIONTARGET

```
public static final int KEYFRAMEONLYDURATIONTARGET
```

Constant value: **2000**

CHUNKDURATIONTOLERANCE

```
public static final int CHUNKDURATIONTOLERANCE
```

Constant value: **500**

PLAYSTARTTOLERANCE

```
public static final int PLAYSTARTTOLERANCE
```

Constant value: **500**

AUDIOGROUPCOUNT

```
public static final int AUDIOGROUPCOUNT
```

(continued from last page)

Constant value: **3**

WAITFORCODECTIME

```
public static final int WAITFORCODECTIME
```

Constant value: **8000**

DEFAULT_CHUNKDURATION_MAX

```
public static final int DEFAULT_CHUNKDURATION_MAX
```

Constant value: **-1**

DEFAULT_CHUNKDURATION_MIN

```
public static final int DEFAULT_CHUNKDURATION_MIN
```

Constant value: **0**

DEFAULT_CHUNKDURATION_OVERFLOW_THRESHOLD

```
public static final int DEFAULT_CHUNKDURATION_OVERFLOW_THRESHOLD
```

Constant value: **-1**

randomSessionStr

```
protected java.lang.String randomSessionStr
```

originRepeaterContext

```
protected java.lang.String originRepeaterContext
```

Constructors

LiveStreamPacketizerCupertino

```
public LiveStreamPacketizerCupertino()
```

Methods

getChunkDurationTarget

```
public static int getChunkDurationTarget(IApplicationInstance appInstance,  
String packetizer)
```

(continued from last page)

init

```
public void init(String streamName,  
                String packetizerName,  
                IApplicationInstance appInstance,  
                LiveStreamPacketizerItem liveStreamPacketizerItem)
```

getEncryptionInfo

```
public CupertinoEncInfo getEncryptionInfo()
```

internalStartStream

```
public void internalStartStream(IMediaStream stream)
```

internalResetStream

```
public void internalResetStream(IMediaStream stream)
```

resetStream

```
public void resetStream()
```

internalHandlePacket

```
public void internalHandlePacket(IMediaStream stream,  
                                AMFPacket packet)
```

isCustomChunkId

```
public boolean isCustomChunkId()
```

calculateChunkIndexForPlaylist

```
public long calculateChunkIndexForPlaylist(long chunkIndex,  
                                           long timecode)
```

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startChunk

```
public void startChunk(int streamMode,  
    int videoCodecId,  
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo,  
    int audioCodecId,  
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio,  
    long timecode,  
    long timecode90)
```

sendECMBytesTS

```
public void sendECMBytesTS(java.util.List ecmHolders)
```

sendECMBytesAudioTS

```
public void sendECMBytesAudioTS(java.util.List ecmHolders)
```

sendECMBytesVideoTS

```
public void sendECMBytesVideoTS(java.util.List ecmHolders)
```

endChunk

```
public void endChunk(long timecode)
```

sortAudioTS

```
public void sortAudioTS(CupertinoTSHolder tsHolder,  
    boolean doFlush)
```

sortVideoTS

```
public void sortVideoTS(CupertinoTSHolder tsHolder,  
    boolean doFlush)
```

sortTS

```
public void sortTS(CupertinoTSHolder tsHolder,  
    boolean doFlush)
```

(continued from last page)

encryptTS

```
public void encryptTS(CupertinoTSHolder tsHolder)
```

encryptAudioTS

```
public void encryptAudioTS(CupertinoTSHolder tsHolder)
```

encryptVideoTS

```
public void encryptVideoTS(CupertinoTSHolder tsHolder)
```

addToChunk

```
public void addToChunk(CupertinoPacketHolder holder)
```

setCodecInfoAudio

```
public void setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
codecInfoAudio)
```

setCodecInfoVideo

```
public void setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo)
```

startChunkAudioTS

```
public void startChunkAudioTS(int chunkId,  
    long chunkIdForPlaylist,  
    long discontinuitySeq,  
    boolean isRepeater,  
    int streamMode,  
    int videoCodecId,  
    int audioCodecId,  
    long timecode,  
    int encMethod,  
    String encUrl,  
    byte[] encRepeaterBytes,  
    byte[] encIVBytes,  
    boolean encIVBytesInChunklist,  
    String encKeyFormat,  
    String encKeyFormatVersion,  
    String encPlayReadyHeader,  
    String originRepeaterContext,  
    java.util.Map userManifestHeaders)
```

startChunkVideoTS

```
public void startChunkVideoTS(int chunkId,
    long chunkIdForPlaylist,
    long discontinuitySeq,
    boolean isRepeater,
    int streamMode,
    int videoCodecId,
    int audioCodecId,
    long timecode,
    int encMethod,
    String encUrl,
    byte[] encRepeaterBytes,
    byte[] encIVBytes,
    boolean encIVBytesInChunklist,
    String encKeyFormat,
    String encKeyFormatVersion,
    String encPlayReadyHeader,
    String originRepeaterContext,
    java.util.Map userManifestHeaders)
```

startChunkTS

```
public void startChunkTS(int chunkId,
    long chunkIdForPlaylist,
    long discontinuitySeq,
    boolean isRepeater,
    int streamMode,
    int videoCodecId,
    int audioCodecId,
    long timecode,
    int encMethod,
    String encUrl,
    byte[] encRepeaterBytes,
    byte[] encIVBytes,
    boolean encIVBytesInChunklist,
    String encKeyFormat,
    String encKeyFormatVersion,
    String encPlayReadyHeader,
    String originRepeaterContext,
    java.util.Map userManifestHeaders)
```

mergeUserManifestHeaders

```
public void mergeUserManifestHeaders(LiveStreamPacketizerCupertinoChunk chunk,
    java.util.Map userManifestHeaders)
```

endChunkAudioTS

```
public void endChunkAudioTS(long timecode,
    java.util.Map userManifestHeaders,
    String programDateTime)
```

(continued from last page)

endChunkVideoTS

```
public void endChunkVideoTS(long timecode,  
    java.util.Map userManifestHeaders,  
    String programDateTime)
```

endChunkTS

```
public void endChunkTS(long timecode,  
    java.util.Map userManifestHeaders,  
    String programDateTime)
```

endChunkSubtitles

```
public void endChunkSubtitles(long timecode)
```

endChunkSubtitlesRepeater

```
public void endChunkSubtitlesRepeater(LiveStreamPacketizerWebVTTChunk captions)
```

addToChunkAudioTS

```
public void addToChunkAudioTS(CupertinoTSHolder tsHolder)
```

addToChunkVideoTS

```
public void addToChunkVideoTS(CupertinoTSHolder tsHolder)
```

addToChunkTS

```
public void addToChunkTS(CupertinoTSHolder tsHolder)
```

getRepeaterLastSequence

```
public long getRepeaterLastSequence()
```

getRepeaterItems

```
public void getRepeaterItems(java.util.List items,  
    long seq)
```

getChunkByFilename

```
public LiveStreamPacketizerCupertinoChunk getChunkByFilename(String filename)
```

getChunkAudioByFilename

```
public LiveStreamPacketizerCupertinoChunk getChunkAudioByFilename(String filename)
```

getChunkVideoByFilename

```
public LiveStreamPacketizerCupertinoChunk getChunkVideoByFilename(String filename)
```

getLock

```
public Object getLock()
```

getPlaylistLock

```
public Object getPlaylistLock()
```

getPlaylistStr

```
public String getPlaylistStr()
```

getCodecsStr

```
public String getCodecsStr(int codecStrFormatId)
```

getResolutionStr

```
public String getResolutionStr()
```

getPlaylistAudioStr

```
public String getPlaylistAudioStr()
```

getCodecsAudioStr

```
public String getCodecsAudioStr(int codecStrFormatId)
```

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getPlaylistVideoStr

```
public String getPlaylistVideoStr()
```

getCodecsVideoStr

```
public String getCodecsVideoStr(int codecStrFormatId)
```

isEmptyAllPlaylist

```
public boolean isEmptyAllPlaylist()
```

getPlayReadySampleEncHeaderFromEarliestChunk

```
public String getPlayReadySampleEncHeaderFromEarliestChunk()
```

isEmptyPlaylist

```
public boolean isEmptyPlaylist()
```

isEmptyAudioPlaylist

```
public boolean isEmptyAudioPlaylist()
```

isEmptyVideoPlaylist

```
public boolean isEmptyVideoPlaylist()
```

getUserManifestHeaders

```
public CupertinoUserManifestHeaders getUserManifestHeaders(CupertinoStreamingRendition rendition)
```

getUserManifestHeaders

```
public CupertinoUserManifestHeaders getUserManifestHeaders()
```

(continued from last page)

getUserManifestHeadersAudio

```
public CupertinoUserManifestHeaders getUserManifestHeadersAudio()
```

getUserManifestHeadersVideo

```
public CupertinoUserManifestHeaders getUserManifestHeadersVideo()
```

addAdditionalManifestHeaders

```
public String addAdditionalManifestHeaders(java.util.Map userHeaders)
```

getTitleStr

```
public String getTitleStr()
```

setTitleStr

```
public void setTitleStr(String titleStr)
```

isCaptionTargetCEA608

```
public boolean isCaptionTargetCEA608()
```

isCaptionTargetWebVTT

```
public boolean isCaptionTargetWebVTT()
```

isAudioOnlyRendition

```
public boolean isAudioOnlyRendition()
```

isVideoOnlyRendition

```
public boolean isVideoOnlyRendition()
```

isAudioVideoRendition

```
public boolean isAudioVideoRendition()
```

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getCalculatedBitrateAverage

```
public long getCalculatedBitrateAverage()
```

getCalculatedAudioBitrateAverage

```
public long getCalculatedAudioBitrateAverage()
```

getCalculatedVideoBitrateAverage

```
public long getCalculatedVideoBitrateAverage()
```

getCalculatedBitratePeak

```
public long getCalculatedBitratePeak()
```

getCalculatedAudioBitratePeak

```
public long getCalculatedAudioBitratePeak()
```

getCalculatedVideoBitratePeak

```
public long getCalculatedVideoBitratePeak()
```

getID3FramesHeader

```
public ID3Frames getID3FramesHeader(CupertinoStreamingRendition rendition)
```

getID3FramesFooter

```
public ID3Frames getID3FramesFooter(CupertinoStreamingRendition rendition)
```

getID3FramesHeader

```
public ID3Frames getID3FramesHeader()
```

(continued from last page)

getID3FramesFooter

```
public ID3Frames getID3FramesFooter()
```

getID3FramesHeaderAudio

```
public ID3Frames getID3FramesHeaderAudio()
```

getID3FramesFooterAudio

```
public ID3Frames getID3FramesFooterAudio()
```

getID3FramesHeaderVideo

```
public ID3Frames getID3FramesHeaderVideo()
```

getID3FramesFooterVideo

```
public ID3Frames getID3FramesFooterVideo()
```

getChunkWriter

```
public ICupertinoChunkWriter getChunkWriter()
```

setChunkWriter

```
public void setChunkWriter(ICupertinoChunkWriter chunkWriter)
```

getDataHandler

```
public IHTTPStreamerCupertinoLivePacketizerDataHandler getDataHandler()
```

getDataHandler2

```
public IHTTPStreamerCupertinoLivePacketizerDataHandler2 getDataHandler2()
```

setDataHandler

```
public void setDataHandler(IHTTPStreamerCupertinoLivePacketizerDataHandler  
dataHandler)
```

(continued from last page)

setDataHandler

```
public void setDataHandler(IHTTPStreamerCupertinoLivePacketizerDataHandler2
dataHandler)
```

isEnabledDataEvents

```
public boolean isEnabledDataEvents()
```

setEnabledDataEvents

```
public void setEnabledDataEvents(boolean enableDataEvents)
```

isOnChunkStartResetCounter

```
public boolean isOnChunkStartResetCounter()
```

setOnChunkStartResetCounter

```
public void setOnChunkStartResetCounter(boolean onChunkStartResetCounter)
```

isPacketizeAllStreamsAsTS

```
public boolean isPacketizeAllStreamsAsTS()
```

setPacketizeAllStreamsAsTS

```
public void setPacketizeAllStreamsAsTS(boolean packetizeAllStreamsAsTS)
```

getSubtitleListStr

```
public String getSubtitleListStr(HTTPStreamerAdapterCupertinoStreamer.RequestInfo
requestInfo,
    String languageID)
```

getSubtitleChunk

```
public String getSubtitleChunk(String filename,
    String languageID,
    boolean isByteRangeRequest)
```

(continued from last page)

getLastChunkId

```
public int getLastChunkId()
```

getFirstChunkId

```
public int getFirstChunkId()
```

getChunkCount

```
public int getChunkCount()
```

getChunkById

```
public LiveStreamPacketizerCupertinoChunk getChunkById(int index)
```

getChunkAudioById

```
public LiveStreamPacketizerCupertinoChunk getChunkAudioById(int index)
```

getChunkVideoById

```
public LiveStreamPacketizerCupertinoChunk getChunkVideoById(int index)
```

getRandomSessionStr

```
public String getRandomSessionStr()
```

getChunkDurationTarget

```
public int getChunkDurationTarget()
```

getPlaylistChunkCount

```
public int getPlaylistChunkCount()
```

(continued from last page)

getChunkIdHandler

```
public IHTTPStreamerCupertinoLiveStreamPacketizerChunkIdHandler getChunkIdHandler()
```

setChunkIdHandler

```
public void setChunkIdHandler(IHTTPStreamerCupertinoLiveStreamPacketizerChunkIdHandler  
chunkIdHandler)
```

hasCaptionChunks

```
public boolean hasCaptionChunks()
```

getMaxChunkDuration

```
public int getMaxChunkDuration()
```

setMaxChunkDuration

```
public void setMaxChunkDuration(int maxChunkDuration)
```

getMinChunkDuration

```
public int getMinChunkDuration()
```

setMinChunkDuration

```
public void setMinChunkDuration(int minChunkDuration)
```

isAutoAdjustDurationIfOutOfBounds

```
public boolean isAutoAdjustDurationIfOutOfBounds()
```

setAutoAdjustDurationIfOutOfBounds

```
public void setAutoAdjustDurationIfOutOfBounds(boolean  
autoAdjustDurationIfOutOfBounds)
```

(continued from last page)

isChunkIdFromRepeater

```
public boolean isChunkIdFromRepeater()
```

setChunkIdFromRepeater

```
public void setChunkIdFromRepeater(boolean chunkIdFromRepeater)
```

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer Class LiveStreamPacketizerCupertinoChunk

java.lang.Object



com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer.LiveStreamPacketizerCupertinoChunk

```
public class LiveStreamPacketizerCupertinoChunk
extends Object
```

Field Summary

public static final	AUDIO_PACKET_DEFAULT_DURATION Value: 21
public static final	AUDIO_PACKET_MAX_DURATION Value: 2000
public static final	AUDIO_PACKET_MIN_DURATION Value: -500
public static final	VIDEO_PACKET_DEFAULT_DURATION Value: 33
public static final	VIDEO_PACKET_MAX_DURATION Value: 2000
public static final	VIDEO_PACKET_MIN_DURATION Value: 0

Constructor Summary

public	LiveStreamPacketizerCupertinoChunk (int chunkIndex, int rendition)
--------	--

Method Summary

int	addBlock (byte[] buffer, int offset, int len)
int	addBlock (byte[] buffer, int offset, int len, CupertinoTSHolder tsHolder)
void	addDataPacket (AMFPacket packet)
void	forceDiscontinuity (boolean value)
int	getAudioCount ()

int	getBlockCount()
java.util.List	getBlockList()
long	getCalcDuration()
long	getCalcDurationAudio()
long	getCalcDurationVideo()
int	getChunkIndex()
long	getChunkIndexByTime()
long	getChunkIndexForPlaylist()
CupertinoChunkMap	getChunkMap()
com.wowza.wms.media.m odel.MediaCodecInfoAu dio	getCodecInfoAudio()
com.wowza.wms.media.m odel.MediaCodecInfoVi deo	getCodecInfoVideo()
java.util.List	getDataPackets()
int	getDataSize()
long	getDiscontinuitySequence()
long	getDuration()
byte[]	getEncIVBytes()
String	getEncKeyFormat()
String	getEncKeyFormatVersion()
int	getEncMethod()
String	getEncPlayReadyHeader()
byte[]	getEncRepeaterBytes()
String	getEncUrl()
long	getFirstAudioTimecode()

long	getFirstVideoTimecode()
long	getLastAudioTimecode()
long	getLastVideoTimecode()
String	getProgramDateTime()
WMSProperties	getProperties()
CupertinoStreamingRendition	getRendition()
int	getSize()
long	getStartTimecode()
int	getStreamMode()
CupertinoUserManifestHeaders	getUserManifestHeaders()
int	getVideoCount()
int	getVideoKeyCount()
void	incAudioCount()
void	incDataSize(int incSize)
void	incVideoCount()
void	incVideoKeyCount()
int	insertBlock(int index, byte[] buffer, int offset, int len)
int	insertBlock(int index, byte[] buffer, int offset, int len, CupertinoTSHolder tsHolder)
boolean	isCacheable()
boolean	isDiscontinuity()
boolean	isDurationDiscontinuity()
boolean	isEncIVBytesInChunklist()
boolean	isFillSuccessful()
boolean	isNewCodecInfo()

boolean	isWritePAT()
void	newAudioTimecode (long timecode)
void	newVideoTimecode (long timecode)
void	setAudioCount (int audioCount)
void	setBlockList (java.util.List blocks)
void	setCacheable (boolean cacheable)
void	setChunkIndex (int chunkIndex)
void	setChunkIndexByTime (long chunkIndexByTime)
void	setCodecInfoAudio (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	setCodecInfoVideo (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	setDataSize (int dataSize)
void	setDiscontinuitySequence (long discontinuitySequence)
void	setDuration (long duration)
void	setDurationDiscontinuity (boolean isDurationDiscontinuity)
void	setEncIVBytes (byte[] encIVBytes)
void	setEncIVBytesInChunklist (boolean encIVBytesInChunklist)
void	setEncKeyFormat (String encKeyFormat)
void	setEncKeyFormatVersion (String encKeyFormatVersion)
void	setEncMethod (int encMethod)
void	setEncPlayReadyHeader (String encPlayReadyHeader)
void	setEncRepeaterBytes (byte[] encRepeaterBytes)
void	setEncUrl (String encUrl)
void	setFillSuccessful (boolean fillSuccessful)

void	setFirstAudioTimecode (long firstAudioTimecode)
void	setFirstVideoTimecode (long firstVideoTimecode)
void	setLastAudioTimecode (long lastAudioTimecode)
void	setLastVideoTimecode (long lastVideoTimecode)
void	setNewCodecInfo (boolean isNewCodecInfo)
void	setProgramDateTime (String programDateTime)
void	setStartTimecode (long startTimecode)
void	setStreamMode (int streamMode)
void	setVideoCount (int videoCount)
void	setVideoKeyCount (int videoKeyCount)
void	setWritePAT (boolean writePAT)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

AUDIO_PACKET_MIN_DURATION

```
public static final int AUDIO_PACKET_MIN_DURATION
```

Constant value: **-500**

AUDIO_PACKET_MAX_DURATION

```
public static final int AUDIO_PACKET_MAX_DURATION
```

Constant value: **2000**

AUDIO_PACKET_DEFAULT_DURATION

```
public static final int AUDIO_PACKET_DEFAULT_DURATION
```

Constant value: **21**

(continued from last page)

VIDEO_PACKET_MIN_DURATION

```
public static final int VIDEO_PACKET_MIN_DURATION
```

Constant value: **0**

VIDEO_PACKET_MAX_DURATION

```
public static final int VIDEO_PACKET_MAX_DURATION
```

Constant value: **2000**

VIDEO_PACKET_DEFAULT_DURATION

```
public static final int VIDEO_PACKET_DEFAULT_DURATION
```

Constant value: **33**

Constructors

LiveStreamPacketizerCupertinoChunk

```
public LiveStreamPacketizerCupertinoChunk(int chunkIndex,  
                                           int rendition)
```

Methods

getChunkIndex

```
public int getChunkIndex()
```

addBlock

```
public int addBlock(byte[] buffer,  
                   int offset,  
                   int len,  
                   CupertinoTSHolder tsHolder)
```

addBlock

```
public int addBlock(byte[] buffer,  
                   int offset,  
                   int len)
```

(continued from last page)

insertBlock

```
public int insertBlock(int index,
    byte[] buffer,
    int offset,
    int len,
    CupertinoTSHolder tsHolder)
```

insertBlock

```
public int insertBlock(int index,
    byte[] buffer,
    int offset,
    int len)
```

getSize

```
public int getSize()
```

getStartTimecode

```
public long getStartTimecode()
```

setStartTimecode

```
public void setStartTimecode(long startTimecode)
```

getDuration

```
public long getDuration()
```

setDuration

```
public void setDuration(long duration)
```

getBlockList

```
public java.util.List getBlockList()
```

setBlockList

```
public void setBlockList(java.util.List blocks)
```

(continued from last page)

isCacheable

```
public boolean isCacheable()
```

setCacheable

```
public void setCacheable(boolean cacheable)
```

getBlockCount

```
public int getBlockCount()
```

getEncUrl

```
public String getEncUrl()
```

setEncUrl

```
public void setEncUrl(String encUrl)
```

getEncRepeaterBytes

```
public byte[] getEncRepeaterBytes()
```

setEncRepeaterBytes

```
public void setEncRepeaterBytes(byte[] encRepeaterBytes)
```

getDataSize

```
public int getDataSize()
```

setDataSize

```
public void setDataSize(int dataSize)
```

(continued from last page)

incDataSize

```
public void incDataSize(int incSize)
```

isWritePAT

```
public boolean isWritePAT()
```

setWritePAT

```
public void setWritePAT(boolean writePAT)
```

incAudioCount

```
public void incAudioCount()
```

incVideoCount

```
public void incVideoCount()
```

incVideoKeyCount

```
public void incVideoKeyCount()
```

getAudioCount

```
public int getAudioCount()
```

setAudioCount

```
public void setAudioCount(int audioCount)
```

getVideoCount

```
public int getVideoCount()
```

setVideoCount

```
public void setVideoCount(int videoCount)
```

(continued from last page)

getVideoKeyCount

```
public int getVideoKeyCount()
```

setVideoKeyCount

```
public void setVideoKeyCount(int videoKeyCount)
```

getStreamMode

```
public int getStreamMode()
```

setStreamMode

```
public void setStreamMode(int streamMode)
```

getCodecInfoVideo

```
public com.wowza.wms.media.model.MediaCodecInfoVideo getCodecInfoVideo()
```

setCodecInfoVideo

```
public void setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo)
```

getCodecInfoAudio

```
public com.wowza.wms.media.model.MediaCodecInfoAudio getCodecInfoAudio()
```

setCodecInfoAudio

```
public void setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
codecInfoAudio)
```

isNewCodecInfo

```
public boolean isNewCodecInfo()
```

setNewCodecInfo

```
public void setNewCodecInfo(boolean isNewCodecInfo)
```

getEncMethod

```
public int getEncMethod()
```

setEncMethod

```
public void setEncMethod(int encMethod)
```

getEncIVBytes

```
public byte[] getEncIVBytes()
```

setEncIVBytes

```
public void setEncIVBytes(byte[] encIVBytes)
```

getEncKeyFormat

```
public String getEncKeyFormat()
```

setEncKeyFormat

```
public void setEncKeyFormat(String encKeyFormat)
```

getEncKeyFormatVersion

```
public String getEncKeyFormatVersion()
```

setEncKeyFormatVersion

```
public void setEncKeyFormatVersion(String encKeyFormatVersion)
```

getEncPlayReadyHeader

```
public String getEncPlayReadyHeader()
```

(continued from last page)

setEncPlayReadyHeader

```
public void setEncPlayReadyHeader(String encPlayReadyHeader)
```

getFirstAudioTimecode

```
public long getFirstAudioTimecode()
```

setFirstAudioTimecode

```
public void setFirstAudioTimecode(long firstAudioTimecode)
```

getFirstVideoTimecode

```
public long getFirstVideoTimecode()
```

setFirstVideoTimecode

```
public void setFirstVideoTimecode(long firstVideoTimecode)
```

newAudioTimecode

```
public void newAudioTimecode(long timecode)
```

newVideoTimecode

```
public void newVideoTimecode(long timecode)
```

setChunkIndex

```
public void setChunkIndex(int chunkIndex)
```

getChunkIndexByTime

```
public long getChunkIndexByTime()
```

(continued from last page)

setChunkIndexByTime

```
public void setChunkIndexByTime(long chunkIndexByTime)
```

getChunkIndexForPlaylist

```
public long getChunkIndexForPlaylist()
```

isFillSuccessful

```
public boolean isFillSuccessful()
```

setFillSuccessful

```
public void setFillSuccessful(boolean fillSuccessful)
```

getRendition

```
public CupertinoStreamingRendition getRendition()
```

getUserManifestHeaders

```
public CupertinoUserManifestHeaders getUserManifestHeaders()
```

isDurationDiscontinuity

```
public boolean isDurationDiscontinuity()
```

setDurationDiscontinuity

```
public void setDurationDiscontinuity(boolean isDurationDiscontinuity)
```

getDiscontinuitySequence

```
public long getDiscontinuitySequence()
```

setDiscontinuitySequence

```
public void setDiscontinuitySequence(long discontinuitySequence)
```

(continued from last page)

forceDiscontinuity

```
public void forceDiscontinuity(boolean value)
```

isDiscontinuity

```
public boolean isDiscontinuity()
```

getCalcDurationAudio

```
public long getCalcDurationAudio()
```

getCalcDurationVideo

```
public long getCalcDurationVideo()
```

getCalcDuration

```
public long getCalcDuration()
```

getProgramDateTime

```
public String getProgramDateTime()
```

setProgramDateTime

```
public void setProgramDateTime(String programDateTime)
```

getChunkMap

```
public CupertinoChunkMap getChunkMap()
```

getLastAudioTimecode

```
public long getLastAudioTimecode()
```

(continued from last page)

setLastAudioTimecode

```
public void setLastAudioTimecode(long lastAudioTimecode)
```

getLastVideoTimecode

```
public long getLastVideoTimecode()
```

setLastVideoTimecode

```
public void setLastVideoTimecode(long lastVideoTimecode)
```

getProperties

```
public WMSProperties getProperties()
```

addDataPacket

```
public void addDataPacket(AMFPacket packet)
```

getDataPackets

```
public java.util.List getDataPackets()
```

isEncIVBytesInChunklist

```
public boolean isEncIVBytesInChunklist()
```

setEncIVBytesInChunklist

```
public void setEncIVBytesInChunklist(boolean encIVBytesInChunklist)
```

Package

com.wowza.wms.httpstreamer.cupertinostreaming.util

com.wowza.wms.httpstreamer.cupertinoStreaming.util Interface ICupertinoEncInfoFrame

public interface **ICupertinoEncInfoFrame**
extends

Method Summary

int	getFrameType()
long	getPTS()
void	setFrameType(int frameType)
void	setPTS(long pts)

Methods

getFrameType

public int **getFrameType**()

setFrameType

public void **setFrameType**(int frameType)

getPTS

public long **getPTS**()

setPTS

public void **setPTS**(long pts)

com.wowza.wms.httpstreamer.cupertinostreaming.util Interface ICupertinoEncryptor

public interface **ICupertinoEncryptor**
extends

Method Summary

void	close()
byte[]	encryptAudioFrame (int codec, byte[] data, int offset, int len, int frameOffset)
void	encryptAudioFrames (int codec, long pts, java.util.List fragments)
byte[]	encryptChunk (byte[] data, int offset, int len, boolean isLast)
void	encryptVideoFrame (int codec, long pts, long dts, java.util.List fragments)
java.util.List	getECMPESBytes (CupertinoTransportStreamPIDContext pidContextECM, int videoPID, int audioPID, int dataPID, int ecmPID)
IEncryptionInfoPlayReady	getEncInfo()
byte[]	getPMTDescriptorForEncryption (int mediaPID, int ecmPID, int contentType)
void	init (IEncryptionInfoPlayReady encInfo, long chunkIndex)
boolean	isAES128SampleEncryptor ()
boolean	isChunkEncryptor ()
boolean	isPlayReadySampleEncryptor ()
boolean	isSampleEncryptor ()
void	setEncryptorContextStr (String encryptorContextStr)
void	setupPIDContextForEncryption (CupertinoTransportStreamPIDContext pidContext, int contentType)

Methods

(continued from last page)

init

```
public void init(IEncryptionInfoPlayReady encInfo,  
                long chunkIndex)
```

close

```
public void close()
```

encryptChunk

```
public byte[] encryptChunk(byte[] data,  
                            int offset,  
                            int len,  
                            boolean isLast)
```

encryptVideoFrame

```
public void encryptVideoFrame(int codec,  
                               long pts,  
                               long dts,  
                               java.util.List fragments)
```

encryptAudioFrames

```
public void encryptAudioFrames(int codec,  
                                long pts,  
                                java.util.List fragments)
```

encryptAudioFrame

```
public byte[] encryptAudioFrame(int codec,  
                                 byte[] data,  
                                 int offset,  
                                 int len,  
                                 int frameOffset)
```

isChunkEncryptor

```
public boolean isChunkEncryptor()
```

isSampleEncryptor

```
public boolean isSampleEncryptor()
```

isAES128SampleEncryptor

```
public boolean isAES128SampleEncryptor()
```

isPlayReadySampleEncryptor

```
public boolean isPlayReadySampleEncryptor()
```

setEncryptorContextStr

```
public void setEncryptorContextStr(String encryptorContextStr)
```

getEncInfo

```
public IEncryptionInfoPlayReady getEncInfo()
```

setupPIDContextForEncryption

```
public void setupPIDContextForEncryption(CupertinoTransportStreamPIDContext  
pidContext,  
int contentType)
```

getPMTDescriptorForEncryption

```
public byte[] getPMTDescriptorForEncryption(int mediaPID,  
int ecmPID,  
int contentType)
```

getECMPESBytes

```
public java.util.List getECMPESBytes(CupertinoTransportStreamPIDContext pidContextECM,  
int videoPID,  
int audioPID,  
int dataPID,  
int ecmPID)
```

com.wowza.wms.httpstreamer.cupertinoStreaming.util Class LiveStreamPacketizerCupertinoUtils

java.lang.Object



com.wowza.wms.httpstreamer.cupertinoStreaming.util.LiveStreamPacketizerCupertinoUtils

```
public class LiveStreamPacketizerCupertinoUtils
extends Object
```

Field Summary

public static final	APPINSTANCEPLACHOLDER Value: {appInstance}
public static final	APPLICATIONPLACHOLDER Value: {application}
public static final	AUDIOONLYKEY Value: ao
public static final	BITRATEKEY Value: b
public static final	BITRATEPLACEHOLDER Value: {bitrate}
public static final	CACHECONTROLSTR Value: #EXT-X-ALLOW-CACHE
public static final	CAPTIONFILEKEY Value: cf
public static final	CAPTIONFILEPLACEHOLDER Value: {captionFile}
public static final	CHUNKLISTFILENAMEPATTERN Value: {chunklistName}{sessionId}{bitrate}{playStart}{playDuration}{playSeek}{dvr}{rendition}{language}{title}{ngrp}{captionFile}{secureToken}
public static final	CHUNKLISTNAMEPLACEHOLDER Value: {chunklistName}
public static final	CODEC_H264_ID Value: avc1

public static final	CRLF_STR Value:
public static final	DEFAULT_CHUNKLISTNAME Value: chunklist
public static final	DEFAULT_CORS_ENABLED Value: true
public static final	DEFAULT_EXT Value: .m3u8
public static final	DEFAULT_MEDIANAME Value: media
public static final	DEFAULT_SUBTITLECHUNKLISTNAME Value: subtitlechunk
public static final	DEFAULT_SUBTITLEGROUPNAME Value: subs
public static final	DEFAULT_SUBTITLELISTNAME Value: subtitlelist
public static final	DISCONTINUITYSTR Value: #EXT-X-DISCONTINUITY
public static final	DOMAINPLACHOLDER Value: {domain}
public static final	DVRKEY Value: DVR
public static final	DVRPLACEHOLDER Value: {dvr}
public static final	EMPTYPLAYLISTSTR Value: #EXTM3U #EXT-X-ENDLIST
public static final	ENCIVPLACEHOLDER Value: {encIV}
public static final	ENCKEYONLYSTR Value: #EXT-X-KEY:
public static final	ENCKEYPLACEHOLDERPLACHOLDER Value: {enckeyurl}

public static final	ENCKEYSTR Value: #EXT-X-KEY:METHOD={encmethod},{enckeyurl}
public static final	ENCKEYSTRWITHIV Value: #EXT-X-KEY:METHOD={encmethod},URI="{enckeyurl}",IV="{encIV}"
public static final	ENCKEYSTRWITHURI Value: #EXT-X-KEY:METHOD={encmethod},URI="{enckeyurl}"
public static final	ENCKEYURLSESSIONIDPLACEHOLDER Value: {encKeySessionid}
public static final	ENCMETHOD_DEFAULT Value: AES-128
public static final	ENCMETHODPLACEHOLDERPLACHOLDER Value: {encmethod}
public static final	ENCPLAYREADYHEADER Value: #EXT-X-INIT-PRHDR:{playReadyHeader}
public static final	ENCPLAYREADYHEADERMSFT Value: #EXT-X-PLAYREADYHEADER:{playReadyHeader}
public static final	ENCPLAYREADYHEADERPLACEHOLDER Value: {playReadyHeader}
public static final	EXTPLACEHOLDER Value: {ext}
public static final	EXTXVERSIONPLACEHOLDER Value: {ext-x-version}
public static final	EXTXVERSIONSTR Value: #EXT-X-VERSION:{ext-x-version}
public static final	FILENAMEBASEPATTERN Value: {sessionid}{bitrate}{playStart}{playDuration}{playSeek}{dvr}{rendition}{language}{title}{ngroup}{captionFile}{secureToken}
public static final	FILENAMEPLACHOLDER Value: {filename}
public static final	HOSTPLACHOLDER Value: {host}

public static final	INDEXPLACHOLDER Value: {index}
public static	initProvider
public static final	KEYFRAMEONLYKEY Value: ko
public static final	LANGUAGEIDKEY Value: 1
public static final	LANGUAGEPLACHOLDER Value: {language}
public static final	MEDIAFILENAMEPATTERN Value: {mediaName}{sessionId}{bitrate}{playStart}{playDuration}{playSeek}{dvr}{rendition}{language}{title}{ngrp}{captionFile}{secureToken}_{index}{ext}
public static final	MEDIANAMEPLACEHOLDER Value: {mediaName}
public static final	NGRPEPLACHOLDER Value: {ngrp}
public static final	NGRPKEY Value: ngrp
public static final	PARAMETERDELIMITERKEY Value: _
public static final	PLAYDURATIONKEY Value: pd
public static final	PLAYDURATIONPLACEHOLDER Value: {playDuration}
public static final	PLAYLIST_GROUPID_AUDIO Value: audioGroup
public static final	PLAYLIST_GROUPID_VIDEO Value: videoGroup
public static final	PLAYLISTBYTERRANGE Value: #EXT-X-BYTERRANGE
public static final	PLAYLISTDISCONTINUITYSEQSTR Value: #EXT-X-DISCONTINUITY-SEQUENCE

public static final	PLAYLISTIFRAMESONLY Value: #EXT-X-I-FRAMES-ONLY
public static final	PLAYLISTIFRAMESTREAMINF Value: #EXT-X-I-FRAME-STREAM-INF
public static final	PLAYLISTINDEPENDENTSEGMENTSSTR Value: #EXT-X-INDEPENDENT-SEGMENTS
public static final	PLAYLISTITEMSTR Value: #EXTINF
public static final	PLAYLISTMEDIA Value: #EXT-X-MEDIA
public static final	PLAYLISTMEDIASEQSTR Value: #EXT-X-MEDIA-SEQUENCE
public static final	PLAYLISTPLAYLISTTYPESTR Value: #EXT-X-PLAYLIST-TYPE
public static final	PLAYLISTSTART Value: #EXT-X-START
public static final	PLAYLISTSTARTSTR Value: #EXTM3U
public static final	PLAYLISTSTOPSTR Value: #EXT-X-ENDLIST
public static final	PLAYLISTSTREAMINF Value: #EXT-X-STREAM-INF
public static final	PLAYLISTTARGETDURATIONSTR Value: #EXT-X-TARGETDURATION
public static final	PLAYSEEKKEY Value: pk
public static final	PLAYSEEKPLACEHOLDER Value: {playSeek}
public static final	PLAYSTARTKEY Value: ps
public static final	PLAYSTARTPLACEHOLDER Value: {playStart}

public static final	PROGRAMDATETIME_DATEFORMAT Value: yyyy-MM-dd'T'HH:mm:ss.SSSZ
public static final	PROGRAMDATETIMESTR Value: #EXT-X-PROGRAM-DATE-TIME
public static final	QUERYSTRPLACHOLDER Value: {query}
public static final	RENDITIONPLACHOLDER Value: {rendition}
public static final	RESOLUTIONHEIGHTPLACEHOLDER Value: {resolution-height}
public static final	RESOLUTIONPLACEHOLDER Value: {resolution}
public static final	RESOLUTIONSTR Value: ,RESOLUTION={resolution-width}x{resolution-height}
public static final	RESOLUTIONWIDTHPLACEHOLDER Value: {resolution-width}
public static final	SECURETOKENKEY Value: tk
public static final	SECURETOKENPLACEHOLDER Value: {secureToken}
public static final	SESSIONIDKEY Value: w
public static final	SESSIONIDPLACEHOLDER Value: {sessionId}
public static final	STREAMPLACHOLDER Value: {stream}
public static final	SUBTITLEBASEPATTERN Value: {sessionId}{bitrate}{language}{title}{playStart}{playDuration}{playSeek}{dvr}{captionFile}
public static final	SUBTITLELISTFILENAMEPATTERN Value: {subtitlelistName}{sessionId}{bitrate}{language}{title}{playStart}{playDuration}{playSeek}{dvr}{captionFile}

public static final	SUBTITLELISTNAMEPLACEHOLDER Value: <code>{subtitlelistName}</code>
public static final	SYSTEMLANGUAGEIDKEY Value: <code>s1</code>
public static final	TITLEKEY Value: <code>t64</code>
public static final	TITLEPLACHOLDER Value: <code>{title}</code>
public static final	URLPATTERN Value: <code>{domain}/{application}/{appInstance}/{stream}/{filename}?{query}</code>
public static final	URLPATTERN_RELATIVE Value: <code>{filename}?{query}</code>
public static final	VIDEOONLYKEY Value: <code>vo</code>

Constructor Summary

public	LiveStreamPacketizerCupertinoUtils ()
--------	---

Method Summary

static void	appendUserManifestHeaders (StringBuffer strBuf, LiveStreamPacketizerCupertinoChunk chunk)
static long	chunkFilenameToIndex (String filename)
static int	chunkFilenameToStreamMode (String filename)
static String	codecInfoAudioToCodecsStr (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
static String	codecInfoAudioToCodecsStr (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio, int codecStrFormatId)
static String	codecInfoVideoToCodecsStr (int codec, int profile, int level, int codecStrFormatId)
static String	codecInfoVideoToCodecsStr (int codec, int profile, int level, int codecStrFormatId, boolean forceH264BaselineProfile)
static String	codecInfoVideoToCodecsStr (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo, int codecStrFormatId)

static String	codecInfoVideoToCodecsStr (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo, int codecStrFormatId, boolean forceH264BaselineProfile)
static String	codecInfoVideoToCodecsStr (String codecStr, int codecStrFormatId)
static String	codecInfoVideoToResolutionStr (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
static java.util.Map	createUserManifestHeaderMapFromString (String userManifestHeaders)
static String	createUserManifestParameterString (java.util.Map encUserParams)
static java.util.Map	deepCopyUserManifestHeaders (java.util.Map userManifestHeaders)
static void	encryptChunk (LiveStreamPacketizerCupertinoChunk chunk, ICupertinoEncryptor encryptor)
static void	encryptChunk2 (LiveStreamPacketizerCupertinoChunk chunk, CupertinoEncInfo encInfo)
static CupertinoEncInfo	getEncInfo (IApplicationInstance appInstance, String streamName)
static boolean	isValidAudioCodec (int codec)
static boolean	isValidVideoCodec (int codec)
static void	mergeUserManifestHeaders (java.util.Map dst, java.util.Map src)
static int	millisToSecondsCeilDuration (long millis)
static int	millisToSecondsDuration (long millis)
static String	streamModeToFileExtension (int streamMode)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

initProvider

public static boolean **initProvider**

CODEC_H264_ID

public static final java.lang.String **CODEC_H264_ID**

(continued from last page)

Constant value: **avc1**

PROGRAMDATETIME_DATEFORMAT

public static final java.lang.String **PROGRAMDATETIME_DATEFORMAT**Constant value: **yyyy-MM-dd'T'HH:mm:ss.SSSZ**

CRLF_STR

public static final java.lang.String **CRLF_STR**

Constant value:

EMPTYPLAYLISTSTR

public static final java.lang.String **EMPTYPLAYLISTSTR**Constant value: **#EXTM3U**
#EXT-X-ENDLIST

PLAYLISTSTARTSTR

public static final java.lang.String **PLAYLISTSTARTSTR**Constant value: **#EXTM3U**

EXTXVERSIONPLACEHOLDER

public static final java.lang.String **EXTXVERSIONPLACEHOLDER**Constant value: **{ext-x-version}**

EXTXVERSIONSTR

public static final java.lang.String **EXTXVERSIONSTR**Constant value: **#EXT-X-VERSION:{ext-x-version}**

PLAYLISTSTOPSTR

public static final java.lang.String **PLAYLISTSTOPSTR**Constant value: **#EXT-X-ENDLIST**

PLAYLISTTARGETDURATIONSTR

public static final java.lang.String **PLAYLISTTARGETDURATIONSTR**Constant value: **#EXT-X-TARGETDURATION**

PLAYLISTINDEPENDENTSEGMENTSSTR

```
public static final java.lang.String PLAYLISTINDEPENDENTSEGMENTSSTR
```

Constant value: **#EXT-X-INDEPENDENT-SEGMENTS**

PLAYLISTIFRAMESONLY

```
public static final java.lang.String PLAYLISTIFRAMESONLY
```

Constant value: **#EXT-X-I-FRAMES-ONLY**

PLAYLISTMEDIASEQSTR

```
public static final java.lang.String PLAYLISTMEDIASEQSTR
```

Constant value: **#EXT-X-MEDIA-SEQUENCE**

PLAYLISTDISCONTINUITYSEQSTR

```
public static final java.lang.String PLAYLISTDISCONTINUITYSEQSTR
```

Constant value: **#EXT-X-DISCONTINUITY-SEQUENCE**

PLAYLISTITEMSTR

```
public static final java.lang.String PLAYLISTITEMSTR
```

Constant value: **#EXTINF**

CACHECONTROLSTR

```
public static final java.lang.String CACHECONTROLSTR
```

Constant value: **#EXT-X-ALLOW-CACHE**

PLAYLISTPLAYLISTTYPESTR

```
public static final java.lang.String PLAYLISTPLAYLISTTYPESTR
```

Constant value: **#EXT-X-PLAYLIST-TYPE**

PLAYLISTSTART

```
public static final java.lang.String PLAYLISTSTART
```

Constant value: **#EXT-X-START**

(continued from last page)

PLAYLISTBYTERANGE

```
public static final java.lang.String PLAYLISTBYTERANGE
```

Constant value: **#EXT-X-BYTERANGE**

PLAYLISTSTREAMINF

```
public static final java.lang.String PLAYLISTSTREAMINF
```

Constant value: **#EXT-X-STREAM-INF**

PLAYLISTIFRAMESTREAMINF

```
public static final java.lang.String PLAYLISTIFRAMESTREAMINF
```

Constant value: **#EXT-X-I-FRAME-STREAM-INF**

PLAYLISTMEDIA

```
public static final java.lang.String PLAYLISTMEDIA
```

Constant value: **#EXT-X-MEDIA**

PLAYLIST_GROUPID_AUDIO

```
public static final java.lang.String PLAYLIST_GROUPID_AUDIO
```

Constant value: **audioGroup**

PLAYLIST_GROUPID_VIDEO

```
public static final java.lang.String PLAYLIST_GROUPID_VIDEO
```

Constant value: **videoGroup**

DOMAINPLACHOLDER

```
public static final java.lang.String DOMAINPLACHOLDER
```

Constant value: **{domain}**

HOSTPLACHOLDER

```
public static final java.lang.String HOSTPLACHOLDER
```

Constant value: **{host}**

APPLICATIONPLACHOLDER

```
public static final java.lang.String APPLICATIONPLACHOLDER
```

(continued from last page)

Constant value: **{application}**

APPINSTANCEPLACHOLDER

```
public static final java.lang.String APPINSTANCEPLACHOLDER
```

Constant value: **{appInstance}**

STREAMPLACHOLDER

```
public static final java.lang.String STREAMPLACHOLDER
```

Constant value: **{stream}**

FILENAMEPLACHOLDER

```
public static final java.lang.String FILENAMEPLACHOLDER
```

Constant value: **{filename}**

INDEXPLACHOLDER

```
public static final java.lang.String INDEXPLACHOLDER
```

Constant value: **{index}**

EXTPLACEHOLDER

```
public static final java.lang.String EXTPLACEHOLDER
```

Constant value: **{ext}**

QUERYSTRPLACHOLDER

```
public static final java.lang.String QUERYSTRPLACHOLDER
```

Constant value: **{query}**

RESOLUTIONPLACEHOLDER

```
public static final java.lang.String RESOLUTIONPLACEHOLDER
```

Constant value: **{resolution}**

RESOLUTIONWIDTHPLACEHOLDER

```
public static final java.lang.String RESOLUTIONWIDTHPLACEHOLDER
```

Constant value: **{resolution-width}**

RESOLUTIONHEIGHTPLACEHOLDER

```
public static final java.lang.String RESOLUTIONHEIGHTPLACEHOLDER
```

Constant value: **{resolution-height}**

RENDITIONPLACHOLDER

```
public static final java.lang.String RENDITIONPLACHOLDER
```

Constant value: **{rendition}**

LANGUAGEPLACHOLDER

```
public static final java.lang.String LANGUAGEPLACHOLDER
```

Constant value: **{language}**

TITLEPLACHOLDER

```
public static final java.lang.String TITLEPLACHOLDER
```

Constant value: **{title}**

PLAYSTARTPLACEHOLDER

```
public static final java.lang.String PLAYSTARTPLACEHOLDER
```

Constant value: **{playStart}**

PLAYDURATIONPLACEHOLDER

```
public static final java.lang.String PLAYDURATIONPLACEHOLDER
```

Constant value: **{playDuration}**

PLAYSEEKPLACEHOLDER

```
public static final java.lang.String PLAYSEEKPLACEHOLDER
```

Constant value: **{playSeek}**

NGRPEPLACHOLDER

```
public static final java.lang.String NGRPEPLACHOLDER
```

Constant value: **{ngrp}**

(continued from last page)

ENCKEYPLACEHOLDERPLACHOLDER

```
public static final java.lang.String ENCKEYPLACEHOLDERPLACHOLDER
```

Constant value: **{enckeyurl}**

ENCMETHODPLACEHOLDERPLACHOLDER

```
public static final java.lang.String ENCMETHODPLACEHOLDERPLACHOLDER
```

Constant value: **{encmethod}**

ENCIVPLACEHOLDER

```
public static final java.lang.String ENCIVPLACEHOLDER
```

Constant value: **{encIV}**

ENCPLAYREADYHEADERPLACEHOLDER

```
public static final java.lang.String ENCPLAYREADYHEADERPLACEHOLDER
```

Constant value: **{playReadyHeader}**

SESSIONIDPLACEHOLDER

```
public static final java.lang.String SESSIONIDPLACEHOLDER
```

Constant value: **{sessionId}**

DVRPLACEHOLDER

```
public static final java.lang.String DVRPLACEHOLDER
```

Constant value: **{dvr}**

SECURETOKENPLACEHOLDER

```
public static final java.lang.String SECURETOKENPLACEHOLDER
```

Constant value: **{secureToken}**

CAPTIONFILEPLACEHOLDER

```
public static final java.lang.String CAPTIONFILEPLACEHOLDER
```

Constant value: **{captionFile}**

PARAMETERDELIMITERKEY

```
public static final java.lang.String PARAMETERDELIMITERKEY
```

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Constant value: `_`

DVRKEY

```
public static final java.lang.String DVRKEY
```

Constant value: `DVR`

PLAYSTARTKEY

```
public static final java.lang.String PLAYSTARTKEY
```

Constant value: `ps`

PLAYDURATIONKEY

```
public static final java.lang.String PLAYDURATIONKEY
```

Constant value: `pd`

PLAYSEEKKEY

```
public static final java.lang.String PLAYSEEKKEY
```

Constant value: `pk`

SESSIONIDKEY

```
public static final java.lang.String SESSIONIDKEY
```

Constant value: `w`

BITRATEKEY

```
public static final java.lang.String BITRATEKEY
```

Constant value: `b`

NGRPKEY

```
public static final java.lang.String NGRPKEY
```

Constant value: `ngrp`

AUDIOONLYKEY

```
public static final java.lang.String AUDIOONLYKEY
```

Constant value: `ao`

VIDEOONLYKEY

```
public static final java.lang.String VIDEOONLYKEY
```

Constant value: **vo**

KEYFRAMEONLYKEY

```
public static final java.lang.String KEYFRAMEONLYKEY
```

Constant value: **ko**

LANGUAGEIDKEY

```
public static final java.lang.String LANGUAGEIDKEY
```

Constant value: **l**

SYSTEMLANGUAGEIDKEY

```
public static final java.lang.String SYSTEMLANGUAGEIDKEY
```

Constant value: **sl**

TITLEKEY

```
public static final java.lang.String TITLEKEY
```

Constant value: **t64**

SECURETOKENKEY

```
public static final java.lang.String SECURETOKENKEY
```

Constant value: **tk**

CAPTIONFILEKEY

```
public static final java.lang.String CAPTIONFILEKEY
```

Constant value: **cf**

ENCKEYSTR

```
public static final java.lang.String ENCKEYSTR
```

Constant value: **#EXT-X-KEY:METHOD={encmethod},{enckeyurl}**

(continued from last page)

ENCKEYSTRWITHURI

```
public static final java.lang.String ENCKEYSTRWITHURI
```

Constant value: **#EXT-X-KEY:METHOD={encmethod},URI="{enckeyurl}"**

ENCKEYSTRWITHIV

```
public static final java.lang.String ENCKEYSTRWITHIV
```

Constant value: **#EXT-X-KEY:METHOD={encmethod},URI="{enckeyurl}",IV="{encIV}"**

ENCKEYONLYSTR

```
public static final java.lang.String ENCKEYONLYSTR
```

Constant value: **#EXT-X-KEY:**

ENCKEYURLSESSIONIDPLACEHOLDER

```
public static final java.lang.String ENCKEYURLSESSIONIDPLACEHOLDER
```

Constant value: **{encKeySessionid}**

ENCPLAYREADYHEADER

```
public static final java.lang.String ENCPPLAYREADYHEADER
```

Constant value: **#EXT-X-INIT-PRHDR:{playReadyHeader}**

ENCPLAYREADYHEADERMSFT

```
public static final java.lang.String ENCPPLAYREADYHEADERMSFT
```

Constant value: **#EXT-X-PLAYREADYHEADER:{playReadyHeader}**

DISCONTINUITYSTR

```
public static final java.lang.String DISCONTINUITYSTR
```

Constant value: **#EXT-X-DISCONTINUITY**

PROGRAMDATETIMESTR

```
public static final java.lang.String PROGRAMDATETIMESTR
```

Constant value: **#EXT-X-PROGRAM-DATE-TIME**

RESOLUTIONSTR

```
public static final java.lang.String RESOLUTIONSTR
```

(continued from last page)

Constant value: `,RESOLUTION={resolution-width}x{resolution-height}`

CHUNKLISTNAMEPLACEHOLDER

```
public static final java.lang.String CHUNKLISTNAMEPLACEHOLDER
```

Constant value: `{chunklistName}`

MEDIANAMEPLACEHOLDER

```
public static final java.lang.String MEDIANAMEPLACEHOLDER
```

Constant value: `{mediaName}`

BITRATEPLACEHOLDER

```
public static final java.lang.String BITRATEPLACEHOLDER
```

Constant value: `{bitrate}`

FILENAMEBASEPATTERN

```
public static final java.lang.String FILENAMEBASEPATTERN
```

Constant value:

```
{sessionId}{bitrate}{playStart}{playDuration}{playSeek}{dvr}{rendition}{language}{title}{ngrp}{captionFile}{secureToken}
```

MEDIAFILENAMEPATTERN

```
public static final java.lang.String MEDIAFILENAMEPATTERN
```

Constant value:

```
{mediaName}{sessionId}{bitrate}{playStart}{playDuration}{playSeek}{dvr}{rendition}{language}{title}{ngrp}{captionFile}{secureToken}_{index}{ext}
```

CHUNKLISTFILENAMEPATTERN

```
public static final java.lang.String CHUNKLISTFILENAMEPATTERN
```

Constant value:

```
{chunklistName}{sessionId}{bitrate}{playStart}{playDuration}{playSeek}{dvr}{rendition}{language}{title}{ngrp}{captionFile}{secureToken}
```

URLPATTERN

```
public static final java.lang.String URLPATTERN
```

Constant value: `{domain}/{application}/{appInstance}/{stream}/{filename}?{query}`

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URLPATTERN_RELATIVE

```
public static final java.lang.String URLPATTERN_RELATIVE
```

Constant value: `{filename}?{query}`

ENCMETHOD_DEFAULT

```
public static final java.lang.String ENCMETHOD_DEFAULT
```

Constant value: `AES-128`

SUBTITLELISTNAMEPLACEHOLDER

```
public static final java.lang.String SUBTITLELISTNAMEPLACEHOLDER
```

Constant value: `{subtitlelistName}`

SUBTITLEBASEPATTERN

```
public static final java.lang.String SUBTITLEBASEPATTERN
```

Constant value:

```
{sessionId}{bitrate}{language}{title}{playStart}{playDuration}{playSeek}{dvr}{captionFile}
```

SUBTITLELISTFILENAMEPATTERN

```
public static final java.lang.String SUBTITLELISTFILENAMEPATTERN
```

Constant value:

```
{subtitlelistName}{sessionId}{bitrate}{language}{title}{playStart}{playDuration}{playSeek}{dvr}{captionFile}
```

DEFAULT_MEDIANAME

```
public static final java.lang.String DEFAULT_MEDIANAME
```

Constant value: `media`

DEFAULT_CHUNKLISTNAME

```
public static final java.lang.String DEFAULT_CHUNKLISTNAME
```

Constant value: `chunklist`

DEFAULT_EXT

```
public static final java.lang.String DEFAULT_EXT
```

Constant value: `.m3u8`

DEFAULT_SUBTITLELISTNAME

```
public static final java.lang.String DEFAULT_SUBTITLELISTNAME
```

Constant value: **subtitlelist**

DEFAULT_SUBTITLECHUNKLISTNAME

```
public static final java.lang.String DEFAULT_SUBTITLECHUNKLISTNAME
```

Constant value: **subtitlechunk**

DEFAULT_SUBTITLEGROUPNAME

```
public static final java.lang.String DEFAULT_SUBTITLEGROUPNAME
```

Constant value: **subs**

DEFAULT_CORS_ENABLED

```
public static final boolean DEFAULT_CORS_ENABLED
```

Constant value: **true**

Constructors

LiveStreamPacketizerCupertinoUtils

```
public LiveStreamPacketizerCupertinoUtils()
```

Methods

streamModeToFileExtension

```
public static String streamModeToFileExtension(int streamMode)
```

chunkFilenameToIndex

```
public static long chunkFilenameToIndex(String filename)
```

encryptChunk

```
public static void encryptChunk(LiveStreamPacketizerCupertinoChunk chunk,  
    ICupertinoEncryptor encryptor)
```

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encryptChunk2

```
public static void encryptChunk2(LiveStreamPacketizerCupertinoChunk chunk,  
    CupertinoEncInfo encInfo)
```

getEncInfo

```
public static CupertinoEncInfo getEncInfo(IApplicationInstance appInstance,  
    String streamName)
```

mergeUserManifestHeaders

```
public static void mergeUserManifestHeaders(java.util.Map dst,  
    java.util.Map src)
```

appendUserManifestHeaders

```
public static void appendUserManifestHeaders(StringBuffer strBuf,  
    LiveStreamPacketizerCupertinoChunk chunk)
```

deepCopyUserManifestHeaders

```
public static java.util.Map deepCopyUserManifestHeaders(java.util.Map  
    userManifestHeaders)
```

createUserManifestHeaderMapFromString

```
public static java.util.Map createUserManifestHeaderMapFromString(String  
    userManifestHeaders)
```

createUserManifestParameterString

```
public static String createUserManifestParameterString(java.util.Map encUserParams)
```

millisToSecondsDuration

```
public static int millisToSecondsDuration(long millis)
```

millisToSecondsCeilDuration

```
public static int millisToSecondsCeilDuration(long millis)
```

codecInfoVideoToResolutionStr

```
public static String
codecInfoVideoToResolutionStr(com.wowza.wms.media.model.MediaCodecInfoVideo
codecInfoVideo)
```

codecInfoAudioToCodecsStr

```
public static String
codecInfoAudioToCodecsStr(com.wowza.wms.media.model.MediaCodecInfoAudio
codecInfoAudio)
```

chunkFilenameToStreamMode

```
public static int chunkFilenameToStreamMode(String filename)
```

codecInfoAudioToCodecsStr

```
public static String
codecInfoAudioToCodecsStr(com.wowza.wms.media.model.MediaCodecInfoAudio
codecInfoAudio,
    int codecStrFormatId)
```

codecInfoVideoToCodecsStr

```
public static String
codecInfoVideoToCodecsStr(com.wowza.wms.media.model.MediaCodecInfoVideo
codecInfoVideo,
    int codecStrFormatId)
```

codecInfoVideoToCodecsStr

```
public static String codecInfoVideoToCodecsStr(int codec,
    int profile,
    int level,
    int codecStrFormatId)
```

codecInfoVideoToCodecsStr

```
public static String codecInfoVideoToCodecsStr(int codec,
    int profile,
    int level,
    int codecStrFormatId,
    boolean forceH264BaselineProfile)
```

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codecInfoVideoToCodecsStr

```
public static String codecInfoVideoToCodecsStr(String codecStr,  
        int codecStrFormatId)
```

codecInfoVideoToCodecsStr

```
public static String  
codecInfoVideoToCodecsStr(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo,  
        int codecStrFormatId,  
        boolean forceH264BaselineProfile)
```

isValidVideoCodec

```
public static boolean isValidVideoCodec(int codec)
```

isValidAudioCodec

```
public static boolean isValidAudioCodec(int codec)
```

Package

**com.wowza.wms.httpstreamer.directstreamin
g.httpstreamer**

com.wowza.wms.httpstreamer.directstreaming.httpstreamer Class HTTPStreamerSessionDirect

java.lang.Object

└─ com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

└─

com.wowza.wms.httpstreamer.directstreaming.httpstreamer.HTTPStreamerSessionDirect

All Implemented Interfaces:

[IHTTPStreamerSession](#)

```
public class HTTPStreamerSessionDirect
extends HTTPStreamerSessionBase
```

Fields inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

acceptSession, appInstance, connectionHolder, cookieStr, corsHeaders, DATEFORMAT, elapsedTime, fastDateFormat, fileInfoMap, firstCheck, httpHeaders, httpStreamerAdapter, ioPerformanceCounter, ipAddress, isActive, isDelete, isHTTPOrigin, isPlayLogged, isSecure, lastRequest, liveStreamingPacketizer, lock, mediaCasterStreamLock, notifyCreate, playDuration, playSeek, playStart, properties, queryStr, redirectSession, redirectSessionBody, redirectSessionCode, redirectSessionContentType, redirectSessionURL, referrer, serverIp, serverPort, sessionId, sessionProtocol, sessionTimeout, sessionType, stream, streamDomainStrSet, streamExt, streamName, streamNamePartMap, streamPosition, timeoutSession, totalIOPerformance2Last, totalIOPerformanceLast, transcoderVODIndex, transcoderVODIndexDestinationsMap, transcoderVODIndexDestinationsOrder, transcoderVODListeners, transcoderVODSession, uri, userAgent, userHTTPHeaders, userManifestHeaders, userQueryStr, vhost, vodTranscodeNGRP

Fields inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[SESSIONPROTOCOL_COUNT](#), [SESSIONPROTOCOL_CUPERTINOSTREAMING](#), [SESSIONPROTOCOL_DIRECTSTREAMING](#), [SESSIONPROTOCOL_DVRCHUNKSTREAMING](#), [SESSIONPROTOCOL_MPEGDASHSTREAMING](#), [SESSIONPROTOCOL_SANJOSESTREAMING](#), [SESSIONPROTOCOL_SMOOTHSTREAMING](#), [SESSIONPROTOCOL_TSSTREAMING](#), [SESSIONPROTOCOL_UNKNOWN](#), [SESSIONPROTOCOL_WEBMSTREAMING](#), [SESSIONTYPE_LIVE](#), [SESSIONTYPE_LIVEDVR](#), [SESSIONTYPE_UNKNOWN](#), [SESSIONTYPE_VOD](#)

Constructor Summary

public [HTTPStreamerSessionDirect](#)()

Methods inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

```

acceptSession, addHTTPSessionToTCPSession, addIOPerformance, addIOPerformance2,
addStreamDomainStr, addStreamDomainStrs, addTranscoderVODListener,
addUserHTTPHeaders, checkAndSetPlayLogged, clearLoggingValues,
containsStreamDomainStr, containsStreamNameParts, doSessionRedirect,
doSessionRedirect, extractHTTPRequestInfo, getAndClearNotifyCreate, getAppInstance,
getConnectionHolder, getCookieStr, getCORSHaders, getDvrSessionInfo, getElapsedTime,
getFileInfo, getHTTPDate, getHTTPHeader, getHTTPHeaderMap, getHTTPHeaderNames,
getHTTPIntHeader, getHTTPStreamerAdapter, getIOPerformanceCounter, getIpAddress,
getLastRequest, getLiveStreamingPacketizer, getLock, getPlayDuration, getPlaySeek,
getPlayStart, getProperties, getQueryStr, getRedirectSessionBody,
getRedirectSessionCode, getRedirectSessionContentType, getRedirectSessionURL,
getReferrer, getServerIp, getServerPort, getSessionId, getSessionProtocol,
getSessionTimeout, getSessionType, getStream, getStreamDomainStr,
getStreamDomainStrList, getStreamExt, getStreamName, getStreamNameParts,
getStreamPosition, getTimeRunning, getTimeRunningSeconds, getTranscoderVODIndex,
getTranscoderVODIndex, getTranscoderVODIndexDestinationsMap,
getTranscoderVODIndexDestinationsOrder, getTranscoderVODSession, getUri,
getUserAgent, getUserHTTPHeaders, getUserQueryStr, getVHost, getVODTranscodeNGRP,
indexTranscoderVOD, isAcceptSession, isActive, isDelete, isDeleteSession, isFileInfo,
isHTTPOrigin, isPlayLogged, isRedirectSession, isSecure, isTimeout, isTimeoutSession,
isValidated, isValidStreamDomainStr, lockRepeaterStreams,
notifyTranscoderVODFillChunkStart, notifyTranscoderVODFillChunkStop,
notifyTranscoderVODFillChunkTranscode, putFileInfo, putStreamNameParts,
redirectSession, redirectSession, rejectSession, removeStreamDomainStr,
removeTranscoderVODListener, setAcceptSession, setActive, setAppInstance,
setCookieStr, setDeleteSession, setDvrSessionInfo, setHTTPOrigin,
setHTTPStreamerAdapter, setIpAddress, setLiveStreamingPacketizer, setPlayDuration,
setPlayLogged, setPlaySeek, setPlayStart, setQueryStr, setRedirectSession,
setRedirectSessionBody, setRedirectSessionCode, setRedirectSessionContentType,
setRedirectSessionURL, setReferrer, setSecure, setServerIp, setServerPort,
setSessionId, setSessionProtocol, setSessionTimeout, setSessionType, setStream,
setStreamExt, setStreamName, setStreamPosition, setThreadContext, setTimeoutSession,
setTranscoderVODIndex, setTranscoderVODSession, setUri, setUserAgent,
setUserHTTPHeader, setUserQueryStr, setValidated, setVHost, setVODTranscodeNGRP,
shutdown, shutdownLocked, touch, updateLoggingValues, validStreamDomainToString

```

Methods inherited from class `java.lang.Object`

```

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

```

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[acceptSession](#), [addHTTPSessionToTCPSession](#), [addIOPerformance](#), [addIOPerformance2](#),
[addStreamDomainStr](#), [addStreamDomainStrs](#), [addTranscoderVODListener](#),
[addUserHTTPHeaders](#), [checkAndSetPlayLogged](#), [clearLoggingValues](#),
[containsStreamDomainStr](#), [containsStreamNameParts](#), [doSessionRedirect](#),
[doSessionRedirect](#), [extractHTTPRequestInfo](#), [getAndClearNotifyCreate](#), [getAppInstance](#),
[getConnectionHolder](#), [getCookieStr](#), [getCORSHeaders](#), [getDvrSessionInfo](#), [getElapsedTime](#),
[getFileInfo](#), [getHTTPHeader](#), [getHTTPHeaderMap](#), [getHTTPHeaderNames](#), [getHTTPIntHeader](#),
[getHTTPStreamerAdapter](#), [getIOPerformanceCounter](#), [getIpAddress](#), [getLastRequest](#),
[getLiveStreamingPacketizer](#), [getLock](#), [getPlayDuration](#), [getPlaySeek](#), [getPlayStart](#),
[getProperties](#), [getQueryStr](#), [getRedirectSessionBody](#), [getRedirectSessionCode](#),
[getRedirectSessionContentType](#), [getRedirectSessionURL](#), [getReferrer](#), [getServerIp](#),
[getServerPort](#), [getSessionId](#), [getSessionProtocol](#), [getSessionTimeout](#), [getSessionType](#),
[getStream](#), [getStreamExt](#), [getStreamName](#), [getStreamNameParts](#), [getStreamPosition](#),
[getTimeRunning](#), [getTimeRunningSeconds](#), [getTranscoderVODIndex](#), [getTranscoderVODIndex](#),
[getTranscoderVODIndexDestinationsMap](#), [getTranscoderVODIndexDestinationsOrder](#),
[getTranscoderVODSession](#), [getUri](#), [getUserAgent](#), [getUserHTTPHeaders](#), [getUserQueryStr](#),
[getVHost](#), [getVODTranscodeNGRP](#), [indexTranscoderVOD](#), [isAcceptSession](#), [isActive](#),
[isDelete](#), [isDeleteSession](#), [isFileInfo](#), [isHTTPOrigin](#), [isPlayLogged](#), [isRedirectSession](#),
[isSecure](#), [isTimeout](#), [isTimeoutSession](#), [isValidated](#), [isValidStreamDomainStr](#),
[lockRepeaterStreams](#), [notifyTranscoderVODFillChunkStart](#),
[notifyTranscoderVODFillChunkStop](#), [notifyTranscoderVODFillChunkTranscode](#), [putFileInfo](#),
[putStreamNameParts](#), [redirectSession](#), [redirectSession](#), [rejectSession](#),
[removeStreamDomainStr](#), [removeTranscoderVODListener](#), [setAcceptSession](#), [setActive](#),
[setAppInstance](#), [setCookieStr](#), [setDeleteSession](#), [setDvrSessionInfo](#), [setHTTPOrigin](#),
[setHTTPStreamerAdapter](#), [setIpAddress](#), [setLiveStreamingPacketizer](#), [setPlayDuration](#),
[setPlayLogged](#), [setPlaySeek](#), [setPlayStart](#), [setQueryStr](#), [setRedirectSession](#),
[setRedirectSessionBody](#), [setRedirectSessionCode](#), [setRedirectSessionContentType](#),
[setRedirectSessionURL](#), [setReferrer](#), [setSecure](#), [setServerIp](#), [setServerPort](#),
[getSessionId](#), [getSessionProtocol](#), [getSessionTimeout](#), [getSessionType](#), [setStream](#),
[setStreamExt](#), [setStreamName](#), [setStreamPosition](#), [setTimeoutSession](#),
[setTranscoderVODIndex](#), [setTranscoderVODSession](#), [setUri](#), [setUserAgent](#),
[setUserHTTPHeader](#), [setUserQueryStr](#), [setVHost](#), [setVODTranscodeNGRP](#), [shutdown](#), [touch](#),
[updateLoggingValues](#), [validStreamDomainToString](#)

Constructors

HTTPStreamerSessionDirect

```
public HTTPStreamerSessionDirect()
```

Package

com.wowza.wms.httpstreamer.model

com.wowza.wms.httpstreamer.model Interface IHTTPCryptoHolder

public interface IHTTPCryptoHolder
extends

Method Summary

byte[]	getBuffer()
int	getOffset()
int	getPacketType()
long	getSample()
int	getSize()
void	setBuffer (byte[] buffer)
void	setOffset (int offset)
void	setPacketType (int packetType)
void	setSample (long sample)
void	setSize (int size)

Methods

getBuffer

public byte[] **getBuffer**()

setBuffer

public void **setBuffer**(byte[] buffer)

getOffset

public int **getOffset**()

setOffset

```
public void setOffset(int offset)
```

getSize

```
public int getSize()
```

setSize

```
public void setSize(int size)
```

getPacketType

```
public int getPacketType()
```

setPacketType

```
public void setPacketType(int packetType)
```

getSample

```
public long getSample()
```

setSample

```
public void setSample(long sample)
```

com.wowza.wms.httpstreamer.model Interface IHTTPSessionFactory

public interface **IHTTPSessionFactory**
extends

Method Summary

IHTTPStreamerSession	createHTTPSessionInstance()
--------------------------------------	---

Methods

createHTTPSessionInstance

public [IHTTPStreamerSession](#) **createHTTPSessionInstance()**

com.wowza.wms.httpstreamer.model Interface IHTTPSessionNotify

All Known Implementing Classes:

[HTTPStreamerSessionSmoothStreamer](#), [HTTPStreamerSessionSanJose](#), [HTTPStreamerSessionMPEGDash](#),
[HTTPStreamerSessionCupertino](#)

```
public interface IHTTPSessionNotify  
extends
```

Method Summary

void	notifyHTTPSessionCreate (IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)
void	notifyHTTPSessionDestroy (IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)

Methods

notifyHTTPSessionCreate

```
public void notifyHTTPSessionCreate(IApplicationInstance appInstance,  
    IHTTPStreamerSession httpStreamerSession)
```

notifyHTTPSessionDestroy

```
public void notifyHTTPSessionDestroy(IApplicationInstance appInstance,  
    IHTTPStreamerSession httpStreamerSession)
```

com.wowza.wms.httpstreamer.model Interface IHTTPStreamerAdapter

public interface IHTTPStreamerAdapter
extends

IHTTPStreamerAdapter: HTTP streaming adapter interface

Method Summary	
boolean	canHandle (String path) Return true if can handle request
String	getAdapterName () Get the name of this adapter
HTTPStreamerItem	getHTTPStreamerItem () Get the HTTP streamer item associated with this adapter
String	getID () Get the id of this adapter
int	getIdleFrequency () Get the idle frequency (milliseconds) for HTTP requests.
WMSProperties	getProperties () Get properties
int	getSessionProtocol () Set the adapter session protocol.
IVHost	getVHost () Get the vhost associated with this adapter
void	init () Initialize the HTTP streaming adapter
void	service (org.apache.mina.common.io.Session session, RtmpRequestMessage req, RtmpResponseMessage resp) Called to service each request
void	setHTTPStreamerItem (HTTPStreamerItem httpStreamerItem) Set the HTTP streamer item associated with this adapter
void	setID (String id) Set the id of this adapter
void	setProperties (WMSProperties properties) Set properties
void	setSessionProtocol (int sessionProtocol) Get the adapter session protocol.
void	setVHost (IVHost vhost) Set the vhost associated with this adapter

void	shutdownSession (IApplicationInstance appInstance, IHTTPStreamerSession session) Called when an HTTP streaming session is shutdown
------	--

Methods

canHandle

```
public boolean canHandle(String path)
```

Return true if can handle request

Parameters:

path - request path

Returns:

true if can handle request

service

```
public void service(org.apache.mina.common.IoSession session,  
    RtmpRequestMessage req,  
    RtmpResponseMessage resp)
```

Called to service each request

Parameters:

session - io session

req - request

resp - response

getProperties

```
public WMSProperties getProperties()
```

Get properties

Returns:

properties

setProperties

```
public void setProperties(WMSProperties properties)
```

Set properties

Parameters:

properties - properties

getHTTPStreamerItem

```
public HTTPStreamerItem getHTTPStreamerItem()
```

Get the HTTP streamer item associated with this adapter

Returns:

(continued from last page)

HTTP streamer item

setHTTPStreamerItem

```
public void setHTTPStreamerItem(HTTPStreamerItem httpStreamerItem)
```

Set the HTTP streamer item associated with this adapter

Parameters:

httpStreamerItem - HTTP streamer item

getVHost

```
public IVHost getVHost()
```

Get the vhost associated with this adapter

Returns:

vhost

setVHost

```
public void setVHost(IVHost vhost)
```

Set the vhost associated with this adapter

Parameters:

vhost - vhost

init

```
public void init()
```

Initialize the HTTP streaming adapter

shutdownSession

```
public void shutdownSession(IApplicationInstance appInstance,  
IHTTPStreamerSession session)
```

Called when an HTTP streaming session is shutdown

Parameters:

session - HTTP streaming session

getIdleFrequency

```
public int getIdleFrequency()
```

Get the idle frequency (milliseconds) for HTTP requests. This is how often the session is called back while active.

Returns:

idle frequency (milliseconds)

getAdapterName

```
public String getAdapterName()
```

(continued from last page)

Get the name of this adapter

Returns:

name of this adapter

getID

```
public String getID()
```

Get the id of this adapter

Returns:

id of this adapter

setID

```
public void setID(String id)
```

Set the id of this adapter

Parameters:

id - id of this adapter

getSessionProtocol

```
public int getSessionProtocol()
```

Set the adapter session protocol. See IHTTPStreamerSession.SESSIONPROTOCOL_*

Returns:

adapter session protocol

setSessionProtocol

```
public void setSessionProtocol(int sessionProtocol)
```

Get the adapter session protocol. See IHTTPStreamerSession.SESSIONPROTOCOL_*

Parameters:

sessionProtocol - adapter session protocol

com.wowza.wms.httpstreamer.model Interface IHTTPStreamerApplicationContext

public interface IHTTPStreamerApplicationContext
extends

IHTTPStreamerApplicationContext: HTTP streamer application context interface. Used by HTTP streaming adapter to store per-application information.

Field Summary

public static final	HTTPORIGINMODE_AUTO Value: 1
public static final	HTTPORIGINMODE_OFF Value: 0
public static final	HTTPORIGINMODE_ON Value: 2

Method Summary

void	addQueryStrRemoveList (String name) Add a name to the list of query string parameters that will not be copied to the media URLs for HTTP streaming
java.util.Map	filterQueryStr (java.util.Map map) Internal
IApplicationInstance	getAppInstance () Get application instance
String	getCacheControlStatus4xx () Get the cache-control header for 4xx HTTP responses
int	getHTTPOriginMode () Get current HTTP origin mode.
IHTTPStreamerHTTPOrigInSessionIdProvider	getHTTPOriginSessionIdProvider () Get HTTP origin sessionId provider used to determine unique HTTP origin sessions.
int	getMaxHTTPSessionsPerTCPSession () Get maximum number of HTTP sessions tracked per-TCP session
WMSProperties	getProperties () Get properties
MediaCasterItem	getRepeaterMediaCasterDef () Get the live repeater media caster definition
int	getResponseOnIncompleteChunk () Get the response code used when an incomplete chunk (read error) is encountered.

String	getStreamTypeStr() Get stream type
java.util.Map	getUserHTTPHeaders() Get user HTTP headers.
IVHost	getVHost() Get vhost
void	init(IApplicationInstance appInstance, HTTPStreamerItem httpStreamerItem) Initialize context
boolean	isHTTPOriginOn() Returns true if HTTP origin mode is set to ON.
boolean	isStreamDomainProtectionActive() Return true if stream domain protection is on
void	setCacheControlStatus4xx(String cacheControlStatus4xx) Set the cache-control header for 4xx HTTP responses
void	setHTTPOriginMode(int httpOriginMode) Set current HTTP origin mode.
void	setHTTPOriginSessionIdProvider(IHTTPStreamerHTTPOriginSessionIdProvider httpOriginSessionIdProvider) Set HTTP origin sessionId provider used to determine unique HTTP origin sessions.
void	setMaxHTTPSessionsPerTCPSession(int maxHTTPSessionsPerTCPSession) Set maximum number of HTTP sessions tracked per-TCP session
void	setRepeaterMediaCasterDef(MediaCasterItem repeaterMediaCasterDef) Set the live repeater media caster definition
void	setResponseOnIncompleteChunk(int responseOnIncompleteChunk) Set the response code used when an incomplete chunk (read error) is encountered.
void	setStreamDomainProtectionActive(boolean streamDomainProtectionActive) Turn on/off stream domain protection
void	setStreamTypeStr(String streamTypeStr) Set stream type
void	setUserHTTPHeader(String name, String value) Add a user HTTP header to the header map.

Fields

HTTPORIGINMODE_OFF

```
public static final int HTTPORIGINMODE_OFF
```

Constant value: 0

(continued from last page)

HTTPORIGINMODE_AUTO

```
public static final int HTTPORIGINMODE_AUTO
```

Constant value: **1**

HTTPORIGINMODE_ON

```
public static final int HTTPORIGINMODE_ON
```

Constant value: **2**

Methods

init

```
public void init(IApplicationInstance appInstance,  
                HTTPStreamerItem httpStreamerItem)
```

Initialize context

Parameters:

`appInstance` - application instance
`httpStreamerItem` - HTTP streamer

getProperties

```
public WMSProperties getProperties()
```

Get properties

Returns:

properties

getAppInstance

```
public IApplicationInstance getAppInstance()
```

Get application instance

Returns:

application instance

getVHost

```
public IVHost getVHost()
```

Get vhost

Returns:

vhost

getRepeaterMediaCasterDef

```
public MediaCasterItem getRepeaterMediaCasterDef()
```

Get the live repeater media caster definition

(continued from last page)

Returns:

live repeater media caster definition

setRepeaterMediaCasterDef

```
public void setRepeaterMediaCasterDef(MediaCasterItem repeaterMediaCasterDef)
```

Set the live repeater media caster definition

Parameters:

repeaterMediaCasterDef - live repeater media caster definition

getStreamTypeStr

```
public String getStreamTypeStr()
```

Get stream type

Returns:

stream type

setStreamTypeStr

```
public void setStreamTypeStr(String streamTypeStr)
```

Set stream type

Parameters:

streamTypeStr - stream type

isStreamDomainProtectionActive

```
public boolean isStreamDomainProtectionActive()
```

Return true if stream domain protection is on

Returns:

true if stream domain protection is on

setStreamDomainProtectionActive

```
public void setStreamDomainProtectionActive(boolean streamDomainProtectionActive)
```

Turn on/off stream domain protection

Parameters:

streamDomainProtectionActive - true if stream domain protection is on

getHTTPOriginMode

```
public int getHTTPOriginMode()
```

Get current HTTP origin mode. See HTTPORIGINMODE_ (auto is currently not supported)

Returns:

HTTP origin mode

setHTTPOriginMode

```
public void setHTTPOriginMode(int httpOriginMode)
```

Set current HTTP origin mode. See HTTPORIGINMODE_ (auto is currently not supported)

Parameters:

httpOriginMode - HTTP origin mode

isHTTPOriginOn

```
public boolean isHTTPOriginOn()
```

Returns true if HTTP origin mode is set to ON.

Returns:

true if HTTP origin mode is set to ON.

setUserHTTPHeader

```
public void setUserHTTPHeader(String name,  
String value)
```

Add a user HTTP header to the header map. These headers will be added to every HTTP response.

Parameters:

name - name

value - value (null if no value)

getUserHTTPHeaders

```
public java.util.Map getUserHTTPHeaders()
```

Get user HTTP headers.

Returns:

header map

addQueryStrRemoveList

```
public void addQueryStrRemoveList(String name)
```

Add a name to the list of query string parameters that will not be copied to the media URLs for HTTP streaming

Parameters:

name - query name

filterQueryStr

```
public java.util.Map filterQueryStr(java.util.Map map)
```

Internal

Parameters:

map - query map

Returns:

query map

getCacheControlStatus4xx

```
public String getCacheControlStatus4xx()
```

Get the cache-control header for 4xx HTTP responses

Returns:

cache-control header for 4xx HTTP responses

setCacheControlStatus4xx

```
public void setCacheControlStatus4xx(String cacheControlStatus4xx)
```

Set the cache-control header for 4xx HTTP responses

Parameters:

cacheControlStatus4xx - cache-control header for 4xx HTTP responses

getResponseOnIncompleteChunk

```
public int getResponseOnIncompleteChunk()
```

Get the response code used when an incomplete chunk (read error) is encountered. If zero, chunk is sent.

Returns:

response code

setResponseOnIncompleteChunk

```
public void setResponseOnIncompleteChunk(int responseOnIncompleteChunk)
```

Set the response code used when an incomplete chunk (read error) is encountered. If zero, chunk is sent.

Parameters:

responseOnIncompleteChunk - response code

getMaxHTTPSessionsPerTCPSession

```
public int getMaxHTTPSessionsPerTCPSession()
```

Get maximum number of HTTP sessions tracked per-TCP session

Returns:

maximum number of HTTP sessions tracked per-TCP session

setMaxHTTPSessionsPerTCPSession

```
public void setMaxHTTPSessionsPerTCPSession(int maxHTTPSessionsPerTCPSession)
```

Set maximum number of HTTP sessions tracked per-TCP session

Parameters:

maxHTTPSessionsPerTCPSession - maximum number of HTTP sessions tracked per-TCP session

getHTTPOriginSessionIdProvider

```
public IHTTPStreamerHTTPOriginSessionIdProvider getHTTPOriginSessionIdProvider()
```

(continued from last page)

Get HTTP origin sessionId provider used to determine unique HTTP origin sessions.

Returns:

sessionId provider

setHTTPOriginSessionIdProvider

```
public void setHTTPOriginSessionIdProvider(IHTTPStreamerHTTPOriginSessionIdProvider  
httpOriginSessionIdProvider)
```

Set HTTP origin sessionId provider used to determine unique HTTP origin sessions.

Parameters:

httpOriginSessionIdProvider - sessionId provider

com.wowza.wms.httpstreamer.model Interface IHTTPStreamerHTTPOriginSessionIdProvider

public interface IHTTPStreamerHTTPOriginSessionIdProvider
extends

Method Summary

String	getHTTPOriginId (String httpOriginId, IHttpRequest req, IHTTPStreamerApplicationContext appContext, String oldSessionId, String streamDomainStr, boolean isHTTPOrigin, boolean isDvr, long currTime)
--------	--

Methods

getHTTPOriginId

```
public String getHTTPOriginId(String httpOriginId,  
    IHttpRequest req,  
    IHTTPStreamerApplicationContext appContext,  
    String oldSessionId,  
    String streamDomainStr,  
    boolean isHTTPOrigin,  
    boolean isDvr,  
    long currTime)
```

com.wowza.wms.httpstreamer.model Interface IHTTPStreamerRepeater

public interface IHTTPStreamerRepeater
extends

IHTTPStreamerRepeater: stream switching constants

Field Summary

public static final	MSG_STARTSTREAM Value: startStream
public static final	MSG_SWITCHSTREAM Value: switchStream

Fields

MSG_STARTSTREAM

public static final java.lang.String **MSG_STARTSTREAM**

Constant value: **startStream**

MSG_SWITCHSTREAM

public static final java.lang.String **MSG_SWITCHSTREAM**

Constant value: **switchStream**

com.wowza.wms.httpstreamer.model Interface IHTTPStreamerRequestContext

public interface IHTTPStreamerRequestContext
extends

Field Summary

public static final	CUPERTINO_CHUNKLIST Value: 2
public static final	CUPERTINO_MANIFEST Value: 1
public static final	CUPERTINO_MEDIA Value: 3
public static final	CUPERTINO_SUBTITLE_CHUNK Value: 5
public static final	CUPERTINO_SUBTITLE_LIST Value: 4
public static final	MPEGDASH_DATA Value: 32
public static final	MPEGDASH_MANIFEST Value: 30
public static final	MPEGDASH_MEDIA Value: 31
public static final	MPEGDASH_SUBTITLE_CHUNK Value: 33
public static final	MPEGDASH_TIME Value: 34
public static final	NONE Value: 0
public static final	SANJOSE_MANIFEST Value: 10
public static final	SANJOSE_MEDIA Value: 11

public static final	SMOOTHSTREAMING_AUDIO_FRAGMENT Value: 21
public static final	SMOOTHSTREAMING_DATA_FRAGMENT Value: 23
public static final	SMOOTHSTREAMING_MANIFEST Value: 20
public static final	SMOOTHSTREAMING_VIDEO_FRAGMENT Value: 22

Method Summary

IHTTPRequest	getRequest()
int	getRequestType()
void	setRequest(IHTTPRequest request)
void	setRequestType(int requestType)

Fields

NONE

public static final int **NONE**

Constant value: **0**

CUPERTINO_MANIFEST

public static final int **CUPERTINO_MANIFEST**

Constant value: **1**

CUPERTINO_CHUNKLIST

public static final int **CUPERTINO_CHUNKLIST**

Constant value: **2**

CUPERTINO_MEDIA

public static final int **CUPERTINO_MEDIA**

Constant value: **3**

CUPERTINO_SUBTITLE_LIST

```
public static final int CUPERTINO_SUBTITLE_LIST
```

Constant value: **4**

CUPERTINO_SUBTITLE_CHUNK

```
public static final int CUPERTINO_SUBTITLE_CHUNK
```

Constant value: **5**

SANJOSE_MANIFEST

```
public static final int SANJOSE_MANIFEST
```

Constant value: **10**

SANJOSE_MEDIA

```
public static final int SANJOSE_MEDIA
```

Constant value: **11**

SMOOTHSTREAMING_MANIFEST

```
public static final int SMOOTHSTREAMING_MANIFEST
```

Constant value: **20**

SMOOTHSTREAMING_AUDIO_FRAGMENT

```
public static final int SMOOTHSTREAMING_AUDIO_FRAGMENT
```

Constant value: **21**

SMOOTHSTREAMING_VIDEO_FRAGMENT

```
public static final int SMOOTHSTREAMING_VIDEO_FRAGMENT
```

Constant value: **22**

SMOOTHSTREAMING_DATA_FRAGMENT

```
public static final int SMOOTHSTREAMING_DATA_FRAGMENT
```

Constant value: **23**

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MPEGDASH_MANIFEST

```
public static final int MPEGDASH_MANIFEST
```

Constant value: **30**

MPEGDASH_MEDIA

```
public static final int MPEGDASH_MEDIA
```

Constant value: **31**

MPEGDASH_DATA

```
public static final int MPEGDASH_DATA
```

Constant value: **32**

MPEGDASH_SUBTITLE_CHUNK

```
public static final int MPEGDASH_SUBTITLE_CHUNK
```

Constant value: **33**

MPEGDASH_TIME

```
public static final int MPEGDASH_TIME
```

Constant value: **34**

Methods

getRequestType

```
public int getRequestType()
```

setRequestType

```
public void setRequestType(int requestType)
```

getRequest

```
public IHTTPRequest getRequest()
```

setRequest

```
public void setRequest(IHTTPRequest request)
```

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com.wowza.wms.httpstreamer.model Interface IHTTPStreamerRequestNotify

public interface **IHTTPStreamerRequestNotify**
extends

IHTTPStreamerRequestNotify: HTTP streamer request interface

Method Summary

void	<code>onHTTPStreamerRequest(IHTTPStreamerSession httpStreamerSession, IHTTPStreamerRequestContext requestContext)</code> Called during an HTTP streaming request after the session has been created
------	--

Methods

onHTTPStreamerRequest

public void **onHTTPStreamerRequest**([IHTTPStreamerSession](#) httpStreamerSession,
[IHTTPStreamerRequestContext](#) requestContext)

Called during an HTTP streaming request after the session has been created

Parameters:

httpStreamerSession - HTTP streaming session

com.wowza.wms.httpstreamer.model Interface IHTTPStreamerSession

public interface **IHTTPStreamerSession**
extends

IHTTPStreamerSession: HTTP streaming session interface

Field Summary	
public static final	SESSIONPROTOCOL_COUNT Value: 8
public static final	SESSIONPROTOCOL_CUPERTINOSTREAMING Value: 1
public static final	SESSIONPROTOCOL_DIRECTSTREAMING Value: 6
public static final	SESSIONPROTOCOL_DVRCHUNKSTREAMING Value: 5
public static final	SESSIONPROTOCOL_MPEGDASHSTREAMING Value: 4
public static final	SESSIONPROTOCOL_SANJOSESTREAMING Value: 2
public static final	SESSIONPROTOCOL_SMOOTHSTREAMING Value: 0
public static final	SESSIONPROTOCOL_TSSTREAMING Value: 7
public static final	SESSIONPROTOCOL_UNKNOWN Value: -1
public static final	SESSIONPROTOCOL_WEBMSTREAMING Value: 3
public static final	SESSIONTYPE_LIVE Value: 1
public static final	SESSIONTYPE_LIVEDVR Value: 3

public static final	SESSIONTYPE_UNKNOWN Value: 0
public static final	SESSIONTYPE_VOD Value: 2

Method Summary

void	acceptSession() Accept the HTTP session.
void	addHTTPSessionToTCPSession(RtmpSessionInfo wmsSessionInfo, IHTTPStreamerApplicationContext appContext) Add HTTP session to TCP session for tracking
void	addIOPerformance(IOPerformanceCounter totalIOPerformanceResult) Internal user, keep track of IO performance
void	addIOPerformance2(IOPerformanceCounter totalIOPerformanceResult) Internal user, keep track of IO performance
void	addStreamDomainStr(String streamDomainStr) Internal user, add stream name
void	addStreamDomainStrs(java.util.List streamNames) Internal user, add stream names
void	addTranscoderVODListener(IHTTPStreamerTranscoderVODActionNotifyListener) Add VOD Transcoder action listener
void	addUserHTTPHeaders(IHTTPResponse resp) Internal
boolean	checkAndSetPlayLogged() If play has not been logged return false, else returns true, sets play has been logged
void	clearLoggingValues() Internal user, clear logging values
boolean	containsStreamDomainStr(String streamDomainStr) Internal user, test stream name
boolean	containsStreamNameParts(String streamName) Return true if stream name in stream name parts
void	doSessionRedirect(IHTTPResponse resp) Internal
void	doSessionRedirect(IHTTPResponse resp, String redirectSessionURL, String redirectSessionContentType, int redirectSessionCode) Internal
void	extractHTTPRequestInfo(IHTTPRequest req) Extract information from HTTP request
boolean	getAndClearNotifyCreate()

IApplicationInstance	getAppInstance() Get the application instance associated with this HTTP session
ConnectionHolder	getConnectionHolder() Connection holder for this session
String	getCookieStr() Get cookie string
HTTPCORSHeaders	getCORSHeaders()
DvrSessionInfo	getDvrSessionInfo() This information is used to manage the connection to the DVR store.
ElapsedTimer	getElapsedTime() Get the elapsed timer to see how long this session has been running
HTTPStreamerFileInfo	getFileInfo(String streamName) Get the file information if video on demand streaming
String	getHTTPHeader(String name) Get a HTTP header value such as 'Content-Length'
java.util.Map	getHTTPHeaderMap() Get a copy of the HTTP request header map
java.util.Set	getHTTPHeaderNames() Get a Set of the header names
int	getHTTPIntHeader(String name) Get a HTTP header value such as 'Content-Length' and return as int
IHTTPStreamerAdapter	getHTTPStreamerAdapter() Get the HTTP streaming adapter associated with this HTTP session
IOPerformanceCounter	getIOPerformanceCounter() Get IO performance counter
String	getIpAddress() Get the IP address
long	getLastRequest() Get the last timestamp of the last Io request
String	getLiveStreamingPacketizer() Get the live stream packetizer name
Object	getLock() Get the synchronization lock for this HTTP session
long	getPlayDuration() Get the play duration (milliseconds) for video on demand playback.
long	getPlaySeek() Get the seek location (milliseconds) where playback should start
long	getPlayStart() Get the play start time offset (milliseconds) for video on demand playback.

WMSProperties	getProperties() Get the properties associated with this session
String	getQueryStr() Get query string
byte[]	getRedirectSessionBody() Get redirect session body
int	getRedirectSessionCode() Get session redirect HTTP response code (default 302)
String	getRedirectSessionContentType() Get redirect session HTTP Content-Type
String	getRedirectSessionURL() Get redirect session URL
String	getReferrer() Get referrer
String	getServerIp() Get server IP address
int	getServerPort() Get server port
String	getSessionId() Get session id
int	getSessionProtocol() Get protocol, see SESSIONPROTOCOL_*
int	getSessionTimeout() Get the session timeout for this session (milliseconds)
int	getSessionType() Get session type: see SESSIONTYPE_*
IMediaStream	getStream() Get the IMediaStream associated with this HTTP session
String	getStreamExt() Get stream extension
String	getStreamName() Get stream name
HTTPStreamerStreamNameParts	getStreamNameParts(String streamName) Break the stream name into parts
long	getStreamPosition() Get stream position
String	getTimeRunning() Get the time this session has been running (milliseconds)
double	getTimeRunningSeconds() Get the time this session has been running (seconds)

IHTTPStreamerTranscoderVODIndex	getTranscoderVODIndex() Get the VOD Transcoder index information
IHTTPStreamerTranscoderVODDestinationIndex	getTranscoderVODIndex(String bitrateStr) Get VOD transcoder index for given bitrate
java.util.Map	getTranscoderVODIndexDestinationsMap() Get the VOD Transcoder destination map
java.util.List	getTranscoderVODIndexDestinationsOrder() Get the list of VOD Transcoder destinations in playlist order
com.wowza.wms.transcoder.vod.TranscoderVODSession	getTranscoderVODSession() Get the vod transcoder session associated with this HTTP session
String	getUri() Get the URI associated with initial request
String	getUserAgent() Get user agent
java.util.Map	getUserHTTPHeaders() Get user HTTP header.
String	getUserQueryStr() This query string will be added to URLs used in HTTP streaming
IVHost	getVHost() Get vhost
String	getVODTranscodeNGRP() Get the VOD Transcoder NGRP name
void	indexTranscoderVOD(IHTTPStreamerApplicationContext appContext, String vodTranscodeNGRP) Index the HTTP session for VOD transcoder streaming
boolean	isAcceptSession() Return true if this session has not been rejected
boolean	isActive() Is this session active, false after shutdown
boolean	isDelete() Return true if this session is flagged for deletion.
boolean	isDeleteSession() Get is session to be deleted.
boolean	isFileInfo(String streamName) Return true if the is file information for a given stream name
boolean	isHTTPOrigin() Return true if session in an HTTP origin session
boolean	isPlayLogged() true, if play has been logged

boolean	<u>isRedirectSession()</u> Is session redirect
boolean	<u>isSecure()</u> Returns true if the stream is being streamed over an SSL port
boolean	<u>isTimeout(long timecode)</u> Return true if this session is timed out.
boolean	<u>isTimeoutSession()</u> Get is session timeout.
boolean	<u>isValidated()</u> Has this session been validated
boolean	<u>isValidStreamDomainStr(String streamDomainStr)</u> Internal user, is stream name valid for HTTP session
void	<u>lockRepeaterStreams(java.util.List streamNames, String liveStreamPacketizer, String liveStreamRepeater, String streamTypeStr)</u> Internal user, lock in reapter streams
void	<u>notifyTranscoderVODFillChunkStart(com.wowza.wms.transcoder.vod.TranscoderVODSession transcoderVODSession, com.wowza.wms.transcoder.vod.TranscoderVODDestination transcoderVODDestination, MediaReaderH264Chunk mediaReaderChunk, com.wowza.wms.transcoder.vod.TranscoderVODChunkContext transcoderVODChunkContext)</u> Called to notify of VOD Transcoder fill chunk start
void	<u>notifyTranscoderVODFillChunkStop(com.wowza.wms.transcoder.vod.TranscoderVODSession transcoderVODSession, com.wowza.wms.transcoder.vod.TranscoderVODChunkContext transcoderVODChunkContext)</u> Called to notify of VOD Transcoder fill stop
void	<u>notifyTranscoderVODFillChunkTranscode(com.wowza.wms.transcoder.vod.TranscoderVODSession transcoderVODSession, com.wowza.wms.transcoder.vod.TranscoderVODChunkContext transcoderVODChunkContext, java.util.List packets)</u> Called to notify of VOD Transcoder fill chunk
void	<u>putFileInfo(String streamName, HTTPStreamerFileInfo fileInfo)</u> Set the file information
void	<u>putStreamNameParts(String streamName, HTTPStreamerStreamNameParts streamNameParts)</u> Add stream name to stream name parts
void	<u>redirectSession(String redirectSessionURL)</u> Redirect session
void	<u>redirectSession(String redirectSessionURL, int redirectSessionCode)</u> Redirect session
void	<u>rejectSession()</u> Reject this HTTP session.
void	<u>removeStreamDomainStr(String streamDomainStr)</u> Internal user, remove stream name

boolean	removeTranscoderVODListener (IHTTPStreamerTranscoderVODActionNotifyListener) Remove VOD Transcoder action listener
void	setAcceptSession (boolean acceptSession) Set to false to reject session
void	setActive (boolean isActive) Set session active
void	setAppInstance (IApplicationInstance appInstance) Set the application instance associated with this HTTP session
void	setCookieStr (String cookieStr) Set cookie string
void	setDeleteSession () Set session to be deleted.
void	setDvrSessionInfo (DvrSessionInfo dvr) This information is used to manage the connection to the DVR store.
void	setHTTPOrigin (boolean isHTTPOrigin) Set to true if HTTP origin session
void	setHTTPStreamerAdapter (IHTTPStreamerAdapter httpStreamerAdapter) Set the HTTP streaming adapter associated with this HTTP session
void	setIpAddress (String ipAddress) Set the IP address
void	setLiveStreamingPacketizer (String liveStreamingPacketizer) Set the live stream packetizer name
void	setPlayDuration (long playDuration) Set the play duration (milliseconds) for video on demand playback.
void	setPlayLogged (boolean isPlayLogged) true, if play has been logged
void	setPlaySeek (long playSeek) Set the seek location (milliseconds) where playback should start
void	setPlayStart (long playStart) Set the play start time offset (milliseconds) for video on demand playback.
void	setQueryStr (String queryStr) Set query string
void	setRedirectSession (boolean redirectSession) Set session redirect
void	setRedirectSessionBody (byte[] redirectSessionBody) Set redirect session body
void	setRedirectSessionCode (int redirectSessionCode) Set session redirect HTTP response code (default 302)
void	setRedirectSessionContentType (String redirectSessionContentType) Set redirect session HTTP Content-Type

void	<u>setRedirectSessionURL</u> (String redirectSessionURL) Set redirect session URL.
void	<u>setReferrer</u> (String referrer) Set referrer
void	<u>setSecure</u> (boolean isSecure) Set to true if the stream is being streamed over an SSL port
void	<u>setServerIp</u> (String serverIp) Set server IP address
void	<u>setServerPort</u> (int serverPort) Set server port
void	<u>setSessionId</u> (String sessionId) Set session id
void	<u>setSessionProtocol</u> (int sessionProtocol) Set protocol, see SESSIONPROTOCOL_*
void	<u>setSessionTimeout</u> (int sessionTimeout) Set the session timeout for this session (milliseconds)
void	<u>setSessionType</u> (int sessionType) Set session type: see SESSIONTYPE_*
void	<u>setStream</u> (IMediaStream stream) Set the IMediaStream associated with this HTTP session
void	<u>setStreamExt</u> (String streamExt) Set stream extension
void	<u>setStreamName</u> (String streamName) Set stream name
void	<u>setStreamPosition</u> (long streamPosition) Set stream position (will not cause seek)
void	<u>setTimeoutSession</u> (boolean timeoutSession) Set is session timeout.
void	<u>setTranscoderVODIndex</u> (IHTTPStreamerTranscoderVODIndex transcoderVODIndex) Set the VOD Transcoder index information
void	<u>setTranscoderVODSession</u> (com.wowza.wms.transcoder.vod.TranscoderVODSession transcoderVODSession) Set the vod transcoder session associated with this HTTP session
void	<u>setUri</u> (String uri) Set the URI associated with initial request
void	<u>setUserAgent</u> (String userAgent) Set user agent
void	<u>setUserHTTPHeader</u> (String name, String value) Set user HTTP header.

void	setUserQueryStr (String userQueryStr) This query string will be added to URLs used in HTTP streaming
void	setVHost (IVHost vhost) Set vhost
void	setVODTranscodeNGRP (String vodTranscodeNGRP) Set the VOD Transcoder NGRP name
void	shutdown () Called then the HTTP session is shutting down
void	touch (long timecode) Touch this session to keep it active.
void	updateLoggingValues () Internal user, update logging values
String	validStreamDomainToString () Return the valid domain strings as a string

Fields

SESSIONTYPE_UNKNOWN

```
public static final int SESSIONTYPE_UNKNOWN
```

Constant value: **0**

SESSIONTYPE_LIVE

```
public static final int SESSIONTYPE_LIVE
```

Constant value: **1**

SESSIONTYPE_VOD

```
public static final int SESSIONTYPE_VOD
```

Constant value: **2**

SESSIONTYPE_LIVEDVR

```
public static final int SESSIONTYPE_LIVEDVR
```

Constant value: **3**

SESSIONPROTOCOL_UNKNOWN

```
public static final int SESSIONPROTOCOL_UNKNOWN
```

Constant value: **-1**

SESSIONPROTOCOL_SMOOTHSTREAMING

public static final int **SESSIONPROTOCOL_SMOOTHSTREAMING**

Constant value: **0**

SESSIONPROTOCOL_CUPERTINOSTREAMING

public static final int **SESSIONPROTOCOL_CUPERTINOSTREAMING**

Constant value: **1**

SESSIONPROTOCOL_SANJOSESTREAMING

public static final int **SESSIONPROTOCOL_SANJOSESTREAMING**

Constant value: **2**

SESSIONPROTOCOL_WEBMSTREAMING

public static final int **SESSIONPROTOCOL_WEBMSTREAMING**

Constant value: **3**

SESSIONPROTOCOL_MPEGDASHSTREAMING

public static final int **SESSIONPROTOCOL_MPEGDASHSTREAMING**

Constant value: **4**

SESSIONPROTOCOL_DVRCHUNKSTREAMING

public static final int **SESSIONPROTOCOL_DVRCHUNKSTREAMING**

Constant value: **5**

SESSIONPROTOCOL_DIRECTSTREAMING

public static final int **SESSIONPROTOCOL_DIRECTSTREAMING**

Constant value: **6**

SESSIONPROTOCOL_TSSTREAMING

public static final int **SESSIONPROTOCOL_TSSTREAMING**

Constant value: **7**

(continued from last page)

SESSIONPROTOCOL_COUNT

```
public static final int SESSIONPROTOCOL_COUNT
```

Constant value: **8**

Methods

getSessionId

```
public String getSessionId()
```

Get session id

Returns:

session id

setSessionId

```
public void setSessionId(String sessionId)
```

Set session id

Parameters:

sessionId - session id

getVHost

```
public IVHost getVHost()
```

Get vhost

Returns:

vhost

setVHost

```
public void setVHost(IVHost vhost)
```

Set vhost

Parameters:

vhost - vhost

touch

```
public void touch(long timecode)
```

Touch this session to keep it active.

Parameters:

timecode - timecode of touch - System.currentTimeMillis();

isTimeout

```
public boolean isTimeout(long timecode)
```

(continued from last page)

Return true if this session is timed out.

Parameters:

timecode - last touch - System.currentTimeMillis();

Returns:

true, if timed out

isDelete

public boolean **isDelete**()

Return true if this session is flagged for deletion.

Returns:

true, if flagged for deletion

getLock

public Object **getLock**()

Get the synchronization lock for this HTTP session

Returns:

synchronization lock

shutdown

public void **shutdown**()

Called then the HTTP session is shutting down

isActive

public boolean **isActive**()

Is this session active, false after shutdown

Returns:

true if session is active

setActive

public void **setActive**(boolean isActive)

Set session active

Parameters:

isActive - session active

getStream

public [IMediaStream](#) **getStream**()

Get the IMediaStream associated with this HTTP session

Returns:

IMediaStream associated with this HTTP session

setStream

```
public void setStream(IMediaStream stream)
```

Set the IMediaStream associated with this HTTP session

Parameters:

stream - IMediaStream associated with this HTTP session

isTimeoutSession

```
public boolean isTimeoutSession()
```

Get is session timeout.

Returns:

true if this session is timed out

setTimeoutSession

```
public void setTimeoutSession(boolean timeoutSession)
```

Set is session timeout.

Parameters:

timeoutSession - true if this session is timed out

isDeleteSession

```
public boolean isDeleteSession()
```

Get is session to be deleted.

Returns:

true if this session is flagged for deletion

setDeleteSession

```
public void setDeleteSession()
```

Set session to be deleted.

getSessionTimeout

```
public int getSessionTimeout()
```

Get the session timeout for this session (milliseconds)

Returns:

session timeout for this session (milliseconds)

setSessionTimeout

```
public void setSessionTimeout(int sessionTimeout)
```

Set the session timeout for this session (milliseconds)

(continued from last page)

Parameters:

sessionTimeout - session timeout for this session (milliseconds)

isValidated

```
public boolean isValidated()
```

Has this session been validated

Returns:

true, if validated

checkAndSetPlayLogged

```
public boolean checkAndSetPlayLogged()
```

If play has not been logged return false, else returns true, sets play has been logged

Returns:

true, if play has been logged

isPlayLogged

```
public boolean isPlayLogged()
```

true, if play has been logged

Returns:

true, if play has been logged

setPlayLogged

```
public void setPlayLogged(boolean isPlayLogged)
```

true, if play has been logged

Parameters:

isPlayLogged - true, if play has been logged

addIOPerformance

```
public void addIOPerformance(IOPerformanceCounter totalIOPerformanceResult)
```

Internal user, keep track of IO performance

Parameters:

totalIOPerformanceResult - IO performance

addIOPerformance2

```
public void addIOPerformance2(IOPerformanceCounter totalIOPerformanceResult)
```

Internal user, keep track of IO performance

Parameters:

totalIOPerformanceResult - IO performance

(continued from last page)

getConnectionHolder

```
public ConnectionHolder getConnectionHolder()
```

Connection holder for this session

Returns:

connection holder

getHTTPStreamerAdapter

```
public IHTTPStreamerAdapter getHTTPStreamerAdapter()
```

Get the HTTP streaming adapter associated with this HTTP session

Returns:

HTTP streaming adapter

setHTTPStreamerAdapter

```
public void setHTTPStreamerAdapter(IHTTPStreamerAdapter httpStreamerAdapter)
```

Set the HTTP streaming adapter associated with this HTTP session

Parameters:

httpStreamerAdapter - HTTP streaming adapter

getAppInstance

```
public IApplicationInstance getAppInstance()
```

Get the application instance associated with this HTTP session

Returns:

application instance associated with this HTTP session

setAppInstance

```
public void setAppInstance(IApplicationInstance appInstance)
```

Set the application instance associated with this HTTP session

Parameters:

appInstance - application instance associated with this HTTP session

getSessionType

```
public int getSessionType()
```

Get session type: see SESSIONTYPE_*

Returns:

session type: see SESSIONTYPE_*

setSessionType

```
public void setSessionType(int sessionType)
```

(continued from last page)

Set session type: see SESSIONTYPE_*

Parameters:

sessionType - session type: see SESSIONTYPE_*

getLiveStreamingPacketizer

```
public String getLiveStreamingPacketizer()
```

Get the live stream packetizer name

Returns:

live stream packetizer name

setLiveStreamingPacketizer

```
public void setLiveStreamingPacketizer(String liveStreamingPacketizer)
```

Set the live stream packetizer name

Parameters:

liveStreamingPacketizer - live stream packetizer name

getIpAddress

```
public String getIpAddress()
```

Get the IP address

Returns:

IP address

setIpAddress

```
public void setIpAddress(String ipAddress)
```

Set the IP address

Parameters:

ipAddress - IP address

updateLoggingValues

```
public void updateLoggingValues()
```

Internal user, update logging values

clearLoggingValues

```
public void clearLoggingValues()
```

Internal user, clear logging values

getSessionProtocol

```
public int getSessionProtocol()
```

Get protocol, see SESSIONPROTOCOL_*

(continued from last page)

Returns:

protocol, see SESSIONPROTOCOL_*

setSessionProtocolpublic void **setSessionProtocol**(int sessionProtocol)

Set protocol, see SESSIONPROTOCOL_*

Parameters:

sessionProtocol - protocol, see SESSIONPROTOCOL_*

getServerIppublic String **getServerIp**()

Get server IP address

Returns:

server IP address

setServerIppublic void **setServerIp**(String serverIp)

Set server IP address

Parameters:

serverIp - server IP address

getServerPortpublic int **getServerPort**()

Get server port

Returns:

server port

setServerPortpublic void **setServerPort**(int serverPort)

Set server port

Parameters:

serverPort - server port

getUserAgentpublic String **getUserAgent**()

Get user agent

Returns:

user agent

setUserAgent

```
public void setUserAgent(String userAgent)
```

Set user agent

Parameters:

userAgent - user agent

getUri

```
public String getUri()
```

Get the URI associated with initial request

Returns:

URI associated with initial request

setUri

```
public void setUri(String uri)
```

Set the URI associated with initial request

Parameters:

uri - URI associated with initial request

getReferrer

```
public String getReferrer()
```

Get referrer

Returns:

referrer

setReferrer

```
public void setReferrer(String referrer)
```

Set referrer

Parameters:

referrer - referrer

getQueryStr

```
public String getQueryStr()
```

Get query string

Returns:

query string

setQueryStr

```
public void setQueryStr(String queryStr)
```

(continued from last page)

Set query string

Parameters:

queryStr - query string

lockRepeaterStreams

```
public void lockRepeaterStreams(java.util.List streamNames,  
    String liveStreamPacketizer,  
    String liveStreamRepeater,  
    String streamTypeStr)
```

Internal user, lock in reapter streams

Parameters:

streamNames - list of stream names
liveStreamPacketizer - live stream packetizer name
liveStreamRepeater - live repeater name
streamTypeStr - stream type

rejectSession

```
public void rejectSession()
```

Reject this HTTP session. No further processing should occur

acceptSession

```
public void acceptSession()
```

Accept the HTTP session.

isAcceptSession

```
public boolean isAcceptSession()
```

Return true if this session has not been rejected

Returns:

true if this session has not been rejected

setAcceptSession

```
public void setAcceptSession(boolean acceptSession)
```

Set to false to reject session

Parameters:

acceptSession - false to reject session

getCookieStr

```
public String getCookieStr()
```

Get cookie string

Returns:

cookie string

setCookieStr

```
public void setCookieStr(String cookieStr)
```

Set cookie string

Parameters:

cookieStr - cookie string

getStreamName

```
public String getStreamName()
```

Get stream name

Returns:

stream name

setStreamName

```
public void setStreamName(String streamName)
```

Set stream name

Parameters:

streamName - stream name

getStreamExt

```
public String getStreamExt()
```

Get stream extension

Returns:

stream extension

setStreamExt

```
public void setStreamExt(String streamExt)
```

Set stream extension

Parameters:

streamExt - stream extension

getStreamNameParts

```
public HTTPStreamerStreamNameParts getStreamNameParts(String streamName)
```

Break the stream name into parts

Parameters:

streamName - stream name

Returns:

stream name parts

containsStreamNameParts

```
public boolean containsStreamNameParts(String streamName)
```

Return true if stream name in stream name parts

Parameters:

streamName - stream name

Returns:

true if stream name in stream name parts

putStreamNameParts

```
public void putStreamNameParts(String streamName,  
    HTTPStreamerStreamNameParts streamNameParts)
```

Add stream name to stream name parts

Parameters:

streamName - stream name

streamNameParts - stream name parts

getStreamPosition

```
public long getStreamPosition()
```

Get stream position

Returns:

stream position

setStreamPosition

```
public void setStreamPosition(long streamPosition)
```

Set stream position (will not cause seek)

Parameters:

streamPosition - stream position

getIOPerformanceCounter

```
public IOPerformanceCounter getIOPerformanceCounter()
```

Get IO performance counter

Returns:

IO performance counter

getFileInfo

```
public HTTPStreamerFileInfo getFileInfo(String streamName)
```

Get the file information if video on demand streaming

Parameters:

streamName - stream name

(continued from last page)

Returns:

file information

putFileInfo

```
public void putFileInfo(String streamName,  
    HTTPStreamerFileInfo fileInfo)
```

Set the file information

Parameters:

streamName - stream name

fileInfo - file information

isFileInfo

```
public boolean isFileInfo(String streamName)
```

Return true if the is file information for a given stream name

Parameters:

streamName - stream name

Returns:

true if the is file information for a given stream name

isValidStreamDomainStr

```
public boolean isValidStreamDomainStr(String streamDomainStr)
```

Internal user, is stream name valid for HTTP session

Parameters:

streamDomainStr - stream name

Returns:

true if valid

validStreamDomainToString

```
public String validStreamDomainToString()
```

Return the valid domain strings as a string

Returns:

valid domain strings as a string

containsStreamDomainStr

```
public boolean containsStreamDomainStr(String streamDomainStr)
```

Internal user, test stream name

Parameters:

streamDomainStr - stream name

Returns:

true if valid

removeStreamDomainStr

```
public void removeStreamDomainStr(String streamDomainStr)
```

Internal user, remove stream name

Parameters:

streamDomainStr - stream name

addStreamDomainStr

```
public void addStreamDomainStr(String streamDomainStr)
```

Internal user, add stream name

Parameters:

streamDomainStr - stream name

addStreamDomainStrs

```
public void addStreamDomainStrs(java.util.List streamNames)
```

Internal user, add stream names

Parameters:

streamNames - stream names

getElapsedTime

```
public ElapsedTimer getElapsedTime()
```

Get the elapsed timer to see how long this session has been running

Returns:

elapsed timer (milliseconds)

getTimeRunning

```
public String getTimeRunning()
```

Get the time this session has been running (milliseconds)

Returns:

time this session has been running (milliseconds)

getTimeRunningSeconds

```
public double getTimeRunningSeconds()
```

Get the time this session has been running (seconds)

Returns:

time this session has been running (seconds)

getProperties

```
public WMSProperties getProperties()
```

(continued from last page)

Get the properties associated with this session

Returns:

properties

getUserQueryStr

```
public String getUserQueryStr()
```

This query string will be added to URLs used in HTTP streaming

Returns:

user query string

setUserQueryStr

```
public void setUserQueryStr(String userQueryStr)
```

This query string will be added to URLs used in HTTP streaming

Parameters:

userQueryStr - user query string

setDvrSessionInfo

```
public void setDvrSessionInfo(DvrSessionInfo dvr)
```

This information is used to manage the connection to the DVR store.

Parameters:

dvr - The DVR session info.

getDvrSessionInfo

```
public DvrSessionInfo getDvrSessionInfo()
```

This information is used to manage the connection to the DVR store.

Returns:

DVR session info.

extractHTTPRequestInfo

```
public void extractHTTPRequestInfo(IHttpRequest req)
```

Extract information from HTTP request

Parameters:

req - HTTP request

getHTTPHeaderMap

```
public java.util.Map getHTTPHeaderMap()
```

Get a copy of the HTTP request header map

Returns:

copy of the HTTP request header map

getHTTPHeader

```
public String getHTTPHeader(String name)
```

Get a HTTP header value such as 'Content-Length'

Parameters:

name - header name

Returns:

header value

getHTTPIntHeader

```
public int getHTTPIntHeader(String name)
```

Get a HTTP header value such as 'Content-Length' and return as int

Parameters:

name - header name

Returns:

header value

getHTTPHeaderNames

```
public java.util.Set getHTTPHeaderNames()
```

Get a Set of the header names

Returns:

Set of header names

getPlayStart

```
public long getPlayStart()
```

Get the play start time offset (milliseconds) for video on demand playback.

Returns:

play start time offset (milliseconds)

setPlayStart

```
public void setPlayStart(long playStart)
```

Set the play start time offset (milliseconds) for video on demand playback.

Parameters:

playStart - play start time offset (milliseconds)

getPlayDuration

```
public long getPlayDuration()
```

Get the play duration (milliseconds) for video on demand playback. A values of -1 means play to end.

(continued from last page)

Returns:

play duration (milliseconds)

setPlayDuration

```
public void setPlayDuration(long playDuration)
```

Set the play duration (milliseconds) for video on demand playback. A values of -1 means play to end.

Parameters:

playDuration - play duration (milliseconds)

getPlaySeek

```
public long getPlaySeek()
```

Get the seek location (milliseconds) where playback should start

Returns:

seek location (milliseconds)

setPlaySeek

```
public void setPlaySeek(long playSeek)
```

Set the seek location (milliseconds) where playback should start

Parameters:

playSeek - seek location (milliseconds)

setUserHTTPHeader

```
public void setUserHTTPHeader(String name,  
String value)
```

Set user HTTP header. This header value will be added to all HTTP responses

Parameters:

name - name

value - value

getUserHTTPHeaders

```
public java.util.Map getUserHTTPHeaders()
```

Get user HTTP header. This header value will be added to all HTTP responses

Returns:

header map

addUserHTTPHeaders

```
public void addUserHTTPHeaders(IHTTPResponse resp)
```

Internal

Parameters:

resp - response

getCORSHaders

```
public HTTPCORSHaders getCORSHaders()
```

Returns:

HTTPCORSHaders object

doSessionRedirect

```
public void doSessionRedirect(IHTTPResponse resp)
```

Internal

Parameters:

resp - response

doSessionRedirect

```
public void doSessionRedirect(IHTTPResponse resp,  
    String redirectSessionURL,  
    String redirectSessionContentType,  
    int redirectSessionCode)
```

Internal

Parameters:

resp - response
redirectSessionURL - redirect session URL
redirectSessionContentType
redirectSessionCode - redirect session response code (default 302)

isRedirectSession

```
public boolean isRedirectSession()
```

Is session redirect

Returns:

session redirect

setRedirectSession

```
public void setRedirectSession(boolean redirectSession)
```

Set session redirect

Parameters:

redirectSession - session redirect

getRedirectSessionCode

```
public int getRedirectSessionCode()
```

Get session redirect HTTP response code (default 302)

Returns:

(continued from last page)

session redirect HTTP response code

setRedirectSessionCode

```
public void setRedirectSessionCode(int redirectSessionCode)
```

Set session redirect HTTP response code (default 302)

Parameters:

redirectSessionCode - session redirect HTTP response code

getRedirectSessionURL

```
public String getRedirectSessionURL()
```

Get redirect session URL

Returns:

redirect session URL

setRedirectSessionURL

```
public void setRedirectSessionURL(String redirectSessionURL)
```

Set redirect session URL

Parameters:

redirectSessionURL - redirect session URL

redirectSession

```
public void redirectSession(String redirectSessionURL)
```

Redirect session

Parameters:

redirectSessionURL - redirect session URL

redirectSession

```
public void redirectSession(String redirectSessionURL,  
int redirectSessionCode)
```

Redirect session

Parameters:

redirectSessionURL - redirect session URL

redirectSessionCode - redirect session response code (default 302)

getRedirectSessionBody

```
public byte[] getRedirectSessionBody()
```

Get redirect session body

Returns:

redirect session body

setRedirectSessionBody

```
public void setRedirectSessionBody(byte[] redirectSessionBody)
```

Set redirect session body

Parameters:

redirectSessionBody - redirect session body

getRedirectSessionContentType

```
public String getRedirectSessionContentType()
```

Get redirect session HTTP Content-Type

Returns:

redirect session HTTP Content-Type

setRedirectSessionContentType

```
public void setRedirectSessionContentType(String redirectSessionContentType)
```

Set redirect session HTTP Content-Type

Parameters:

redirectSessionContentType

getLastRequest

```
public long getLastRequest()
```

Get the last timestamp of the last Io request

Returns:

last timestamp of the last Io request (milliseconds)

isHTTPOrigin

```
public boolean isHTTPOrigin()
```

Return true if session in an HTTP origin session

Returns:

true if session in an HTTP origin session

setHTTPOrigin

```
public void setHTTPOrigin(boolean isHTTPOrigin)
```

Set to true if HTTP origin session

Parameters:

isHTTPOrigin - true if HTTP origin session

getAndClearNotifyCreate

```
public boolean getAndClearNotifyCreate()
```

(continued from last page)

getTranscoderVODSession

```
public com.wowza.wms.transcoder.vod.TranscoderVODSession getTranscoderVODSession()
```

Get the vod transcoder session associated with this HTTP session

Returns:

vod transcoder session

setTranscoderVODSession

```
public void setTranscoderVODSession(com.wowza.wms.transcoder.vod.TranscoderVODSession  
transcoderVODSession)
```

Set the vod transcoder session associated with this HTTP session

Parameters:

transcoderVODSession - vod transcoder session

getVODTranscodeNGRP

```
public String getVODTranscodeNGRP()
```

Get the VOD Transcoder NGRP name

Returns:

VOD Transcoder NGRP name

setVODTranscodeNGRP

```
public void setVODTranscodeNGRP(String vodTranscodeNGRP)
```

Set the VOD Transcoder NGRP name

Parameters:

vodTranscodeNGRP - VOD Transcoder NGRP name

getTranscoderVODIndex

```
public IHTTPStreamerTranscoderVODIndex getTranscoderVODIndex()
```

Get the VOD Transcoder index information

Returns:

VOD Transcoder index

setTranscoderVODIndex

```
public void setTranscoderVODIndex(IHTTPStreamerTranscoderVODIndex transcoderVODIndex)
```

Set the VOD Transcoder index information

Parameters:

transcoderVODIndex - VOD Transcoder index

(continued from last page)

getTranscoderVODIndexDestinationsOrder

```
public java.util.List getTranscoderVODIndexDestinationsOrder()
```

Get the list of VOD Transcoder destinations in playlist order

Returns:

list of VOD Transcoder destinations

getTranscoderVODIndexDestinationsMap

```
public java.util.Map getTranscoderVODIndexDestinationsMap()
```

Get the VOD Transcoder destination map

Returns:

VOD Transcoder destination map

indexTranscoderVOD

```
public void indexTranscoderVOD(IHTTPStreamerApplicationContext appContext,  
String vodTranscodeNGRP)
```

Index the HTTP session for VOD transcoder streaming

Parameters:

appContext - application context

vodTranscodeNGRP - transcoder name group

getTranscoderVODIndex

```
public IHTTPStreamerTranscoderVODDestinationIndex getTranscoderVODIndex(String  
bitrateStr)
```

Get VOD transcoder index for given bitrate

Parameters:

bitrateStr - bitrate string

Returns:

VOD transcoder index

addHTTPSessionToTCPSession

```
public void addHTTPSessionToTCPSession(RtmpSessionInfo wmsSessionInfo,  
IHTTPStreamerApplicationContext appContext)
```

Add HTTP session to TCP session for tracking

Parameters:

wmsSessionInfo - TCP session info

appContext - app context

isSecure

```
public boolean isSecure()
```

Returns true if the stream is being streamed over an SSL port

(continued from last page)

Returns:

true if the stream is being streamed over an SSL port

setSecure

```
public void setSecure(boolean isSecure)
```

Set to true if the stream is being streamed over an SSL port

Parameters:

isSecure - true if the stream is being streamed over an SSL port

addTranscoderVODListener

```
public void addTranscoderVODListener(IHTTPStreamerTranscoderVODActionNotify listener)
```

Add VOD Transcoder action listener

Parameters:

listener - VOD Transcoder action listener

removeTranscoderVODListener

```
public boolean removeTranscoderVODListener(IHTTPStreamerTranscoderVODActionNotify  
listener)
```

Remove VOD Transcoder action listener

Parameters:

listener - VOD Transcoder action listener

Returns:

true/false is successful

notifyTranscoderVODFillChunkStart

```
public void  
notifyTranscoderVODFillChunkStart(com.wowza.wms.transcoder.vod.TranscoderVODSession  
transcoderVODSession,  
com.wowza.wms.transcoder.vod.TranscoderVODDestination  
transcoderVODDestination,  
MediaReaderH264Chunk mediaReaderChunk,  
com.wowza.wms.transcoder.vod.TranscoderVODChunkContext  
transcoderVODChunkContext)
```

Called to notify of VOD Transcoder fill chunk start

Parameters:transcoderVODSession - VOD Transcoder session
transcoderVODDestination - VOD Transcoder destination
mediaReaderChunk - media reader for the chunk
transcoderVODChunkContext - VOD Transcoder context

(continued from last page)

notifyTranscoderVODFillChunkTranscode

```
public void
notifyTranscoderVODFillChunkTranscode(com.wowza.wms.transcoder.vod.TranscoderVODSession
n transcoderVODSession,
    com.wowza.wms.transcoder.vod.TranscoderVODChunkContext
transcoderVODChunkContext,
    java.util.List packets)
```

Called to notify of VOD Transcoder fill chunk

Parameters:

transcoderVODSession - VOD Transcoder session
transcoderVODChunkContext - VOD Transcoder context
packets

notifyTranscoderVODFillChunkStop

```
public void
notifyTranscoderVODFillChunkStop(com.wowza.wms.transcoder.vod.TranscoderVODSession
transcoderVODSession,
    com.wowza.wms.transcoder.vod.TranscoderVODChunkContext
transcoderVODChunkContext)
```

Called to notify of VOD Transcoder fill stop

Parameters:

transcoderVODSession - VOD Transcoder session
transcoderVODChunkContext - VOD Transcoder context

com.wowza.wms.httpstreamer.model Interface IHTTPStreamerSessionNotify

public interface IHTTPStreamerSessionNotify
extends

IHTTPStreamerSessionNotify: HTTP session create/destroy interface

Method Summary

void	onHTTPStreamerSessionCreate (IHTTPStreamerSession httpStreamerSession) Called when an HTTP streaming session is created
void	onHTTPStreamerSessionDestroy (IHTTPStreamerSession httpStreamerSession) Called when an HTTP streaming session is destroyed

Methods

onHTTPStreamerSessionCreate

public void **onHTTPStreamerSessionCreate**([IHTTPStreamerSession](#) httpStreamerSession)

Called when an HTTP streaming session is created

Parameters:

httpStreamerSession - HTTP streaming session

onHTTPStreamerSessionDestroy

public void **onHTTPStreamerSessionDestroy**([IHTTPStreamerSession](#) httpStreamerSession)

Called when an HTTP streaming session is destroyed

Parameters:

httpStreamerSession - HTTP streaming session

com.wowza.wms.httpstreamer.model Interface IHTTPStreamerTranscoderVODActionNotify

public interface IHTTPStreamerTranscoderVODActionNotify
extends

Method Summary

void	onFillChunkStart (com.wowza.wms.transcoder.vod.TranscoderVODSession transcoderVODSession, com.wowza.wms.transcoder.vod.TranscoderVODDestination transcoderVODDestination, MediaReaderH264Chunk mediaReaderChunk, com.wowza.wms.transcoder.vod.TranscoderVODChunkContext transcoderVODChunkContext)
void	onFillChunkStop (com.wowza.wms.transcoder.vod.TranscoderVODSession transcoderVODSession, com.wowza.wms.transcoder.vod.TranscoderVODChunkContext transcoderVODChunkContext)
void	onFillChunkTranscode (com.wowza.wms.transcoder.vod.TranscoderVODSession transcoderVODSession, com.wowza.wms.transcoder.vod.TranscoderVODChunkContext transcoderVODChunkContext, java.util.List packets)

Methods

onFillChunkStart

```
public void onFillChunkStart(com.wowza.wms.transcoder.vod.TranscoderVODSession
transcoderVODSession,
    com.wowza.wms.transcoder.vod.TranscoderVODDestination
transcoderVODDestination,
    MediaReaderH264Chunk mediaReaderChunk,
    com.wowza.wms.transcoder.vod.TranscoderVODChunkContext
transcoderVODChunkContext)
```

onFillChunkTranscode

```
public void onFillChunkTranscode(com.wowza.wms.transcoder.vod.TranscoderVODSession
transcoderVODSession,
    com.wowza.wms.transcoder.vod.TranscoderVODChunkContext
transcoderVODChunkContext,
    java.util.List packets)
```

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onFillChunkStop

```
public void onFillChunkStop(com.wowza.wms.transcoder.vod.TranscoderVODSession  
transcoderVODSession,  
    com.wowza.wms.transcoder.vod.TranscoderVODChunkContext  
transcoderVODChunkContext)
```

com.wowza.wms.httpstreamer.model Interface IHTTPStreamerTranscoderVODDestinationIndex

public interface IHTTPStreamerTranscoderVODDestinationIndex
extends

Method Summary

int	getBitrate()
com.wowza.wms.transcoder.vod.TranscoderVODDestination	getTranscoderVODDestination()
void	setBitrate(int bitrate)
void	setTranscoderVODDestination(com.wowza.wms.transcoder.vod.TranscoderVODDestination transcoderVODDestination)

Methods

getTranscoderVODDestination

```
public com.wowza.wms.transcoder.vod.TranscoderVODDestination  
getTranscoderVODDestination()
```

setTranscoderVODDestination

```
public void  
setTranscoderVODDestination(com.wowza.wms.transcoder.vod.TranscoderVODDestination  
transcoderVODDestination)
```

getBitrate

```
public int getBitrate()
```

setBitrate

```
public void setBitrate(int bitrate)
```

com.wowza.wms.httpstreamer.model
Interface IHTTPStreamerTranscoderVODIndex

public interface IHTTPStreamerTranscoderVODIndex
extends

com.wowza.wms.httpstreamer.model Interface **ILiveStreamPacketizerChunkWriter**

public interface **ILiveStreamPacketizerChunkWriter**
extends

Method Summary

void	addToChunk (LiveStreamPacketizerPacketHolder holder)
void	endChunk (long timecode, long timecodeAudio)
boolean	isLogAACAudioGaps ()
boolean	isM4S (int codecAudio, int codecVideo)
boolean	isPacketizeAudio ()
boolean	isPacketizeData ()
boolean	isPacketizeVideo ()
boolean	isValidAudioCodec (int codec)
boolean	isValidVideoCodec (int codec)
boolean	isWebM (int codecAudio, int codecVideo)
void	resetStream ()
void	setCodecInfoAudio (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	setCodecInfoVideo (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	startChunk (long chunkId, long chunkIdUser, int streamMode, int videoCodecId, int audioCodecId, long timecode, long timecodeUser, String originRepeaterContext, CencInfo cencInfo)

Methods

(continued from last page)

startChunk

```
public void startChunk(long chunkId,  
    long chunkIdUser,  
    int streamMode,  
    int videoCodecId,  
    int audioCodecId,  
    long timecode,  
    long timecodeUser,  
    String originRepeaterContext,  
    CencInfo cencInfo)
```

endChunk

```
public void endChunk(long timecode,  
    long timecodeAudio)
```

addToChunk

```
public void addToChunk(LiveStreamPacketizerPacketHolder holder)
```

setCodecInfoAudio

```
public void setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
    codecInfoAudio)
```

setCodecInfoVideo

```
public void setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
    codecInfoVideo)
```

resetStream

```
public void resetStream()
```

isPacketizeAudio

```
public boolean isPacketizeAudio()
```

isPacketizeVideo

```
public boolean isPacketizeVideo()
```

isPacketizeData

```
public boolean isPacketizeData()
```

isValidAudioCodec

```
public boolean isValidAudioCodec(int codec)
```

isValidVideoCodec

```
public boolean isValidVideoCodec(int codec)
```

isLogAACAudioGaps

```
public boolean isLogAACAudioGaps()
```

isM4S

```
public boolean isM4S(int codecAudio,  
                    int codecVideo)
```

isWebM

```
public boolean isWebM(int codecAudio,  
                    int codecVideo)
```

Package

com.wowza.wms.httpstreamer.mpegdashstreaming.file

com.wowza.wms.httpstreamer.mpegdashstreaming.file Interface IHTTPStreamerMPEGDashIndex

public interface IHTTPStreamerMPEGDashIndex
extends

Method Summary

void	close()
IHTTPStreamerApplicationContext	getApplicationContext()
java.util.List	getBitratesAudio()
java.util.List	getBitratesLongs()
java.util.List	getBitratesStrings()
java.util.List	getBitratesVideo()
TimedTextRequest	getCaptionRequest()
MPEGDashDashChunk	getChunk(MPEGDashChunkId chunkId)
IHTTPStreamerSession	getHttpStreamerSession()
MPEGDashProfileManifest	getManifest(int profile, int manifestId, java.util.Map queryMap)
int	getNumStreams()
long	getPlayDuration()
long	getPlaySeek()
long	getPlayStart()
WMSProperties	getProperties()
String	getStreamName()
java.util.List	getStreamNames()
java.util.List	getStreamNamesRaw()
String	getVODTranscodeNGRP()

boolean	indexFile (IHTTPStreamerSession httpStreamerSession, String rawStreamName)
void	init (IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName, long playStart, long playDuration, long playSeek, TimedTextRequest captionRequest, String vodTranscodeNGRP)
boolean	isReloadMediaList ()
void	open ()
void	setCaptionRequest (TimedTextRequest request)
void	setPlayDuration (long playDuration)
void	setPlaySeek (long playSeek)
void	setPlayStart (long playStart)
void	setVODTranscodeNGRP (String vodTranscodeNGRP)

Methods

init

```
public void init(IHTTPStreamerApplicationContext appContext,
    IHTTPStreamerSession httpStreamerSession,
    String rawStreamName,
    String streamExt,
    String streamName,
    long playStart,
    long playDuration,
    long playSeek,
    TimedTextRequest captionRequest,
    String vodTranscodeNGRP)
```

indexFile

```
public boolean indexFile(IHTTPStreamerSession httpStreamerSession,
    String rawStreamName)
```

close

```
public void close()
```

(continued from last page)

open

```
public void open()
```

getChunk

```
public MPEGDashDashChunk getChunk(MPEGDashChunkId chunkId)
```

getApplicationContext

```
public IHTTPStreamerApplicationContext getApplicationContext()
```

getHttpStreamerSession

```
public IHTTPStreamerSession getHttpStreamerSession()
```

getNumStreams

```
public int getNumStreams()
```

getStreamName

```
public String getStreamName()
```

getStreamNames

```
public java.util.List getStreamNames()
```

getStreamNamesRaw

```
public java.util.List getStreamNamesRaw()
```

getBitratesLongs

```
public java.util.List getBitratesLongs()
```

getBitratesStrings

```
public java.util.List getBitratesStrings()
```

(continued from last page)

getBitratesAudio

```
public java.util.List getBitratesAudio()
```

getBitratesVideo

```
public java.util.List getBitratesVideo()
```

getManifest

```
public MPEGDashProfileManifest getManifest(int profile,  
                                             int manifestId,  
                                             java.util.Map queryMap)
```

getPlayStart

```
public long getPlayStart()
```

setPlayStart

```
public void setPlayStart(long playStart)
```

getPlayDuration

```
public long getPlayDuration()
```

setPlayDuration

```
public void setPlayDuration(long playDuration)
```

getPlaySeek

```
public long getPlaySeek()
```

setPlaySeek

```
public void setPlaySeek(long playSeek)
```

getCaptionRequest

```
public TimedTextRequest getCaptionRequest()
```

setCaptionRequest

```
public void setCaptionRequest(TimedTextRequest request)
```

getVODTranscodeNGRP

```
public String getVODTranscodeNGRP()
```

setVODTranscodeNGRP

```
public void setVODTranscodeNGRP(String vodTranscodeNGRP)
```

isReloadMediaList

```
public boolean isReloadMediaList()
```

getProperties

```
public WMSProperties getProperties()
```

com.wowza.wms.httpstreamer.mpegdashstreaming.file Interface IHTTPStreamerMPEGDashIndexItem

public interface IHTTPStreamerMPEGDashIndexItem
extends

Method Summary

java.util.Date	getCreationDate()
CencInfo	getEncInfo()
int	getIndex()
long	getStartTimeCode()
long	getStartTimeCodeAudio()
long	getStartTimeCodeVideo()
long	getStopTimeCode()
long	getStopTimeCodeAudio()
long	getStopTimeCodeVideo()
void	setCreationDate (java.util.Date creationDate)
void	setEncInfo (CencInfo encInfo)
void	setIndex (int index)
void	setStartTimeCode (long startTimeCode)
void	setStartTimeCodeAudio (long startTimeCode)
void	setStartTimeCodeVideo (long startTimeCode)
void	setStopTimeCode (long stopTimeCode)
void	setStopTimeCodeAudio (long stopTimeCode)
void	setStopTimeCodeVideo (long stopTimeCode)

(continued from last page)

Methods

getStartTimecode

```
public long getStartTimecode()
```

setStartTimecode

```
public void setStartTimecode(long startTimecode)
```

getStopTimecode

```
public long getStopTimecode()
```

setStopTimecode

```
public void setStopTimecode(long stopTimecode)
```

getIndex

```
public int getIndex()
```

setIndex

```
public void setIndex(int index)
```

setEncInfo

```
public void setEncInfo(CencInfo encInfo)
```

getEncInfo

```
public CencInfo getEncInfo()
```

setCreationDate

```
public void setCreationDate(java.util.Date creationDate)
```

(continued from last page)

getCreationDate

```
public java.util.Date getCreationDate()
```

getStartTimecodeVideo

```
public long getStartTimecodeVideo()
```

setStartTimecodeVideo

```
public void setStartTimecodeVideo(long startTimecode)
```

getStopTimecodeVideo

```
public long getStopTimecodeVideo()
```

setStopTimecodeVideo

```
public void setStopTimecodeVideo(long stopTimecode)
```

getStartTimecodeAudio

```
public long getStartTimecodeAudio()
```

setStartTimecodeAudio

```
public void setStartTimecodeAudio(long startTimecode)
```

getStopTimecodeAudio

```
public long getStopTimecodeAudio()
```

setStopTimecodeAudio

```
public void setStopTimecodeAudio(long stopTimecode)
```

com.wowza.wms.httpstreamer.mpegdashstreaming.file Interface IMediaReaderMPEGDash

All Superinterfaces:

[IMediaReader](#)

public interface **IMediaReaderMPEGDash**

extends [IMediaReader](#)

Field Summary

public static final	MEDIAREADER_POSTFIX
---------------------	-------------------------------------

Value: **mpegdash**

Fields inherited from interface [com.wowza.wms.stream.IMediaReader](#)

[CONTENTTYPE_MEDIA](#), [CONTENTTYPE_MEDIALIST](#), [DEFAULT_RANDOMACCESSREADER](#),
[DEFAULT_RANDOMACCESSREADEROPTIMIZER](#), [PLAYEVENT_AFTERBUFFERFILL](#), [PLAYEVENT_AFTERMETADATA](#),
[PLAYEVENT_BEFOREBUFFERFILL](#), [PLAYEVENT_BEFOREMETADATA](#), [PLAYEVENT_STARTPLAYBACK](#), [SEEK_EXACT](#),
[SEEK_KEYCLOSE](#), [SEEK_KEYDOWN](#), [SEEK_KEYUP](#), [SEEKTARGET_AUDIO](#), [SEEKTARGET_ENHANCED](#),
[SEEKTARGET_VIDEOKEYFRAME](#)

Method Summary

void	fillChunk (HTTPStreamerMPEGDashIndexItem indexItem, HTTPStreamerMPEGDashIndexItem item, MPEGDashDashChunk chunk)
------	---

void	indexFile (HTTPStreamerMPEGDashIndexItem index)
------	--

Methods inherited from interface [com.wowza.wms.stream.IMediaReader](#)

[close](#), [getDuration](#), [getLength](#), [getMediaExtension](#), [getMetadata](#), [getPath](#),
[getStreamPosition](#), [init](#), [isOpen](#), [open](#), [rewind](#), [seek](#), [sendZeroLengthPacket](#),
[setMediaReaderItem](#), [setProperties](#), [setStreamPosition](#), [startPlayback](#),
[writeGeneratedKeyFrame](#), [writePackets](#), [writePackets](#)

Fields

MEDIAREADER_POSTFIX

public static final java.lang.String **MEDIAREADER_POSTFIX**

Constant value: **mpegdash**

Methods

(continued from last page)

indexFile

```
public void indexFile(HTTPStreamerMPEGDashIndexItem index)
```

fillChunk

```
public void fillChunk(HTTPStreamerMPEGDashIndexItem indexItem,  
IHTTPStreamerMPEGDashIndexItem item,  
MPEGDashDashChunk chunk)
```

Package

com.wowza.wms.httpstreamer.mpegdashstreaming.httpstreamer

com.wowza.wms.httpstreamer.mpegdashstreaming.httpstreamer Class HTTPStreamerSessionMPEGDash

java.lang.Object

└─ com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

└─

com.wowza.wms.httpstreamer.mpegdashstreaming.httpstreamer.HTTPStreamerSessionMPEGDash

All Implemented Interfaces:

[IHTTPSessionNotify](#), [IHTTPStreamerSession](#)

```
public class HTTPStreamerSessionMPEGDash
extends HTTPStreamerSessionBase
implements IHTTPStreamerSession, IHTTPSessionNotify
```

Fields inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

acceptSession, appInstance, connectionHolder, cookieStr, corsHeaders, DATEFORMAT, elapsedTime, fastDateFormat, fileInfoMap, firstCheck, httpHeaders, httpStreamerAdapter, ioPerformanceCounter, ipAddress, isActive, isDelete, isHTTPOrigin, isPlayLogged, isSecure, lastRequest, liveStreamingPacketizer, lock, mediaCasterStreamLock, notifyCreate, playDuration, playSeek, playStart, properties, queryStr, redirectSession, redirectSessionBody, redirectSessionCode, redirectSessionContentType, redirectSessionURL, referrer, serverIp, serverPort, sessionId, sessionProtocol, sessionTimeout, sessionType, stream, streamDomainStrSet, streamExt, streamName, streamNamePartMap, streamPosition, timeoutSession, totalIOPerformance2Last, totalIOPerformanceLast, transcoderVODIndex, transcoderVODIndexDestinationsMap, transcoderVODIndexDestinationsOrder, transcoderVODListeners, transcoderVODSession, uri, userAgent, userHTTPHeaders, userManifestHeaders, userQueryStr, vhost, vodTranscodeNGRP

Fields inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[SESSIONPROTOCOL_COUNT](#), [SESSIONPROTOCOL_CUPERTINOSTREAMING](#), [SESSIONPROTOCOL_DIRECTSTREAMING](#), [SESSIONPROTOCOL_DVRCHUNKSTREAMING](#), [SESSIONPROTOCOL_MPEGDASHSTREAMING](#), [SESSIONPROTOCOL_SANJOSESTREAMING](#), [SESSIONPROTOCOL_SMOOTHSTREAMING](#), [SESSIONPROTOCOL_TSSTREAMING](#), [SESSIONPROTOCOL_UNKNOWN](#), [SESSIONPROTOCOL_WEBMSTREAMING](#), [SESSIONTYPE_LIVE](#), [SESSIONTYPE_LIVEDVR](#), [SESSIONTYPE_UNKNOWN](#), [SESSIONTYPE_VOD](#)

Constructor Summary

public	HTTPStreamerSessionMPEGDash()
--------	---

Method Summary

void	clearLoggingValues()
------	--------------------------------------

boolean	containsIndex (String streamName)
---------	---

static IHTTPStreamerMPEGDashIndex	createIndexLive (IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName)
IHTTPStreamerMPEGDashIndex	getIndex (IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName, long playStart, long playDuration, long playSeek, TimedTextRequest captionRequest, String vodTranscodeNGRP)
IHTTPStreamerMPEGDashIndex	getIndexLive (IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName)
void	indexTranscoderVOD (IHTTPStreamerApplicationContext appContext, String vodTranscodeNGRP)
void	logLiveChunk (MPEGDashDashChunk chunk)
void	logVODChunk (MPEGDashDashChunk chunk)
void	notifyHTTPSessionCreate (IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)
void	notifyHTTPSessionDestroy (IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)
void	shutdown ()
void	updateLoggingValues ()

Methods inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase


```

acceptSession, addHTTPSessionToTCPSession, addIOPerformance, addIOPerformance2,
addStreamDomainStr, addStreamDomainStrs, addTranscoderVODListener,
addUserHTTPHeaders, checkAndSetPlayLogged, clearLoggingValues,
containsStreamDomainStr, containsStreamNameParts, doSessionRedirect,
doSessionRedirect, extractHTTPRequestInfo, getAndClearNotifyCreate, getAppInstance,
getConnectionHolder, getCookieStr, getCORSHaders, getDvrSessionInfo, getElapsedTime,
getFileInfo, getHTTPDate, getHTTPHeader, getHTTPHeaderMap, getHTTPHeaderNames,
getHTTPIntHeader, getHTTPStreamerAdapter, getIOPerformanceCounter, getIpAddress,
getLastRequest, getLiveStreamingPacketizer, getLock, getPlayDuration, getPlaySeek,
getPlayStart, getProperties, getQueryStr, getRedirectSessionBody,
getRedirectSessionCode, getRedirectSessionContentType, getRedirectSessionURL,
getReferrer, getServerIp, getServerPort, getSessionId, getSessionProtocol,
getSessionTimeout, getSessionType, getStream, getStreamDomainStr,
getStreamDomainStrList, getStreamExt, getStreamName, getStreamNameParts,
getStreamPosition, getTimeRunning, getTimeRunningSeconds, getTranscoderVODIndex,
getTranscoderVODIndex, getTranscoderVODIndexDestinationsMap,
getTranscoderVODIndexDestinationsOrder, getTranscoderVODSession, getUri,
getUserAgent, getUserHTTPHeaders, getUserQueryStr, getVHost, getVODTranscodeNGRP,
indexTranscoderVOD, isAcceptSession, isActive, isDelete, isDeleteSession, isFileInfo,
isHTTPOrigin, isPlayLogged, isRedirectSession, isSecure, isTimeout, isTimeoutSession,
isValidated, isValidStreamDomainStr, lockRepeaterStreams,
notifyTranscoderVODFillChunkStart, notifyTranscoderVODFillChunkStop,
notifyTranscoderVODFillChunkTranscode, putFileInfo, putStreamNameParts,
redirectSession, redirectSession, rejectSession, removeStreamDomainStr,
removeTranscoderVODListener, setAcceptSession, setActive, setAppInstance,
setCookieStr, setDeleteSession, setDvrSessionInfo, setHTTPOrigin,
setHTTPStreamerAdapter, setIpAddress, setLiveStreamingPacketizer, setPlayDuration,
setPlayLogged, setPlaySeek, setPlayStart, setQueryStr, setRedirectSession,
setRedirectSessionBody, setRedirectSessionCode, setRedirectSessionContentType,
setRedirectSessionURL, setReferrer, setSecure, setServerIp, setServerPort,
setSessionId, setSessionProtocol, setSessionTimeout, setSessionType, setStream,
setStreamExt, setStreamName, setStreamPosition, setThreadContext, setTimeoutSession,
setTranscoderVODIndex, setTranscoderVODSession, setUri, setUserAgent,
setUserHTTPHeader, setUserQueryStr, setValidated, setVHost, setVODTranscodeNGRP,
shutdown, shutdownLocked, touch, updateLoggingValues, validStreamDomainToString

```

Methods inherited from class `java.lang.Object`

```

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

```

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[acceptSession](#), [addHTTPSessionToTCPSession](#), [addIOPerformance](#), [addIOPerformance2](#),
[addStreamDomainStr](#), [addStreamDomainStrs](#), [addTranscoderVODListener](#),
[addUserHTTPHeaders](#), [checkAndSetPlayLogged](#), [clearLoggingValues](#),
[containsStreamDomainStr](#), [containsStreamNameParts](#), [doSessionRedirect](#),
[doSessionRedirect](#), [extractHTTPRequestInfo](#), [getAndClearNotifyCreate](#), [getAppInstance](#),
[getConnectionHolder](#), [getCookieStr](#), [getCORSHaders](#), [getDvrSessionInfo](#), [getElapsedTime](#),
[getFileInfo](#), [getHTTPHeader](#), [getHTTPHeaderMap](#), [getHTTPHeaderNames](#), [getHTTPIntHeader](#),
[getHTTPStreamerAdapter](#), [getIOPerformanceCounter](#), [getIpAddress](#), [getLastRequest](#),
[getLiveStreamingPacketizer](#), [getLock](#), [getPlayDuration](#), [getPlaySeek](#), [getPlayStart](#),
[getProperties](#), [getQueryStr](#), [getRedirectSessionBody](#), [getRedirectSessionCode](#),
[getRedirectSessionContentType](#), [getRedirectSessionURL](#), [getReferrer](#), [getServerIp](#),
[getServerPort](#), [getSessionId](#), [getSessionProtocol](#), [getSessionTimeout](#), [getSessionType](#),
[getStream](#), [getStreamExt](#), [getStreamName](#), [getStreamNameParts](#), [getStreamPosition](#),
[getTimeRunning](#), [getTimeRunningSeconds](#), [getTranscoderVODIndex](#), [getTranscoderVODIndex](#),
[getTranscoderVODIndexDestinationsMap](#), [getTranscoderVODIndexDestinationsOrder](#),
[getTranscoderVODSession](#), [getUri](#), [getUserAgent](#), [getUserHTTPHeaders](#), [getUserQueryStr](#),
[getVHost](#), [getVODTranscodeNGRP](#), [indexTranscoderVOD](#), [isAcceptSession](#), [isActive](#),
[isDelete](#), [isDeleteSession](#), [isFileInfo](#), [isHTTPOrigin](#), [isPlayLogged](#), [isRedirectSession](#),
[isSecure](#), [isTimeout](#), [isTimeoutSession](#), [isValidated](#), [isValidStreamDomainStr](#),
[lockRepeaterStreams](#), [notifyTranscoderVODFillChunkStart](#),
[notifyTranscoderVODFillChunkStop](#), [notifyTranscoderVODFillChunkTranscode](#), [putFileInfo](#),
[putStreamNameParts](#), [redirectSession](#), [redirectSession](#), [rejectSession](#),
[removeStreamDomainStr](#), [removeTranscoderVODListener](#), [setAcceptSession](#), [setActive](#),
[setAppInstance](#), [setCookieStr](#), [setDeleteSession](#), [setDvrSessionInfo](#), [setHTTPOrigin](#),
[setHTTPStreamerAdapter](#), [setIpAddress](#), [setLiveStreamingPacketizer](#), [setPlayDuration](#),
[setPlayLogged](#), [setPlaySeek](#), [setPlayStart](#), [setQueryStr](#), [setRedirectSession](#),
[setRedirectSessionBody](#), [setRedirectSessionCode](#), [setRedirectSessionContentType](#),
[setRedirectSessionURL](#), [setReferrer](#), [setSecure](#), [setServerIp](#), [setServerPort](#),
[setSessionId](#), [setSessionProtocol](#), [setSessionTimeout](#), [setSessionType](#), [setStream](#),
[setStreamExt](#), [setStreamName](#), [setStreamPosition](#), [setTimeoutSession](#),
[setTranscoderVODIndex](#), [setTranscoderVODSession](#), [setUri](#), [setUserAgent](#),
[setUserHTTPHeader](#), [setUserQueryStr](#), [setVHost](#), [setVODTranscodeNGRP](#), [shutdown](#), [touch](#),
[updateLoggingValues](#), [validStreamDomainToString](#)

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPSessionNotify](#)

[notifyHTTPSessionCreate](#), [notifyHTTPSessionDestroy](#)

Constructors

HTTPStreamerSessionMPEGDash

```
public HTTPStreamerSessionMPEGDash()
```

Methods

shutdown

```
public void shutdown()
```

(continued from last page)

containsIndex

```
public boolean containsIndex(String streamName)
```

createIndexLive

```
public static IHTTPStreamerMPEGDashIndex  
createIndexLive(IHTTPStreamerApplicationContext appContext,  
                IHTTPStreamerSession httpStreamerSession,  
                String rawStreamName,  
                String streamExt,  
                String streamName)
```

getIndexLive

```
public IHTTPStreamerMPEGDashIndex getIndexLive(IHTTPStreamerApplicationContext  
appContext,  
        IHTTPStreamerSession httpStreamerSession,  
        String rawStreamName,  
        String streamExt,  
        String streamName)
```

getIndex

```
public IHTTPStreamerMPEGDashIndex getIndex(IHTTPStreamerApplicationContext appContext,  
        IHTTPStreamerSession httpStreamerSession,  
        String rawStreamName,  
        String streamExt,  
        String streamName,  
        long playStart,  
        long playDuration,  
        long playSeek,  
        TimedTextRequest captionRequest,  
        String vodTranscodeNGRP)
```

updateLoggingValues

```
public void updateLoggingValues()
```

clearLoggingValues

```
public void clearLoggingValues()
```

logLiveChunk

```
public void logLiveChunk(MPEGDashDashChunk chunk)
```

logVODChunk

```
public void logVODChunk(MPEGDashDashChunk chunk)
```

notifyHTTPSessionCreate

```
public void notifyHTTPSessionCreate(IApplicationInstance appInstance,  
    IHTTPStreamerSession httpStreamerSession)
```

notifyHTTPSessionDestroy

```
public void notifyHTTPSessionDestroy(IApplicationInstance appInstance,  
    IHTTPStreamerSession httpStreamerSession)
```

indexTranscoderVOD

```
public void indexTranscoderVOD(IHTTPStreamerApplicationContext appContext,  
    String vodTranscodeNGRP)
```

Package

com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer

com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer Interface IHTTPStreamerMPEGDashLiveStreamPacketizerChunkIdHandler

public interface IHTTPStreamerMPEGDashLiveStreamPacketizerChunkIdHandler
extends

Method Summary

void	init (LiveStreamPacketizerMPEGDash liveStreamPacketizer)
HTTPStreamerMPEGDashLiveStreamPacketizerChunkIdContext	onAssignChunkId (HTTPStreamerMPEGDashLiveStreamPacketizerChunkIdContext chunkIdContext)

Methods

init

public void **init**([LiveStreamPacketizerMPEGDash](#) liveStreamPacketizer)

onAssignChunkId

public HTTPStreamerMPEGDashLiveStreamPacketizerChunkIdContext
onAssignChunkId(HTTPStreamerMPEGDashLiveStreamPacketizerChunkIdContext chunkIdContext)

com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer Class LiveStreamPacketizerMPEGDash

java.lang.Object

└-com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase

└-

com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer.LiveStreamPacketizerMPEGDash

All Implemented Interfaces:

Runnable, IdleNotify, [ILiveStreamPacketizer](#)

```
public class LiveStreamPacketizerMPEGDash
extends LiveStreamPacketizerBase
```

Field Summary

protected	appProps
public static final	AUDIOGROUPCOUNT Value: 3
public static final	CHUNKDURATIONTOLERANCE Value: 500
protected static final	CLASS
protected static final	CLASSNAME Value: LiveStreamPacketizerMPEGDash
protected	liveRepeaterEncryptionSharedSecret
public static final	MAXCHUNKLOGCOUNT Value: 10
protected	originRepeaterContext
public static final	PLAYSTARTTOLERANCE Value: 500
protected	props
protected	randomSessionStr
public static final	STREAMMODE_AAC Value: 3

public static final	STREAMMODE_MP3 Value: 2
public static final	STREAMMODE_TS Value: 1
public static final	WAITFORCODECTIME Value: 8000

Fields inherited from class com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase

appInstance, captionDefaultLanguages, captionIngestType, captionsEnabled, captionUseStreamNameGroups, checkTimeoutInterval, DEFAULT_STREAMTIMEOUT, EVENT_PACKET, EVENT_RESETSTREAM, EVENT_STARTSTREAM, eventProcessCount, events, id, inProcessEvent, isActive, isRepeater, isRepeaterEdge, isRunning, lastCheckTime, lastEventProcessTC, lastStreamStartTime, lastStreamUpdate, liveStreamPacketizerItem, liveTimedTextProvider, maxEventCount, maxEventCountErrors, maxEventsPerRun, MAXEVENTSPERRUN, packetizeAudio, packetizeData, packetizerName, packetizeVideo, properties, runnerLock, startStream, streamName, streamStartupTimeout, streamTimeout, timeoutLock

Constructor Summary

public	LiveStreamPacketizerMPEGDash()
--------	--

Method Summary

void	addToChunk (LiveStreamPacketizerPacketHolder holder)
void	endChunk (long timecode, long timecodeAudio)
String	getAdditionalLiveProfiles ()
MPEGDashDashChunk	getAudioChunk (int chunkFormat, long index)
MPEGDashDashChunk	getAudioChunkByTime (int chunkFormat, long time)
long	getAudioChunkIdFirst ()
long	getAudioChunkIdLast ()
MPEGDashDashChunk	getAudioInit (int chunkFormat)
String	getAudioMimeType (int chunkFormat)
long	getBitrate ()
long	getBitrateAudio ()
long	getBitrateVideo ()

int	getChunkCount()
int	getChunkCountAudio()
int	getChunkCountMedia()
int	getChunkCountVideo()
int	getChunkDurationTarget()
static int	getChunkDurationTarget(IApplicationInstance appInstance, String packetizer)
IHTTPStreamerMPEGDashLiveStreamPacketizerChunkIdHandler	getChunkIdHandler()
com.wowza.wms.media.model.MediaCodecInfoAudio	getCodecInfoAudio()
com.wowza.wms.media.model.MediaCodecInfoVideo	getCodecInfoVideo()
int	getDefaultChunkFormat()
int	getDefaultChunkSetIndex()
EncInfo	getEncInfo()
double	getFrameRate()
Object	getLock()
MPEGDashDashChunk	getMediaChunk(int chunkFormat, long index)
MPEGDashDashChunk	getMediaChunkByTime(int chunkFormat, long time)
MPEGDashDashChunk	getMediaInit(int chunkFormat)
String	getMediaMimeType(int chunkFormat)
long	getMinimumUpdatePeriod()
int	getPlaylistChunkCount()
String	getRandomSessionStr()
void	getRepeaterItemsMPEGDash(java.util.List items, long seq)
long	getRepeaterLastSequence()

java.util.Date	getStreamStartDate()
MPEGDashDashChunk	getVideoChunk (int chunkFormat, long index)
MPEGDashDashChunk	getVideoChunkByTime (int chunkFormat, long time)
long	getVideoChunkIdFirst ()
long	getVideoChunkIdLast ()
MPEGDashDashChunk	getVideoInit (int chunkFormat)
String	getVideoMimeType (int chunkFormat)
void	indexStream (HTTPStreamerMPEGDashLiveIndexItem indexItem)
void	init (String streamName, String packetizerName, IApplicationInstance appInstance, LiveStreamPacketizerItem liveStreamPacketizerItem)
void	internalHandlePacket (IMediaStream stream, AMFPacket packet)
void	internalResetStream (IMediaStream stream)
void	internalStartStream (IMediaStream stream)
boolean	isHbbtvLiveProfileEnabled ()
boolean	isPlaylistReady ()
boolean	isRandomizeMediaName ()
void	repeaterItemsMPEGDashflushed ()
void	resetStream ()
void	setAudioCodec (int codecId)
void	setChunkIdHandler (IHTTPStreamerMPEGDashLiveStreamPacketizerChunkIdHandler chunkIdHandler)
void	setCodecInfoAudio (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	setCodecInfoVideo (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	setRandomizeMediaName (boolean randomizeMediaName)
void	setVideoCodec (int codecId)

void	startChunk (long chunkId, long chunkIdUser, int streamMode, int videoCodecId, int audioCodecId, long timecode, long timecodeUser, String originRepeaterContext, CencInfo encInfo)
CencInfo	updateCencInfo (long chunkId)

Methods inherited from class [com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase](#)

[addPacketizerEvent](#), [checkTimeout](#), [getAndSetStartStream](#), [getApplicationInstance](#), [getCaptionProvider](#), [getContextStr](#), [getLiveStreamPacketizerId](#), [getMaxEventCount](#), [getProperties](#), [getRepeaterItems](#), [getRepeaterItemsSanJose](#), [getRepeaterLastSequence](#), [getStreamStartupTimeout](#), [getStreamTimeout](#), [handlePacket](#), [init](#), [initLiveCaptionIngestor](#), [internalHandlePacket](#), [internalResetStream](#), [internalStartStream](#), [isActive](#), [isCEA608IngestModuleInstalled](#), [isPacketizeAudio](#), [isPacketizeData](#), [isPacketizeVideo](#), [isRepeaterEdge](#), [onIdle](#), [resetStream](#), [run](#), [setLiveStreamPacketizerId](#), [setMaxEventCount](#), [setPacketizeAudio](#), [setPacketizeData](#), [setPacketizeVideo](#), [setRepeaterEdge](#), [setStreamStartupTimeout](#), [setStreamTimeout](#), [shutdown](#), [startStream](#), [touch](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.stream.livepacketizer.ILiveStreamPacketizer](#)

[getAndSetStartStream](#), [getApplicationInstance](#), [getLiveStreamPacketizerId](#), [getProperties](#), [getRepeaterLastSequence](#), [handlePacket](#), [init](#), [isActive](#), [isPacketizeAudio](#), [isPacketizeData](#), [isPacketizeVideo](#), [isRepeaterEdge](#), [resetStream](#), [setLiveStreamPacketizerId](#), [setPacketizeAudio](#), [setPacketizeData](#), [setPacketizeVideo](#), [setRepeaterEdge](#), [shutdown](#), [startStream](#), [touch](#)

Methods inherited from interface [com.wowza.wms.util.IIdleNotify](#)

[onIdle](#)

Methods inherited from interface [java.lang.Runnable](#)

[run](#)

Fields

STREAMMODE_TS

```
public static final int STREAMMODE_TS
```

Constant value: **1**

STREAMMODE_MP3

```
public static final int STREAMMODE_MP3
```

Constant value: **2**

STREAMMODE_AAC

```
public static final int STREAMMODE_AAC
```

Constant value: **3**

MAXCHUNKLOGCOUNT

```
public static final int MAXCHUNKLOGCOUNT
```

Constant value: **10**

CHUNKDURATIONTOLERANCE

```
public static final int CHUNKDURATIONTOLERANCE
```

Constant value: **500**

PLAYSTARTTOLERANCE

```
public static final int PLAYSTARTTOLERANCE
```

Constant value: **500**

AUDIOGROUPOCOUNT

```
public static final int AUDIOGROUPOCOUNT
```

Constant value: **3**

WAITFORCODECTIME

```
public static final int WAITFORCODECTIME
```

Constant value: **8000**

CLASS

```
protected static final java.lang.Class CLASS
```

CLASSNAME

```
protected static final java.lang.String CLASSNAME
```

Constant value: **LiveStreamPacketizerMPEGDash**

props

```
protected com.wowza.wms.application.WMSProperties props
```

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appProps

protected com.wowza.wms.application.WMSProperties **appProps**

randomSessionStr

protected java.lang.String **randomSessionStr**

liveRepeaterEncryptionSharedSecret

protected java.lang.String **liveRepeaterEncryptionSharedSecret**

originRepeaterContext

protected java.lang.String **originRepeaterContext**

Constructors

LiveStreamPacketizerMPEGDash

```
public LiveStreamPacketizerMPEGDash()
```

Methods

init

```
public void init(String streamName,  
                String packetizerName,  
                IApplicationInstance appInstance,  
                LiveStreamPacketizerItem liveStreamPacketizerItem)
```

updateCencInfo

```
public CencInfo updateCencInfo(long chunkId)
```

getLock

```
public Object getLock()
```

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internalHandlePacket

```
public void internalHandlePacket(IMediaStream stream,  
    AMFPacket packet)
```

internalStartStream

```
public void internalStartStream(IMediaStream stream)
```

internalResetStream

```
public void internalResetStream(IMediaStream stream)
```

getDefaultChunkSetIndex

```
public int getDefaultChunkSetIndex()
```

getDefaultChunkFormat

```
public int getDefaultChunkFormat()
```

indexStream

```
public void indexStream(HTTPStreamerMPEGDashLiveIndexItem indexItem)
```

getChunkCount

```
public int getChunkCount()
```

getChunkCountMedia

```
public int getChunkCountMedia()
```

getChunkCountVideo

```
public int getChunkCountVideo()
```

getChunkCountAudio

```
public int getChunkCountAudio()
```

(continued from last page)

getFrameRate

```
public double getFrameRate()
```

setAudioCodec

```
public void setAudioCodec(int codecId)
```

setVideoCodec

```
public void setVideoCodec(int codecId)
```

getAudioChunkByTime

```
public MPEGDashDashChunk getAudioChunkByTime(int chunkFormat,  
long time)
```

getVideoChunkByTime

```
public MPEGDashDashChunk getVideoChunkByTime(int chunkFormat,  
long time)
```

getMediaChunkByTime

```
public MPEGDashDashChunk getMediaChunkByTime(int chunkFormat,  
long time)
```

getAudioChunk

```
public MPEGDashDashChunk getAudioChunk(int chunkFormat,  
long index)
```

getVideoChunk

```
public MPEGDashDashChunk getVideoChunk(int chunkFormat,  
long index)
```

(continued from last page)

getMediaChunk

```
public MPEGDashDashChunk getMediaChunk(int chunkFormat,  
long index)
```

getAudioInit

```
public MPEGDashDashChunk getAudioInit(int chunkFormat)
```

getVideoInit

```
public MPEGDashDashChunk getVideoInit(int chunkFormat)
```

getMediaInit

```
public MPEGDashDashChunk getMediaInit(int chunkFormat)
```

getVideoMimeType

```
public String getVideoMimeType(int chunkFormat)
```

getAudioMimeType

```
public String getAudioMimeType(int chunkFormat)
```

getMediaMimeType

```
public String getMediaMimeType(int chunkFormat)
```

getBitrateAudio

```
public long getBitrateAudio()
```

getBitrateVideo

```
public long getBitrateVideo()
```

getBitrate

```
public long getBitrate()
```

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getCodecInfoVideo

```
public com.wowza.wms.media.model.MediaCodecInfoVideo getCodecInfoVideo()
```

setCodecInfoVideo

```
public void setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo)
```

getCodecInfoAudio

```
public com.wowza.wms.media.model.MediaCodecInfoAudio getCodecInfoAudio()
```

setCodecInfoAudio

```
public void setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
codecInfoAudio)
```

startChunk

```
public void startChunk(long chunkId,  
    long chunkIdUser,  
    int streamMode,  
    int videoCodecId,  
    int audioCodecId,  
    long timecode,  
    long timecodeUser,  
    String originRepeaterContext,  
    CencInfo encInfo)
```

endChunk

```
public void endChunk(long timecode,  
    long timecodeAudio)
```

addToChunk

```
public void addToChunk(LiveStreamPacketizerPacketHolder holder)
```

resetStream

```
public void resetStream()
```

repeaterItemsMPEGDashflushed

```
public void repeaterItemsMPEGDashflushed()
```

getRepeaterLastSequence

```
public long getRepeaterLastSequence()
```

getRepeaterItemsMPEGDash

```
public void getRepeaterItemsMPEGDash(java.util.List items,  
    long seq)
```

isRandomizeMediaName

```
public boolean isRandomizeMediaName()
```

setRandomizeMediaName

```
public void setRandomizeMediaName(boolean randomizeMediaName)
```

isPlaylistReady

```
public boolean isPlaylistReady()
```

getVideoChunkIdFirst

```
public long getVideoChunkIdFirst()
```

getAudioChunkIdFirst

```
public long getAudioChunkIdFirst()
```

getVideoChunkIdLast

```
public long getVideoChunkIdLast()
```

(continued from last page)

getAudioChunkIdLast

```
public long getAudioChunkIdLast()
```

getRandomSessionStr

```
public String getRandomSessionStr()
```

getChunkDurationTarget

```
public int getChunkDurationTarget()
```

getPlaylistChunkCount

```
public int getPlaylistChunkCount()
```

getStreamStartDate

```
public java.util.Date getStreamStartDate()
```

getChunkDurationTarget

```
public static int getChunkDurationTarget(IApplicationInstance appInstance,  
    String packetizer)
```

getMinimumUpdatePeriod

```
public long getMinimumUpdatePeriod()
```

isHbbtvLiveProfileEnabled

```
public boolean isHbbtvLiveProfileEnabled()
```

getAdditionalLiveProfiles

```
public String getAdditionalLiveProfiles()
```

getEncInfo

```
public CencInfo getEncInfo()
```

(continued from last page)

getChunkIdHandler

```
public IHTTPStreamerMPEGDashLiveStreamPacketizerChunkIdHandler getChunkIdHandler()
```

setChunkIdHandler

```
public void setChunkIdHandler(IHTTPStreamerMPEGDashLiveStreamPacketizerChunkIdHandler  
chunkIdHandler)
```

com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer Class MPEGDashDashChunk

java.lang.Object



com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer.MPEGDashDashChunk

```
public class MPEGDashDashChunk
extends Object
```

Constructor Summary

public	MPEGDashDashChunk (int chunkType, long chunkIndex)
public	MPEGDashDashChunk ()

Method Summary

long	getChunkIndex ()
int	getChunkType ()
java.util.Date	getCreationDate ()
long	getDuration ()
PacketFragmentList	getFragments ()
long	getTimecode ()
long	getTimescale ()
int	getVODTranscoderBitrate ()
boolean	isFillSuccessful ()
void	setChunkIndex (long chunkIndex)
void	setChunkType (int chunkType)
void	setDuration (long duration)
void	setFillSuccessful (boolean fillSuccessful)
void	setTimecode (long timecode)

void	setTimescale (long timescale)
void	setVODTranscoderBitrate (int vodTranscoderBitrate)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

MPEGDashDashChunk

```
public MPEGDashDashChunk(int chunkType,  
                          long chunkIndex)
```

MPEGDashDashChunk

```
public MPEGDashDashChunk()
```

Methods

getFragments

```
public PacketFragmentList getFragments()
```

getTimecode

```
public long getTimecode()
```

setTimecode

```
public void setTimecode(long timecode)
```

getDuration

```
public long getDuration()
```

setDuration

```
public void setDuration(long duration)
```

getChunkType

```
public int getChunkType()
```

setChunkType

```
public void setChunkType(int chunkType)
```

getTimescale

```
public long getTimescale()
```

setTimescale

```
public void setTimescale(long timescale)
```

getChunkIndex

```
public long getChunkIndex()
```

setChunkIndex

```
public void setChunkIndex(long chunkIndex)
```

getCreationDate

```
public java.util.Date getCreationDate()
```

isFillSuccessful

```
public boolean isFillSuccessful()
```

setFillSuccessful

```
public void setFillSuccessful(boolean fillSuccessful)
```

getVODTranscoderBitrate

```
public int getVODTranscoderBitrate()
```

(continued from last page)

setVODTranscoderBitrate

```
public void setVODTranscoderBitrate(int vodTranscoderBitrate)
```


com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer Class MPEGDashDashChunkDescription

java.lang.Object



com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer.MPEGDashDashChunkDescription

```
public class MPEGDashDashChunkDescription
extends Object
```

Constructor Summary

public	MPEGDashDashChunkDescription()
--------	--

Method Summary

int	getChunkFormat()
int	getVODTranscoderBitrate()
void	setChunkFormat(int chunkFormat)
void	setVODTranscoderBitrate(int vodTranscoderBitrate)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MPEGDashDashChunkDescription

```
public MPEGDashDashChunkDescription()
```

Methods

getChunkFormat

```
public int getChunkFormat()
```

(continued from last page)

setChunkFormat

```
public void setChunkFormat(int chunkFormat)
```

getVODTranscoderBitrate

```
public int getVODTranscoderBitrate()
```

setVODTranscoderBitrate

```
public void setVODTranscoderBitrate(int vodTranscoderBitrate)
```

Package

com.wowza.wms.httpstreamer.mpegdashstreaming.util

com.wowza.wms.httpstreamer.mpegdashstreaming.util Class IMPEGDashConstants

java.lang.Object

└-com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants

public class **IMPEGDashConstants**
extends Object

Nested Class Summary

class	IMPEGDashConstants.UTCTiming IMPEGDashConstants.UTCTiming
-------	--

Field Summary

public static final	ADAPTION_SET_KEY_ASPECT_RATIO_VAL Value: parValue
public static final	ADAPTION_SET_KEY_CHUNK_FAMILY Value: cfam
public static final	ADAPTION_SET_KEY_CHUNK_FORMAT Value: cf
public static final	ADAPTION_SET_KEY_ESSENTIAL_PROPERTIES Value: essentialProp
public static final	ADAPTION_SET_KEY_LANGUAGE Value: lang
public static final	ADAPTION_SET_KEY_ROLE Value: role
public static final	CHUNK_FORMAT_FILEEXT
public static final	CHUNK_FORMAT_M4S Value: 0
public static final	CHUNK_FORMAT_STRINGS
public static final	CHUNK_FORMAT_TS Value: 1
public static final	CHUNK_FORMAT_UNKNOWN Value: -1

public static final	CHUNK_FORMAT_WEBM Value: 2
public static final	CHUNK_NAME Value: chunk
public static final	CHUNK_TYPE_AUDIO Value: 2
public static final	CHUNK_TYPE_DATA Value: 3
public static final	CHUNK_TYPE_MEDIA Value: 0
public static final	CHUNK_TYPE_STRINGS
public static final	CHUNK_TYPE_UNKNOWN Value: -1
public static final	CHUNK_TYPE_VIDEO Value: 1
public static final	CHUNKSET_M4S_AV Value: 0
public static final	CHUNKSET_M4S_MUXED Value: 1
public static final	CHUNKSET_TOTAL Value: 4
public static final	CHUNKSET_TS Value: 2
public static final	CHUNKSET_UNKNOWN Value: -1
public static final	CHUNKSET_WEBM Value: 3
public static final	CRLF_STR Value:
public static final	DEFAULT_CHUNKDURATIONTARGET Value: 10000

public static final	DEFAULT_CORS_ENABLED Value: true
public static final	DEFAULT_MAXCHUNKCOUNT Value: 5
public static final	DEFAULT_PLAYLISTCHUNKCOUNT Value: 5
public static final	DEFAULT_PROPERTY_DASH_AVAILABILITYSTARTTIME_ADJUSTMENT Value: 6000
public static final	DEFAULT_PROPERTY_DASH_HTTP_REDIRECT_DEFAULT_STATUS_CODE Value: 307
public static final	DEFAULT_REPEATERCHUNKCOUNT Value: -1
public static final	DEFAULT_UTCTIMING_HTTP_HEAD_LIST Value: <code>\${com.wowza.wms.context.ApplicationInstance.MPEGDash.domain}/ dashtime.txt</code>
public static final	DEFAULT_UTCTIMING_SCHEME_ORDER Value: direct
public static final	DEFAULT_VIDEO_TIMESCALE Value: 90000
public static final	INITIALIZATION_CHUNK_INDEX Value: -1
public static final	LANGUAGEIDKEY Value: 1
public static final	LEVEL1 Value:
public static final	LEVEL2 Value:
public static final	LEVEL3 Value:
public static final	LEVEL4 Value:
public static final	LEVEL5 Value:

public static final	MANIFEST_PLACEHOLDER_APPINSTANCE Value: {appInstance}
public static final	MANIFEST_PLACEHOLDER_APPLICATION Value: {application}
public static final	MANIFEST_PLACEHOLDER_BASEURLDOMAIN Value: {domain-baseurl}
public static final	MANIFEST_PLACEHOLDER_BITRATE_AUDIO Value: {bitrate-audio}
public static final	MANIFEST_PLACEHOLDER_BITRATE_MEDIA Value: {bitrate-media}
public static final	MANIFEST_PLACEHOLDER_BITRATE_VIDEO Value: {bitrate-video}
public static final	MANIFEST_PLACEHOLDER_CHUNK_QUERYSTRING Value: {chunk-query-str}
public static final	MANIFEST_PLACEHOLDER_DOMAIN Value: {domain}
public static final	MANIFEST_PLACEHOLDER_FILENAME Value: {filename}
public static final	MANIFEST_PLACEHOLDER_LANGUAGE Value: {language}
public static final	MANIFEST_PLACEHOLDER_MPDBASEURL Value: {mpd-baseurl}
public static final	MANIFEST_PLACEHOLDER_MPDBASEURLXML Value: <BaseURL>{domain-baseurl}/{application}/{appInstance}/{stream}</BaseURL>
public static final	MANIFEST_PLACEHOLDER_MPDLOCATION Value: {mpd-location}
public static final	MANIFEST_PLACEHOLDER_MPDLOCATION_QUERYSTRING Value: {mpdloc-query-str}
public static final	MANIFEST_PLACEHOLDER_MPDLOCATIONXML Value: <Location>{domain}/{application}/{appInstance}/{stream}/{filename}{mpdloc-query-str}</Location>

public static final	MANIFEST_PLACEHOLDER_MPDLOCATIONXML_NOAPPINST Value: <Location>{domain}/{application}/{stream}/{filename}{mpdloc-query-str}</Location>
public static final	MANIFEST_PLACEHOLDER_NGRP Value: {ngrp}
public static final	MANIFEST_PLACEHOLDER_PLAYDURATION Value: {playDuration}
public static final	MANIFEST_PLACEHOLDER_PLAYSEEK Value: {playSeek}
public static final	MANIFEST_PLACEHOLDER_PLAYSTART Value: {playStart}
public static final	MANIFEST_PLACEHOLDER_QUERYENCODED Value: {query-encoded}
public static final	MANIFEST_PLACEHOLDER_REPRESENTATION_AUDIO Value: {representation-audio}
public static final	MANIFEST_PLACEHOLDER_REPRESENTATION_MEDIA Value: {representation-media}
public static final	MANIFEST_PLACEHOLDER_REPRESENTATION_VIDEO Value: {representation-video}
public static final	MANIFEST_PLACEHOLDER_SECURETOKEN Value: {secureToken}
public static final	MANIFEST_PLACEHOLDER_SESSIONID Value: {sessionid}
public static final	MANIFEST_PLACEHOLDER_STREAM Value: {stream}
public static final	MANIFEST_STRINGS
public static final	MANIFESTID_DEFAULT Value: 0
public static final	MANIFESTID_LISTBASED Value: 2
public static final	MANIFESTID_LISTBASED_AUDIO Value: 4

public static final	MANIFESTID_LISTBASED_VIDEO Value: 3
public static final	MANIFESTID_NUMBERBASED Value: 1
public static final	MANIFESTID_TIMEBASED Value: 0
public static final	MANIFESTID_UNKNOWN Value: -1
public static final	MAX_SUGGESTED_PRESENTATION_DELAY Value: 10000
public static final	MIMETYPE_AUDIO_WEBM Value: audio/webm
public static final	MIMETYPE_MEDIA_AAC_AUDIO Value: audio/x-aac
public static final	MIMETYPE_MEDIA_MP4_AUDIO Value: audio/mp4
public static final	MIMETYPE_MEDIA_MP4_VIDEO Value: video/mp4
public static final	MIMETYPE_MEDIA_MPEG_AUDIO Value: audio/mpeg
public static final	MIMETYPE_MEDIA_TS Value: video/mp2t
public static final	MIMETYPE_MEDIA_VTT_TEXT Value: text/vtt
public static final	MIMETYPE_MEDIA_WEBM Value: video/webm
public static final	MIMETYPE_VIDEO_WEBM Value: video/webm
public static final	MPD_3GPP_MIMETYPE Value: video/3gpp
public static final	MPD_AUDIO_CHAN_CONFIG_SCHEME_URI_DOLBY Value: urn:dolby:dash:audio_channel_configuration:2011

public static final	MPD_AUDIO_CHAN_CONFIG_SCHEME_URI_MPEG Value: urn:mpeg:dash:23003:3:audio_channel_configuration:2011
public static final	MPD_AUDIO_PURPOSE_CLASSIFICATION_SCHEME_URI Value: urn:tva:metadata:cs:AudioPurposeCS:2007
public static final	MPD_M4S_MIMETYPE_AUDIO Value: audio/mp4
public static final	MPD_M4S_MIMETYPE_VIDEO Value: video/mp4
public static final	MPD_M4S_XMLNS Value: urn:mpeg:dash:schema:mpd:2011
public static final	MPD_MP4_PROTECTION_SCHEME Value: urn:mpeg:dash:mp4protection:2011
public static final	MPD_MPEG2TS_PROTECTION_SCHEME Value: urn:mpeg:dash:13818:1:CA_descriptor:2011
public static final	MPD_MPEGB_SCHEMALOCATION Value: urn:mpeg:mpegB:schema:DASH:MPD:DIS2011
public static final	MPD_MPEGB_XMLNS Value: urn:mpeg:mpegB:schema:DASH:MPD:DIS2011
public static final	MPD_PROFILE_DASHIF Value: urn:com:dashif:dash264
public static final	MPD_PROFILE_M4S_FULL Value: urn:mpeg:dash:profile:full:2011
public static final	MPD_PROFILE_M4S_LIVE Value: urn:mpeg:dash:profile:isoff-live:2011
public static final	MPD_PROFILE_M4S_LIVE_HBBTV Value: urn:hbbtv:dash:profile:isoff-live:2011
public static final	MPD_PROFILE_M4S_MAIN Value: urn:mpeg:dash:profile:isoff-main:2011
public static final	MPD_PROFILE_MPEGB_FULL Value: urn:mpeg:mpegB:profile:dash:isoff-basic-on-demand:cm
public static final	MPD_PROFILE_WEBM_VOD Value: urn:webm:dash:profile:webm-on-demand:2012

public static final	MPD_ROLE_SCHEME_URI Value: urn:mpeg:dash:role:2011
public static final	MPD_UTCTIMING_SCHEME_URI_DIRECT Value: urn:mpeg:dash:utc:direct:2014
public static final	MPD_UTCTIMING_SCHEME_URI_HTTP_HEAD Value: urn:mpeg:dash:utc:http-head:2014
public static final	MPD_UTCTIMING_SCHEME_URI_HTTP_ISO Value: urn:mpeg:dash:utc:http-iso:2014
public static final	MPD_UTCTIMING_SCHEME_URI_HTTP_NTP Value: urn:mpeg:dash:utc:http-ntp:2014
public static final	MPD_UTCTIMING_SCHEME_URI_HTTP_XSDATE Value: urn:mpeg:dash:utc:http-xsdate:2014
public static final	MPD_UTCTIMING_SCHEME_URI_NTP Value: urn:mpeg:dash:utc:ntp:2014
public static final	MPD_UTCTIMING_SCHEME_URI_Sntp Value: urn:mpeg:dash:utc:sntp:2014
public static final	MPD_WEBM_MIMETYPE Value: video/webm
public static final	MPD_WEBM_XMLNS Value: urn:webm:dash:profile:webm-on-demand:2012
public static final	MPD_XMLNS_CENC Value: urn:mpeg:cenc:2013
public static final	MPD_XMLNS_PLAYREADY Value: urn:microsoft:playready
public static final	MPD_XMLNS_XLINK Value: http://www.w3.org/1999/xlink
public static final	MPD_XMLNS_XSI Value: http://www.w3.org/2001/XMLSchema-instance
public static final	MPD_XSI_SCHEMALOCATION Value: urn:mpeg:DASH:schema:MPD:2011 http://standards.iso.org/ittf/PubliclyAvailableStandards/MPEG-DASH_schema_files/DASH-MPD.xsd

public static final	MPEGDASH_DOMAIN_ENV_PARAM Value: com.wowza.wms.context.ApplicationInstance.MPEGDash.domain
public static final	MPEGDASH_DOMAIN_ENV_VARIABLE Value: #{com.wowza.wms.context.ApplicationInstance.MPEGDash.domain}
public static final	PARAMETERDELIMITERKEY Value: _
public static final	PROFILE_DEFAULT Value: 2
public static final	PROFILE_M4S_DISCRETE Value: 2
public static final	PROFILE_M4S_MUXED Value: 3
public static final	PROFILE_STRING_M4S_DISCRETE
public static final	PROFILE_STRING_M4S_MUXED
public static final	PROFILE_STRING_TS
public static final	PROFILE_STRING_WEBM_DISCRETE
public static final	PROFILE_STRING_WEBM_MUXED
public static final	PROFILE_STRINGS
public static final	PROFILE_TOTAL Value: 5
public static final	PROFILE_TS Value: 4
public static final	PROFILE_UNKNOWN Value: -1
public static final	PROFILE_WEBM_DISCRETE Value: 0
public static final	PROFILE_WEBM_MUXED Value: 1
public static final	schemePattern

public static final	valuePattern
public static final	XMLHEADER_10_UTF8 Value: <?xml version="1.0" encoding="UTF-8"?>

Constructor Summary

public	MPEGDashConstants()
--------	-------------------------------------

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

DEFAULT_CHUNKDURATIONTARGET

```
public static final int DEFAULT_CHUNKDURATIONTARGET
```

Constant value: **10000**

DEFAULT_MAXCHUNKCOUNT

```
public static final int DEFAULT_MAXCHUNKCOUNT
```

Constant value: **5**

DEFAULT_PLAYLISTCHUNKCOUNT

```
public static final int DEFAULT_PLAYLISTCHUNKCOUNT
```

Constant value: **5**

DEFAULT_REPEATERCHUNKCOUNT

```
public static final int DEFAULT_REPEATERCHUNKCOUNT
```

Constant value: **-1**

LANGUAGEIDKEY

```
public static final java.lang.String LANGUAGEIDKEY
```

Constant value: **1**

PARAMETERDELIMITERKEY

```
public static final java.lang.String PARAMETERDELIMITERKEY
```

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Constant value: **_**

CHUNK_TYPE_UNKNOWN

```
public static final int CHUNK_TYPE_UNKNOWN
```

Constant value: **-1**

CHUNK_TYPE_MEDIA

```
public static final int CHUNK_TYPE_MEDIA
```

Constant value: **0**

CHUNK_TYPE_VIDEO

```
public static final int CHUNK_TYPE_VIDEO
```

Constant value: **1**

CHUNK_TYPE_AUDIO

```
public static final int CHUNK_TYPE_AUDIO
```

Constant value: **2**

CHUNK_TYPE_DATA

```
public static final int CHUNK_TYPE_DATA
```

Constant value: **3**

CHUNK_TYPE_STRINGS

```
public static final java.lang.String CHUNK_TYPE_STRINGS
```

CHUNK_FORMAT_UNKNOWN

```
public static final int CHUNK_FORMAT_UNKNOWN
```

Constant value: **-1**

CHUNK_FORMAT_M4S

```
public static final int CHUNK_FORMAT_M4S
```

Constant value: **0**

(continued from last page)

CHUNK_FORMAT_TS

```
public static final int CHUNK_FORMAT_TS
```

Constant value: **1**

CHUNK_FORMAT_WEBM

```
public static final int CHUNK_FORMAT_WEBM
```

Constant value: **2**

CHUNK_FORMAT_STRINGS

```
public static final java.lang.String CHUNK_FORMAT_STRINGS
```

CHUNK_FORMAT_FILEXT

```
public static final java.lang.String CHUNK_FORMAT_FILEXT
```

INITIALIZATION_CHUNK_INDEX

```
public static final int INITIALIZATION_CHUNK_INDEX
```

Constant value: **-1**

CHUNKSET_UNKNOWN

```
public static final int CHUNKSET_UNKNOWN
```

Constant value: **-1**

CHUNKSET_M4S_AV

```
public static final int CHUNKSET_M4S_AV
```

Constant value: **0**

CHUNKSET_M4S_MUXED

```
public static final int CHUNKSET_M4S_MUXED
```

Constant value: **1**

CHUNKSET_TS

```
public static final int CHUNKSET_TS
```

(continued from last page)

Constant value: **2**

CHUNKSET_WEBM

```
public static final int CHUNKSET_WEBM
```

Constant value: **3**

CHUNKSET_TOTAL

```
public static final int CHUNKSET_TOTAL
```

Constant value: **4**

MIMETYPE_MEDIA_WEBM

```
public static final java.lang.String MIMETYPE_MEDIA_WEBM
```

Constant value: **video/webm**

MIMETYPE_VIDEO_WEBM

```
public static final java.lang.String MIMETYPE_VIDEO_WEBM
```

Constant value: **video/webm**

MIMETYPE_AUDIO_WEBM

```
public static final java.lang.String MIMETYPE_AUDIO_WEBM
```

Constant value: **audio/webm**

MIMETYPE_MEDIA_MP4_VIDEO

```
public static final java.lang.String MIMETYPE_MEDIA_MP4_VIDEO
```

Constant value: **video/mp4**

MIMETYPE_MEDIA_MP4_AUDIO

```
public static final java.lang.String MIMETYPE_MEDIA_MP4_AUDIO
```

Constant value: **audio/mp4**

MIMETYPE_MEDIA_TS

```
public static final java.lang.String MIMETYPE_MEDIA_TS
```

Constant value: **video/mp2t**

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MIMETYPE_MEDIA_MPEG_AUDIO

```
public static final java.lang.String MIMETYPE_MEDIA_MPEG_AUDIO
```

Constant value: **audio/mpeg**

MIMETYPE_MEDIA_AAC_AUDIO

```
public static final java.lang.String MIMETYPE_MEDIA_AAC_AUDIO
```

Constant value: **audio/x-aac**

MIMETYPE_MEDIA_VTT_TEXT

```
public static final java.lang.String MIMETYPE_MEDIA_VTT_TEXT
```

Constant value: **text/vtt**

MANIFESTID_UNKNOWN

```
public static final int MANIFESTID_UNKNOWN
```

Constant value: **-1**

MANIFESTID_TIMEBASED

```
public static final int MANIFESTID_TIMEBASED
```

Constant value: **0**

MANIFESTID_NUMBERBASED

```
public static final int MANIFESTID_NUMBERBASED
```

Constant value: **1**

MANIFESTID_LISTBASED

```
public static final int MANIFESTID_LISTBASED
```

Constant value: **2**

MANIFESTID_LISTBASED_VIDEO

```
public static final int MANIFESTID_LISTBASED_VIDEO
```

Constant value: **3**

MANIFESTID_LISTBASED_AUDIO

```
public static final int MANIFESTID_LISTBASED_AUDIO
```

(continued from last page)

Constant value: **4**

MANIFESTID_DEFAULT

```
public static final int MANIFESTID_DEFAULT
```

Constant value: **0**

MANIFEST_STRINGS

```
public static final java.lang.String MANIFEST_STRINGS
```

LEVEL1

```
public static final java.lang.String LEVEL1
```

Constant value:

LEVEL2

```
public static final java.lang.String LEVEL2
```

Constant value:

LEVEL3

```
public static final java.lang.String LEVEL3
```

Constant value:

LEVEL4

```
public static final java.lang.String LEVEL4
```

Constant value:

LEVEL5

```
public static final java.lang.String LEVEL5
```

Constant value:

CRLF_STR

```
public static final java.lang.String CRLF_STR
```

Constant value:

(continued from last page)

MANIFEST_PLACEHOLDER_SECURETOKEN

```
public static final java.lang.String MANIFEST_PLACEHOLDER_SECURETOKEN
```

Constant value: **{secureToken}**

MANIFEST_PLACEHOLDER_PLAYSTART

```
public static final java.lang.String MANIFEST_PLACEHOLDER_PLAYSTART
```

Constant value: **{playStart}**

MANIFEST_PLACEHOLDER_PLAYDURATION

```
public static final java.lang.String MANIFEST_PLACEHOLDER_PLAYDURATION
```

Constant value: **{playDuration}**

MANIFEST_PLACEHOLDER_PLAYSEEK

```
public static final java.lang.String MANIFEST_PLACEHOLDER_PLAYSEEK
```

Constant value: **{playSeek}**

MANIFEST_PLACEHOLDER_NGRP

```
public static final java.lang.String MANIFEST_PLACEHOLDER_NGRP
```

Constant value: **{ngrp}**

MANIFEST_PLACEHOLDER_MPDLOCATION_QUERYSTRING

```
public static final java.lang.String MANIFEST_PLACEHOLDER_MPDLOCATION_QUERYSTRING
```

Constant value: **{mpdloc-query-str}**

MANIFEST_PLACEHOLDER_CHUNK_QUERYSTRING

```
public static final java.lang.String MANIFEST_PLACEHOLDER_CHUNK_QUERYSTRING
```

Constant value: **{chunk-query-str}**

MANIFEST_PLACEHOLDER_QUERYENCODED

```
public static final java.lang.String MANIFEST_PLACEHOLDER_QUERYENCODED
```

Constant value: **{query-encoded}**

MANIFEST_PLACEHOLDER_SESSIONID

```
public static final java.lang.String MANIFEST_PLACEHOLDER_SESSIONID
```

(continued from last page)

Constant value: **{sessionid}**

MANIFEST_PLACEHOLDER_LANGUAGE

```
public static final java.lang.String MANIFEST_PLACEHOLDER_LANGUAGE
```

Constant value: **{language}**

MANIFEST_PLACEHOLDER_DOMAIN

```
public static final java.lang.String MANIFEST_PLACEHOLDER_DOMAIN
```

Constant value: **{domain}**

MANIFEST_PLACEHOLDER_BASEURLDOMAIN

```
public static final java.lang.String MANIFEST_PLACEHOLDER_BASEURLDOMAIN
```

Constant value: **{domain-baseurl}**

MANIFEST_PLACEHOLDER_APPLICATION

```
public static final java.lang.String MANIFEST_PLACEHOLDER_APPLICATION
```

Constant value: **{application}**

MANIFEST_PLACEHOLDER_APPINSTANCE

```
public static final java.lang.String MANIFEST_PLACEHOLDER_APPINSTANCE
```

Constant value: **{appInstance}**

MANIFEST_PLACEHOLDER_STREAM

```
public static final java.lang.String MANIFEST_PLACEHOLDER_STREAM
```

Constant value: **{stream}**

MANIFEST_PLACEHOLDER_FILENAME

```
public static final java.lang.String MANIFEST_PLACEHOLDER_FILENAME
```

Constant value: **{filename}**

MANIFEST_PLACEHOLDER_MPDLOCATION

```
public static final java.lang.String MANIFEST_PLACEHOLDER_MPDLOCATION
```

Constant value: **{mpd-location}**

MANIFEST_PLACEHOLDER_MPDLOCATIONXML

```
public static final java.lang.String MANIFEST_PLACEHOLDER_MPDLOCATIONXML
```

Constant value:

```
<Location>{domain}/{application}/{appInstance}/{stream}/{filename}{mpdloc-query-str}</Location>
```

MANIFEST_PLACEHOLDER_MPDLOCATIONXML_NOAPPINST

```
public static final java.lang.String MANIFEST_PLACEHOLDER_MPDLOCATIONXML_NOAPPINST
```

Constant value: <Location>{domain}/{application}/{stream}/{filename}{mpdloc-query-str}</Location>

MANIFEST_PLACEHOLDER_MPDBASEURL

```
public static final java.lang.String MANIFEST_PLACEHOLDER_MPDBASEURL
```

Constant value: {mpd-baseurl}

MANIFEST_PLACEHOLDER_MPDBASEURLXML

```
public static final java.lang.String MANIFEST_PLACEHOLDER_MPDBASEURLXML
```

Constant value: <BaseURL>{domain-baseurl}/{application}/{appInstance}/{stream}</BaseURL>

MANIFEST_PLACEHOLDER_REPRESENTATION_MEDIA

```
public static final java.lang.String MANIFEST_PLACEHOLDER_REPRESENTATION_MEDIA
```

Constant value: {representation-media}

MANIFEST_PLACEHOLDER_REPRESENTATION_AUDIO

```
public static final java.lang.String MANIFEST_PLACEHOLDER_REPRESENTATION_AUDIO
```

Constant value: {representation-audio}

MANIFEST_PLACEHOLDER_REPRESENTATION_VIDEO

```
public static final java.lang.String MANIFEST_PLACEHOLDER_REPRESENTATION_VIDEO
```

Constant value: {representation-video}

MANIFEST_PLACEHOLDER_BITRATE_MEDIA

```
public static final java.lang.String MANIFEST_PLACEHOLDER_BITRATE_MEDIA
```

Constant value: {bitrate-media}

MANIFEST_PLACEHOLDER_BITRATE_AUDIO

```
public static final java.lang.String MANIFEST_PLACEHOLDER_BITRATE_AUDIO
```

Constant value: `{bitrate-audio}`

MANIFEST_PLACEHOLDER_BITRATE_VIDEO

```
public static final java.lang.String MANIFEST_PLACEHOLDER_BITRATE_VIDEO
```

Constant value: `{bitrate-video}`

CHUNK_NAME

```
public static final java.lang.String CHUNK_NAME
```

Constant value: `chunk`

MPEGDASH_DOMAIN_ENV_PARAM

```
public static final java.lang.String MPEGDASH_DOMAIN_ENV_PARAM
```

Constant value: `com.wowza.wms.context.ApplicationInstance.MPEGDash.domain`

MPEGDASH_DOMAIN_ENV_VARIABLE

```
public static final java.lang.String MPEGDASH_DOMAIN_ENV_VARIABLE
```

Constant value: `${com.wowza.wms.context.ApplicationInstance.MPEGDash.domain}`

PROFILE_STRING_WEBM_DISCRETE

```
public static final java.lang.String PROFILE_STRING_WEBM_DISCRETE
```

PROFILE_STRING_WEBM_MUXED

```
public static final java.lang.String PROFILE_STRING_WEBM_MUXED
```

PROFILE_STRING_M4S_DISCRETE

```
public static final java.lang.String PROFILE_STRING_M4S_DISCRETE
```

PROFILE_STRING_M4S_MUXED

```
public static final java.lang.String PROFILE_STRING_M4S_MUXED
```

PROFILE_STRING_TS

```
public static final java.lang.String PROFILE_STRING_TS
```

PROFILE_UNKNOWN

```
public static final int PROFILE_UNKNOWN
```

Constant value: -1

PROFILE_WEBM_DISCRETE

```
public static final int PROFILE_WEBM_DISCRETE
```

Constant value: 0

PROFILE_WEBM_MUXED

```
public static final int PROFILE_WEBM_MUXED
```

Constant value: 1

PROFILE_M4S_DISCRETE

```
public static final int PROFILE_M4S_DISCRETE
```

Constant value: 2

PROFILE_M4S_MUXED

```
public static final int PROFILE_M4S_MUXED
```

Constant value: 3

PROFILE_TS

```
public static final int PROFILE_TS
```

Constant value: 4

PROFILE_TOTAL

```
public static final int PROFILE_TOTAL
```

Constant value: 5

PROFILE_DEFAULT

```
public static final int PROFILE_DEFAULT
```

(continued from last page)

Constant value: **2**

PROFILE_STRINGS

```
public static final java.lang.String PROFILE_STRINGS
```

MPD_WEBM_MIMETYPE

```
public static final java.lang.String MPD_WEBM_MIMETYPE
```

Constant value: **video/webm**

MPD_M4S_MIMETYPE_VIDEO

```
public static final java.lang.String MPD_M4S_MIMETYPE_VIDEO
```

Constant value: **video/mp4**

MPD_M4S_MIMETYPE_AUDIO

```
public static final java.lang.String MPD_M4S_MIMETYPE_AUDIO
```

Constant value: **audio/mp4**

MPD_3GPP_MIMETYPE

```
public static final java.lang.String MPD_3GPP_MIMETYPE
```

Constant value: **video/3gpp**

XMLHEADER_10_UTF8

```
public static final java.lang.String XMLHEADER_10_UTF8
```

Constant value: **<?xml version="1.0" encoding="UTF-8"?>**

MPD_XMLNS_XSI

```
public static final java.lang.String MPD_XMLNS_XSI
```

Constant value: **http://www.w3.org/2001/XMLSchema-instance**

MPD_XMLNS_PLAYREADY

```
public static final java.lang.String MPD_XMLNS_PLAYREADY
```

Constant value: **urn:microsoft:playready**

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MPD_MP4_PROTECTION_SCHEME

```
public static final java.lang.String MPD_MP4_PROTECTION_SCHEME
```

Constant value: **urn:mpeg:dash:mp4protection:2011**

MPD_MPEG2TS_PROTECTION_SCHEME

```
public static final java.lang.String MPD_MPEG2TS_PROTECTION_SCHEME
```

Constant value: **urn:mpeg:dash:13818:1:CA_descriptor:2011**

MPD_XMLNS_CENC

```
public static final java.lang.String MPD_XMLNS_CENC
```

Constant value: **urn:mpeg:cenc:2013**

MPD_XSI_SCHEMALOCATION

```
public static final java.lang.String MPD_XSI_SCHEMALOCATION
```

Constant value: **urn:mpeg:DASH:schema:MPD:2011**
http://standards.iso.org/ittf/PubliclyAvailableStandards/MPEG-DASH_schema_files/DASH-MPD.xsd

MPD_MPEGB_SCHEMALOCATION

```
public static final java.lang.String MPD_MPEGB_SCHEMALOCATION
```

Constant value: **urn:mpeg:mpegB:schema:DASH:MPD:DIS2011**

MPD_XMLNS_XLINK

```
public static final java.lang.String MPD_XMLNS_XLINK
```

Constant value: **http://www.w3.org/1999/xlink**

MPD_WEBM_XMLNS

```
public static final java.lang.String MPD_WEBM_XMLNS
```

Constant value: **urn:webm:dash:profile:webm-on-demand:2012**

MPD_M4S_XMLNS

```
public static final java.lang.String MPD_M4S_XMLNS
```

Constant value: **urn:mpeg:dash:schema:mpd:2011**

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MPD_MPEGB_XMLNS

```
public static final java.lang.String MPD_MPEGB_XMLNS
```

Constant value: **urn:mpeg:mpegB:schema:DASH:MPD:DIS2011**

MPD_PROFILE_WEBM_VOD

```
public static final java.lang.String MPD_PROFILE_WEBM_VOD
```

Constant value: **urn:webm:dash:profile:webm-on-demand:2012**

MPD_PROFILE_M4S_MAIN

```
public static final java.lang.String MPD_PROFILE_M4S_MAIN
```

Constant value: **urn:mpeg:dash:profile:isoff-main:2011**

MPD_PROFILE_M4S_LIVE

```
public static final java.lang.String MPD_PROFILE_M4S_LIVE
```

Constant value: **urn:mpeg:dash:profile:isoff-live:2011**

MPD_PROFILE_M4S_FULL

```
public static final java.lang.String MPD_PROFILE_M4S_FULL
```

Constant value: **urn:mpeg:dash:profile:full:2011**

MPD_PROFILE_MPEGB_FULL

```
public static final java.lang.String MPD_PROFILE_MPEGB_FULL
```

Constant value: **urn:mpeg:mpegB:profile:dash:isoff-basic-on-demand:cm**

MPD_PROFILE_DASHIF

```
public static final java.lang.String MPD_PROFILE_DASHIF
```

Constant value: **urn:com:dashif:dash264**

MPD_PROFILE_M4S_LIVE_HBBTV

```
public static final java.lang.String MPD_PROFILE_M4S_LIVE_HBBTV
```

Constant value: **urn:hbbtv:dash:profile:isoff-live:2011**

MPD_AUDIO_CHAN_CONFIG_SCHEME_URI_MPEG

```
public static final java.lang.String MPD_AUDIO_CHAN_CONFIG_SCHEME_URI_MPEG
```

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Constant value: **urn:mpeg:dash:23003:3:audio_channel_configuration:2011**

MPD_AUDIO_CHAN_CONFIG_SCHEME_URI_DOLBY

public static final java.lang.String **MPD_AUDIO_CHAN_CONFIG_SCHEME_URI_DOLBY**

Constant value: **urn:dolby:dash:audio_channel_configuration:2011**

MPD_AUDIO_PURPOSE_CLASSIFICATION_SCHEME_URI

public static final java.lang.String **MPD_AUDIO_PURPOSE_CLASSIFICATION_SCHEME_URI**

Constant value: **urn:tva:metadata:cs:AudioPurposeCS:2007**

MPD_ROLE_SCHEME_URI

public static final java.lang.String **MPD_ROLE_SCHEME_URI**

Constant value: **urn:mpeg:dash:role:2011**

DEFAULT_PROPERTY_DASH_HTTP_REDIRECT_DEFAULT_STATUS_CODE

public static final int **DEFAULT_PROPERTY_DASH_HTTP_REDIRECT_DEFAULT_STATUS_CODE**

Constant value: **307**

DEFAULT_PROPERTY_DASH_AVAILABILITYSTARTTIME_ADJUSTMENT

public static final int **DEFAULT_PROPERTY_DASH_AVAILABILITYSTARTTIME_ADJUSTMENT**

Constant value: **6000**

MAX_SUGGESTED_PRESENTATION_DELAY

public static final int **MAX_SUGGESTED_PRESENTATION_DELAY**

Constant value: **10000**

DEFAULT_CORS_ENABLED

public static final boolean **DEFAULT_CORS_ENABLED**

Constant value: **true**

MPD_UTCTIMING_SCHEME_URI_DIRECT

public static final java.lang.String **MPD_UTCTIMING_SCHEME_URI_DIRECT**

Constant value: **urn:mpeg:dash:utc:direct:2014**

MPD_UTCTIMING_SCHEME_URI_HTTP_HEAD

public static final java.lang.String MPD_UTCTIMING_SCHEME_URI_HTTP_HEAD

Constant value: **urn:mpeg:dash:utc:http-head:2014**

MPD_UTCTIMING_SCHEME_URI_HTTP_XSDATE

public static final java.lang.String MPD_UTCTIMING_SCHEME_URI_HTTP_XSDATE

Constant value: **urn:mpeg:dash:utc:http-xsdate:2014**

MPD_UTCTIMING_SCHEME_URI_HTTP_ISO

public static final java.lang.String MPD_UTCTIMING_SCHEME_URI_HTTP_ISO

Constant value: **urn:mpeg:dash:utc:http-iso:2014**

MPD_UTCTIMING_SCHEME_URI_HTTP_NTP

public static final java.lang.String MPD_UTCTIMING_SCHEME_URI_HTTP_NTP

Constant value: **urn:mpeg:dash:utc:http-ntp:2014**

MPD_UTCTIMING_SCHEME_URI_NTP

public static final java.lang.String MPD_UTCTIMING_SCHEME_URI_NTP

Constant value: **urn:mpeg:dash:utc:ntp:2014**

MPD_UTCTIMING_SCHEME_URI_Sntp

public static final java.lang.String MPD_UTCTIMING_SCHEME_URI_Sntp

Constant value: **urn:mpeg:dash:utc:sntp:2014**

DEFAULT_UTCTIMING_SCHEME_ORDER

public static final java.lang.String DEFAULT_UTCTIMING_SCHEME_ORDER

Constant value: **direct**

DEFAULT_UTCTIMING_HTTP_HEAD_LIST

public static final java.lang.String DEFAULT_UTCTIMING_HTTP_HEAD_LIST

Constant value:
`\${com.wowza.wms.context.ApplicationInstance.MPEGDash.domain}/dashtime.txt`

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ADAPTION_SET_KEY_ROLE

```
public static final java.lang.String ADAPTION_SET_KEY_ROLE
```

Constant value: **role**

ADAPTION_SET_KEY_ASPECT_RATIO_VAL

```
public static final java.lang.String ADAPTION_SET_KEY_ASPECT_RATIO_VAL
```

Constant value: **parValue**

ADAPTION_SET_KEY_CHUNK_FORMAT

```
public static final java.lang.String ADAPTION_SET_KEY_CHUNK_FORMAT
```

Constant value: **cf**

ADAPTION_SET_KEY_CHUNK_FAMILY

```
public static final java.lang.String ADAPTION_SET_KEY_CHUNK_FAMILY
```

Constant value: **cfam**

ADAPTION_SET_KEY_LANGUAGE

```
public static final java.lang.String ADAPTION_SET_KEY_LANGUAGE
```

Constant value: **lang**

ADAPTION_SET_KEY_ESSENTIAL_PROPERTIES

```
public static final java.lang.String ADAPTION_SET_KEY_ESSENTIAL_PROPERTIES
```

Constant value: **essentialProp**

DEFAULT_VIDEO_TIMESCALE

```
public static final int DEFAULT_VIDEO_TIMESCALE
```

Constant value: **90000**

valuePattern

```
public static final java.util.regex.Pattern valuePattern
```

schemePattern

```
public static final java.util.regex.Pattern schemePattern
```

(continued from last page)

Constructors

IMPEGDashConstants

```
public IMPEGDashConstants()
```

com.wowza.wms.httpstreamer.mpegdashstreaming.util Class IMPEGDashConstants.UTCTiming

java.lang.Object

└- java.lang.Enum

└- com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants.UTCTiming

All Implemented Interfaces:

java.io.Serializable, Comparable

public static final class **IMPEGDashConstants.UTCTiming**
extends Enum

Field Summary

public static final	DIRECT
public static final	HTTP_HEAD
public static final	HTTP_ISO
public static final	HTTP_NTP
public static final	HTTP_XSDATE
public static final	NTP
public static final	SNTP
public static final	UNKNOWN

Method Summary

static IMPEGDashConstants.UTCTiming	fromString (String text)
String	toString ()
static IMPEGDashConstants.UTCTiming	valueOf (String name)
static IMPEGDashConstants.UTCTiming[]	values ()

Methods inherited from class java.lang.Enum

```
clone, compareTo, equals, finalize, getDeclaringClass, hashCode, name, ordinal,
toString, valueOf
```

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Methods inherited from interface java.lang.Comparable

```
compareTo
```

Fields

DIRECT

```
public static final
com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants.UTCTiming DIRECT
```

HTTP_HEAD

```
public static final
com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants.UTCTiming
HTTP_HEAD
```

NTP

```
public static final
com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants.UTCTiming NTP
```

SNTP

```
public static final
com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants.UTCTiming SNTP
```

HTTP_XSDATE

```
public static final
com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants.UTCTiming
HTTP_XSDATE
```

HTTP_ISO

```
public static final
com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants.UTCTiming
HTTP_ISO
```


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HTTP_NTP

```
public static final
com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants.UTCTiming
HTTP_NTP
```

UNKNOWN

```
public static final
com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants.UTCTiming UNKNOWN
```

Methods

values

```
public static IMPEGDashConstants.UTCTiming\[\] values()
```

valueOf

```
public static IMPEGDashConstants.UTCTiming valueOf(String name)
```

toString

```
public String toString()
```

fromString

```
public static IMPEGDashConstants.UTCTiming fromString(String text)
```

com.wowza.wms.httpstreamer.mpegdashstreaming.util Class MPEGDashUtils

java.lang.Object

└─com.wowza.wms.httpstreamer.mpegdashstreaming.util.MPEGDashUtils

public class **MPEGDashUtils**
extends Object

Constructor Summary

public	MPEGDashUtils()
--------	---------------------------------

Method Summary

static String	audioCodecIdToString (int codecId, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
static int	chunkFormatStrToId (String value)
static String	chunkTypeIdToStr (int id)
static int	chunkTypeStrToId (String value)
static String	codecInfoAudioToCodecsStr (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
static String	codecInfoAudioToCodecsStr (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio, int codecStrFormatId)
static String	codecInfoVideoToCodecsStr (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo, int codecStrFormatId)
static String	codecInfoVideoToCodecsStr (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo, int codecStrFormatId, boolean forceH264BaselineProfile)
static byte[]	createPSSHBox (CencInfo cencInfo, ICencDRMInfo cencDRMInfo)
static String	dimensionsToAspectRatioString (int width, int height)
static int	filenameToManifestId (String filename)
static int	filenameToProfile (String filename)
static String	fixupAudioCodecString (String audioCodecStr, int codecId, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)

static String	fixupVideoCodecString (String videoCodecStr, int codecId, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
static String	frameRateToFrString (double frameRate)
static CencInfo	getCencInfo (IApplicationInstance appInstance, String streamName, IHTTPStreamerSession httpStreamerSession, IHTTPStreamerMPEGDashIndex index, long chunkId, CencInfo cencInfo)
static CencInfo	getCencInfo (IApplicationInstance appInstance, String streamName, ILiveStreamPacketizer liveStreamPacketizer, long chunkId, CencInfo cencInfo)
static int	manifestIdStrToId (String value)
static String	millisToDurationStr (long millis)
static long	msecToTimescaled (long time, long timescale)
static int	profileStrToId (String value)
static double	roughAspectRatioValue (int width, int height)
static long	timescaledToMsec (long time, long timescale)
static String	videoCodecIdToString (int codecId, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MPEGDashUtils

```
public MPEGDashUtils()
```

Methods

getCencInfo

```
public static CencInfo getCencInfo(IApplicationInstance appInstance,
    String streamName,
    IHTTPStreamerSession httpStreamerSession,
    IHTTPStreamerMPEGDashIndex index,
    long chunkId,
    CencInfo cencInfo)
```

getCencInfo

```
public static CencInfo getCencInfo(IApplicationInstance appInstance,  
    String streamName,  
    ILiveStreamPacketizer liveStreamPacketizer,  
    long chunkId,  
    CencInfo cencInfo)
```

fixupVideoCodecString

```
public static String fixupVideoCodecString(String videoCodecStr,  
    int codecId,  
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
```

fixupAudioCodecString

```
public static String fixupAudioCodecString(String audioCodecStr,  
    int codecId,  
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
```

videoCodecIdToString

```
public static String videoCodecIdToString(int codecId,  
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
```

audioCodecIdToString

```
public static String audioCodecIdToString(int codecId,  
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
```

millisToDurationStr

```
public static String millisToDurationStr(long millis)
```

codecInfoAudioToCodecsStr

```
public static String  
codecInfoAudioToCodecsStr(com.wowza.wms.media.model.MediaCodecInfoAudio  
    codecInfoAudio)
```

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codecInfoAudioToCodecsStr

```
public static String
codecInfoAudioToCodecsStr(com.wowza.wms.media.model.MediaCodecInfoAudio
    codecInfoAudio,
        int codecStrFormatId)
```

codecInfoVideoToCodecsStr

```
public static String
codecInfoVideoToCodecsStr(com.wowza.wms.media.model.MediaCodecInfoVideo
    codecInfoVideo,
        int codecStrFormatId)
```

codecInfoVideoToCodecsStr

```
public static String
codecInfoVideoToCodecsStr(com.wowza.wms.media.model.MediaCodecInfoVideo
    codecInfoVideo,
        int codecStrFormatId,
        boolean forceH264BaselineProfile)
```

filenameToManifestId

```
public static int filenameToManifestId(String filename)
```

chunkTypeIdToStr

```
public static String chunkTypeIdToStr(int id)
```

chunkTypeStrToId

```
public static int chunkTypeStrToId(String value)
```

chunkFormatStrToId

```
public static int chunkFormatStrToId(String value)
```

manifestIdStrToId

```
public static int manifestIdStrToId(String value)
```

(continued from last page)

profileStrToId

```
public static int profileStrToId(String value)
```

filenameToProfile

```
public static int filenameToProfile(String filename)
```

roughAspectRatioValue

```
public static double roughAspectRatioValue(int width,  
                                             int height)
```

dimensionsToAspectRatioString

```
public static String dimensionsToAspectRatioString(int width,  
                                                    int height)
```

frameRateToFrString

```
public static String frameRateToFrString(double frameRate)
```

createPSSHBox

```
public static byte[] createPSSHBox(CencInfo cencInfo,  
                                     ICencDRMInfo cencDRMInfo)
```

timescaledToMsec

```
public static long timescaledToMsec(long time,  
                                     long timescale)
```

msecToTimescaled

```
public static long msecToTimescaled(long time,  
                                     long timescale)
```

Package

com.wowza.wms.httpstreamer.sanjoesting.file

com.wowza.wms.httpstreamer.sanjosestreaming.file Interface IHTTPStreamerSanJoseIndex

public interface **IHTTPStreamerSanJoseIndex**
extends

Method Summary

String	bitrateStrToStreamName (String bitrateStr)
void	close ()
byte[]	getABSTData (String bitrateStr)
IHTTPStreamerApplicationContext	getApplicationContext ()
java.util.List	getBitrates ()
TimedTextRequest	getCaptionRequest ()
LiveStreamPacketizerSanJoseChunk	getChunk (int bitrate, long chunkId)
IHTTPStreamerSession	getHttpStreamerSession ()
long	getPlayDuration ()
String	getPlaylistStr ()
long	getPlaySeek ()
long	getPlayStart ()
String	getStreamName ()
java.util.List	getStreamNames ()
java.util.List	getStreamNamesRaw ()
String	getVODTranscodeNGRP ()
void	indexFile (IHTTPStreamerSession httpStreamerSession)
void	init (IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName, long playStart, long playDuration, long playSeek, TimedTextRequest captionRequest, String vodTranscodeNGRP)

boolean	isReloadMediaList()
void	open()
void	setCaptionRequest (TimedTextRequest request)
void	setPlayDuration (long playDuration)
void	setPlaySeek (long playSeek)
void	setPlayStart (long playStart)
void	setVODTranscodeNGRP (String vodTranscodeNGRP)

Methods

init

```
public void init(IHTTPStreamerApplicationContext appContext,
    IHTTPStreamerSession httpStreamerSession,
    String rawStreamName,
    String streamExt,
    String streamName,
    long playStart,
    long playDuration,
    long playSeek,
    TimedTextRequest captionRequest,
    String vodTranscodeNGRP)
```

indexFile

```
public void indexFile(IHTTPStreamerSession httpStreamerSession)
```

close

```
public void close()
```

open

```
public void open()
```

getChunk

```
public LiveStreamPacketizerSanJoseChunk getChunk(int bitrate,
    long chunkId)
```

(continued from last page)

getApplicationContext

```
public IHTTPStreamerApplicationContext getApplicationContext()
```

getHttpStreamerSession

```
public IHTTPStreamerSession getHttpStreamerSession()
```

getStreamName

```
public String getStreamName()
```

getStreamNames

```
public java.util.List getStreamNames()
```

getStreamNamesRaw

```
public java.util.List getStreamNamesRaw()
```

getBitrates

```
public java.util.List getBitrates()
```

getPlaylistStr

```
public String getPlaylistStr()
```

getABSTData

```
public byte[] getABSTData(String bitrateStr)
```

bitrateStrToStreamName

```
public String bitrateStrToStreamName(String bitrateStr)
```

(continued from last page)

getPlayStart

```
public long getPlayStart()
```

setPlayStart

```
public void setPlayStart(long playStart)
```

getPlayDuration

```
public long getPlayDuration()
```

setPlayDuration

```
public void setPlayDuration(long playDuration)
```

getPlaySeek

```
public long getPlaySeek()
```

setPlaySeek

```
public void setPlaySeek(long playSeek)
```

getCaptionRequest

```
public TimedTextRequest getCaptionRequest()
```

setCaptionRequest

```
public void setCaptionRequest(TimedTextRequest request)
```

getVODTranscodeNGRP

```
public String getVODTranscodeNGRP()
```

setVODTranscodeNGRP

```
public void setVODTranscodeNGRP(String vodTranscodeNGRP)
```

(continued from last page)

isReloadMediaList

```
public boolean isReloadMediaList()
```

com.wowza.wms.httpstreamer.sanjosestreaming.file Interface IHTTPStreamerSanJoseIndexItem

public interface IHTTPStreamerSanJoseIndexItem
extends

Method Summary

int	getIndex()
long	getStartTimecode()
long	getStopTimecode()
void	setIndex(int index)
void	setStartTimecode(long startTimecode)
void	setStopTimecode(long stopTimecode)

Methods

getStartTimecode

public long **getStartTimecode()**

setStartTimecode

public void **setStartTimecode**(long startTimecode)

getStopTimecode

public long **getStopTimecode()**

setStopTimecode

public void **setStopTimecode**(long stopTimecode)

(continued from last page)

getIndex

```
public int getIndex()
```

setIndex

```
public void setIndex(int index)
```

com.wowza.wms.httpstreamer.sanjosestreaming.file Interface IMediaReaderSanJose

All Superinterfaces:

[IMediaReader](#)

public interface **IMediaReaderSanJose**

extends [IMediaReader](#)

Field Summary

public static final	MEDIAREADER_POSTFIX
---------------------	-------------------------------------

Value: **sanjose**

Fields inherited from interface [com.wowza.wms.stream.IMediaReader](#)

[CONTENTTYPE_MEDIA](#), [CONTENTTYPE_MEDIALIST](#), [DEFAULT_RANDOMACCESSREADER](#),
[DEFAULT_RANDOMACCESSREADEROPTIMIZER](#), [PLAYEVENT_AFTERBUFFERFILL](#), [PLAYEVENT_AFTERMETADATA](#),
[PLAYEVENT_BEFOREBUFFERFILL](#), [PLAYEVENT_BEFOREMETADATA](#), [PLAYEVENT_STARTPLAYBACK](#), [SEEK_EXACT](#),
[SEEK_KEYCLOSE](#), [SEEK_KEYDOWN](#), [SEEK_KEYUP](#), [SEEKTARGET_AUDIO](#), [SEEKTARGET_ENHANCED](#),
[SEEKTARGET_VIDEOKEYFRAME](#)

Method Summary

void	fillChunk (HTTPStreamerSanJoseIndexItem indexItem, IHTTPStreamerSanJoseIndexItem item, LiveStreamPacketizerSanJoseChunk chunk, int bitrate)
------	--

void	indexFile (HTTPStreamerSanJoseIndexItem index)
------	---

Methods inherited from interface [com.wowza.wms.stream.IMediaReader](#)

[close](#), [getDuration](#), [getLength](#), [getMediaExtension](#), [getMetadata](#), [getPath](#),
[getStreamPosition](#), [init](#), [isOpen](#), [open](#), [rewind](#), [seek](#), [sendZeroLengthPacket](#),
[setMediaReaderItem](#), [setProperties](#), [setStreamPosition](#), [startPlayback](#),
[writeGeneratedKeyFrame](#), [writePackets](#), [writePackets](#)

Fields

MEDIAREADER_POSTFIX

public static final java.lang.String **MEDIAREADER_POSTFIX**

Constant value: **sanjose**

Methods

(continued from last page)

indexFile

```
public void indexFile(HTTPStreamerSanJoseIndexItem index)
```

fillChunk

```
public void fillChunk(HTTPStreamerSanJoseIndexItem indexItem,  
    IHTTPStreamerSanJoseIndexItem item,  
    LiveStreamPacketizerSanJoseChunk chunk,  
    int bitrate)
```

Package

**com.wowza.wms.httpstreamer.sanjosestream
ing.httpstreamer**

com.wowza.wms.httpstreamer.sanjosestreaming.httpstreamer Class HTTPStreamerSessionSanJose

java.lang.Object

└-com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

└-

com.wowza.wms.httpstreamer.sanjosestreaming.httpstreamer.HTTPStreamerSessionSanJose

All Implemented Interfaces:

[IHTTPSessionNotify](#), [IHTTPStreamerSession](#)

```
public class HTTPStreamerSessionSanJose
extends HTTPStreamerSessionBase
implements IHTTPStreamerSession, IHTTPSessionNotify
```

Fields inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

acceptSession, appInstance, connectionHolder, cookieStr, corsHeaders, DATEFORMAT, elapsedTime, fastDateFormat, fileInfoMap, firstCheck, httpHeaders, httpStreamerAdapter, ioPerformanceCounter, ipAddress, isActive, isDelete, isHTTPOrigin, isPlayLogged, isSecure, lastRequest, liveStreamingPacketizer, lock, mediaCasterStreamLock, notifyCreate, playDuration, playSeek, playStart, properties, queryStr, redirectSession, redirectSessionBody, redirectSessionCode, redirectSessionContentType, redirectSessionURL, referrer, serverIp, serverPort, sessionId, sessionProtocol, sessionTimeout, sessionType, stream, streamDomainStrSet, streamExt, streamName, streamNamePartMap, streamPosition, timeoutSession, totalIOPerformance2Last, totalIOPerformanceLast, transcoderVODIndex, transcoderVODIndexDestinationsMap, transcoderVODIndexDestinationsOrder, transcoderVODListeners, transcoderVODSession, uri, userAgent, userHTTPHeaders, userManifestHeaders, userQueryStr, vhost, vodTranscodeNGRP

Fields inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[SESSIONPROTOCOL_COUNT](#), [SESSIONPROTOCOL_CUPERTINOSTREAMING](#), [SESSIONPROTOCOL_DIRECTSTREAMING](#), [SESSIONPROTOCOL_DVRCHUNKSTREAMING](#), [SESSIONPROTOCOL_MPEGDASHSTREAMING](#), [SESSIONPROTOCOL_SANJOSESTREAMING](#), [SESSIONPROTOCOL_SMOOTHSTREAMING](#), [SESSIONPROTOCOL_TSSTREAMING](#), [SESSIONPROTOCOL_UNKNOWN](#), [SESSIONPROTOCOL_WEBMSTREAMING](#), [SESSIONTYPE_LIVE](#), [SESSIONTYPE_LIVEDVR](#), [SESSIONTYPE_UNKNOWN](#), [SESSIONTYPE_VOD](#)

Constructor Summary

public	HTTPStreamerSessionSanJose()
--------	--

Method Summary

void	addFirstABSTRequest (String streamName)
------	---

void	clearLoggingValues ()
------	---------------------------------------

boolean	containsIndex (String streamName)
---------	---

static IHTTPStreamerSanJoseIndex	createIndexLive (IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName)
IHTTPStreamerSanJoseIndex	getIndex (IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName, long playStart, long playDuration, long playSeek, TimedTextRequest captionRequest, String vodTranscodeNGRP, boolean saveIndex)
IHTTPStreamerSanJoseIndex	getIndexLive (IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName)
void	indexTranscoderVOD (IHTTPStreamerApplicationContext appContext, String vodTranscodeNGRP)
boolean	isFirstABSTRequest (String streamName)
void	logLiveChunk (LiveStreamPacketizerSanJoseChunk chunk)
void	logVODChunk (LiveStreamPacketizerSanJoseChunk chunk)
void	notifyHTTPSessionCreate (IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)
void	notifyHTTPSessionDestroy (IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)
void	shutdown ()
void	updateLoggingValues ()

Methods inherited from class `com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase`

```

acceptSession, addHTTPSessionToTCPSession, addIOPerformance, addIOPerformance2,
addStreamDomainStr, addStreamDomainStrs, addTranscoderVODListener,
addUserHTTPHeaders, checkAndSetPlayLogged, clearLoggingValues,
containsStreamDomainStr, containsStreamNameParts, doSessionRedirect,
doSessionRedirect, extractHTTPRequestInfo, getAndClearNotifyCreate, getAppInstance,
getConnectionHolder, getCookieStr, getCORSHaders, getDvrSessionInfo, getElapsedTime,
getFileInfo, getHTTPDate, getHTTPHeader, getHTTPHeaderMap, getHTTPHeaderNames,
getHTTPIntHeader, getHTTPStreamerAdapter, getIOPerformanceCounter, getIpAddress,
getLastRequest, getLiveStreamingPacketizer, getLock, getPlayDuration, getPlaySeek,
getPlayStart, getProperties, getQueryStr, getRedirectSessionBody,
getRedirectSessionCode, getRedirectSessionContentType, getRedirectSessionURL,
getReferrer, getServerIp, getServerPort, getSessionId, getSessionProtocol,
getSessionTimeout, getSessionType, getStream, getStreamDomainStr,
getStreamDomainStrList, getStreamExt, getStreamName, getStreamNameParts,
getStreamPosition, getTimeRunning, getTimeRunningSeconds, getTranscoderVODIndex,
getTranscoderVODIndex, getTranscoderVODIndexDestinationsMap,
getTranscoderVODIndexDestinationsOrder, getTranscoderVODSession, getUri,
getUserAgent, getUserHTTPHeaders, getUserQueryStr, getVHost, getVODTranscodeNGRP,
indexTranscoderVOD, isAcceptSession, isActive, isDelete, isDeleteSession, isFileInfo,
isHTTPOrigin, isPlayLogged, isRedirectSession, isSecure, isTimeout, isTimeoutSession,
isValidated, isValidStreamDomainStr, lockRepeaterStreams,
notifyTranscoderVODFillChunkStart, notifyTranscoderVODFillChunkStop,
notifyTranscoderVODFillChunkTranscode, putFileInfo, putStreamNameParts,
redirectSession, redirectSession, rejectSession, removeStreamDomainStr,
removeTranscoderVODListener, setAcceptSession, setActive, setAppInstance,
setCookieStr, setDeleteSession, setDvrSessionInfo, setHTTPOrigin,
setHTTPStreamerAdapter, setIpAddress, setLiveStreamingPacketizer, setPlayDuration,
setPlayLogged, setPlaySeek, setPlayStart, setQueryStr, setRedirectSession,
setRedirectSessionBody, setRedirectSessionCode, setRedirectSessionContentType,
setRedirectSessionURL, setReferrer, setSecure, setServerIp, setServerPort,
setSessionId, setSessionProtocol, setSessionTimeout, setSessionType, setStream,
setStreamExt, setStreamName, setStreamPosition, setThreadContext, setTimeoutSession,
setTranscoderVODIndex, setTranscoderVODSession, setUri, setUserAgent,
setUserHTTPHeader, setUserQueryStr, setValidated, setVHost, setVODTranscodeNGRP,
shutdown, shutdownLocked, touch, updateLoggingValues, validStreamDomainToString

```

Methods inherited from class java.lang.Object

```

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

```

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[acceptSession](#), [addHTTPSessionToTCPSession](#), [addIOPerformance](#), [addIOPerformance2](#), [addStreamDomainStr](#), [addStreamDomainStrs](#), [addTranscoderVODListener](#), [addUserHTTPHeaders](#), [checkAndSetPlayLogged](#), [clearLoggingValues](#), [containsStreamDomainStr](#), [containsStreamNameParts](#), [doSessionRedirect](#), [doSessionRedirect](#), [extractHTTPRequestInfo](#), [getAndClearNotifyCreate](#), [getAppInstance](#), [getConnectionHolder](#), [getCookieStr](#), [getCORSHaders](#), [getDvrSessionInfo](#), [getElapsedTime](#), [getFileInfo](#), [getHTTPHeader](#), [getHTTPHeaderMap](#), [getHTTPHeaderNames](#), [getHTTPIntHeader](#), [getHTTPStreamerAdapter](#), [getIOPerformanceCounter](#), [getIpAddress](#), [getLastRequest](#), [getLiveStreamingPacketizer](#), [getLock](#), [getPlayDuration](#), [getPlaySeek](#), [getPlayStart](#), [getProperties](#), [getQueryStr](#), [getRedirectSessionBody](#), [getRedirectSessionCode](#), [getRedirectSessionContentType](#), [getRedirectSessionURL](#), [getReferrer](#), [getServerIp](#), [getServerPort](#), [getSessionId](#), [getSessionProtocol](#), [getSessionTimeout](#), [getSessionType](#), [getStream](#), [getStreamExt](#), [getStreamName](#), [getStreamNameParts](#), [getStreamPosition](#), [getTimeRunning](#), [getTimeRunningSeconds](#), [getTranscoderVODIndex](#), [getTranscoderVODIndex](#), [getTranscoderVODIndexDestinationsMap](#), [getTranscoderVODIndexDestinationsOrder](#), [getTranscoderVODSession](#), [getUri](#), [getUserAgent](#), [getUserHTTPHeaders](#), [getUserQueryStr](#), [getVHost](#), [getVODTranscodeNGRP](#), [indexTranscoderVOD](#), [isAcceptSession](#), [isActive](#), [isDelete](#), [isDeleteSession](#), [isFileInfo](#), [isHTTPOrigin](#), [isPlayLogged](#), [isRedirectSession](#), [isSecure](#), [isTimeout](#), [isTimeoutSession](#), [isValidated](#), [isValidStreamDomainStr](#), [lockRepeaterStreams](#), [notifyTranscoderVODFillChunkStart](#), [notifyTranscoderVODFillChunkStop](#), [notifyTranscoderVODFillChunkTranscode](#), [putFileInfo](#), [putStreamNameParts](#), [redirectSession](#), [redirectSession](#), [rejectSession](#), [removeStreamDomainStr](#), [removeTranscoderVODListener](#), [setAcceptSession](#), [setActive](#), [setAppInstance](#), [setCookieStr](#), [setDeleteSession](#), [setDvrSessionInfo](#), [setHTTPOrigin](#), [setHTTPStreamerAdapter](#), [setIpAddress](#), [setLiveStreamingPacketizer](#), [setPlayDuration](#), [setPlayLogged](#), [setPlaySeek](#), [setPlayStart](#), [setQueryStr](#), [setRedirectSession](#), [setRedirectSessionBody](#), [setRedirectSessionCode](#), [setRedirectSessionContentType](#), [setRedirectSessionURL](#), [setReferrer](#), [setSecure](#), [setServerIp](#), [setServerPort](#), [getSessionId](#), [getSessionProtocol](#), [getSessionTimeout](#), [getSessionType](#), [setStream](#), [setStreamExt](#), [setStreamName](#), [setStreamPosition](#), [setTimeoutSession](#), [setTranscoderVODIndex](#), [setTranscoderVODSession](#), [setUri](#), [setUserAgent](#), [setUserHTTPHeader](#), [setUserQueryStr](#), [setVHost](#), [setVODTranscodeNGRP](#), [shutdown](#), [touch](#), [updateLoggingValues](#), [validStreamDomainToString](#)

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPSessionNotify](#)

[notifyHTTPSessionCreate](#), [notifyHTTPSessionDestroy](#)

Constructors

HTTPStreamerSessionSanJose

```
public HTTPStreamerSessionSanJose()
```

Methods

shutdown

```
public void shutdown()
```

(continued from last page)

containsIndex

```
public boolean containsIndex(String streamName)
```

createIndexLive

```
public static IHTTPStreamerSanJoseIndex  
createIndexLive(IHTTPStreamerApplicationContext appContext,  
                IHTTPStreamerSession httpStreamerSession,  
                String rawStreamName,  
                String streamExt,  
                String streamName)
```

getIndexLive

```
public IHTTPStreamerSanJoseIndex getIndexLive(IHTTPStreamerApplicationContext  
appContext,  
        IHTTPStreamerSession httpStreamerSession,  
        String rawStreamName,  
        String streamExt,  
        String streamName)
```

getIndex

```
public IHTTPStreamerSanJoseIndex getIndex(IHTTPStreamerApplicationContext appContext,  
        IHTTPStreamerSession httpStreamerSession,  
        String rawStreamName,  
        String streamExt,  
        String streamName,  
        long playStart,  
        long playDuration,  
        long playSeek,  
        TimedTextRequest captionRequest,  
        String vodTranscodeNGRP,  
        boolean saveIndex)
```

updateLoggingValues

```
public void updateLoggingValues()
```

clearLoggingValues

```
public void clearLoggingValues()
```

logLiveChunk

```
public void logLiveChunk(LiveStreamPacketizerSanJoseChunk chunk)
```

logVODChunk

```
public void logVODChunk(LiveStreamPacketizerSanJoseChunk chunk)
```

isFirstABSTRequest

```
public boolean isFirstABSTRequest(String streamName)
```

addFirstABSTRequest

```
public void addFirstABSTRequest(String streamName)
```

notifyHTTPSessionCreate

```
public void notifyHTTPSessionCreate(IApplicationInstance appInstance,  
    IHTTPStreamerSession httpStreamerSession)
```

notifyHTTPSessionDestroy

```
public void notifyHTTPSessionDestroy(IApplicationInstance appInstance,  
    IHTTPStreamerSession httpStreamerSession)
```

indexTranscoderVOD

```
public void indexTranscoderVOD(IHTTPStreamerApplicationContext appContext,  
    String vodTranscodeNGRP)
```

Package

**com.wowza.wms.httpstreamer.sanjosestream
ing.livestreampacketizer**

com.wowza.wms.httpstreamer.sanjosestreaming.livestreampacketizer Interface IHTTPStreamerSanJoseLiveStreamPacketizerChunkIdHandler

public interface IHTTPStreamerSanJoseLiveStreamPacketizerChunkIdHandler
extends

Method Summary

void	init (LiveStreamPacketizerSanJose liveStreamPacketizer)
long	onAssignChunkId (HTTPStreamerSanJoseLiveStreamPacketizerChunkIdContext chunkIdContext)

Methods

init

public void **init**([LiveStreamPacketizerSanJose](#) liveStreamPacketizer)

onAssignChunkId

public long **onAssignChunkId**(HTTPStreamerSanJoseLiveStreamPacketizerChunkIdContext chunkIdContext)

com.wowza.wms.httpstreamer.sanjosestreaming.livestreampacketizer Interface ISanJoseChunkWriter

All Known Implementing Classes:

[LiveStreamPacketizerSanJose](#)

public interface **ISanJoseChunkWriter**
extends

Method Summary

void	addToChunk (SanJosePacketHolder holder)
void	endChunk (long timecode)
boolean	isPacketizeAudio ()
boolean	isPacketizeData ()
boolean	isPacketizeVideo ()
void	resetStream ()
void	setCodecInfoAudio (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	setCodecInfoVideo (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	setMetaData (SanJosePacketHolder holder)
void	startChunk (int streamMode, int videoCodec, int audioCodec, long timecode)

Methods

startChunk

```
public void startChunk(int streamMode,  
    int videoCodec,  
    int audioCodec,  
    long timecode)
```

endChunk

```
public void endChunk(long timecode)
```

(continued from last page)

addToChunk

```
public void addToChunk(SanJosePacketHolder holder)
```

setMetaData

```
public void setMetaData(SanJosePacketHolder holder)
```

resetStream

```
public void resetStream()
```

setCodecInfoAudio

```
public void setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
codecInfoAudio)
```

setCodecInfoVideo

```
public void setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo)
```

isPacketizeAudio

```
public boolean isPacketizeAudio()
```

isPacketizeVideo

```
public boolean isPacketizeVideo()
```

isPacketizeData

```
public boolean isPacketizeData()
```

com.wowza.wms.httpstreamer.sanjosestreaming.livestreampacketizer Class LiveStreamPacketizerSanJose

java.lang.Object

└-com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase

└-

com.wowza.wms.httpstreamer.sanjosestreaming.livestreampacketizer.LiveStreamPacketizerSanJose

All Implemented Interfaces:

[ISanJoseChunkWriter](#), Runnable, IdleNotify, [ILiveStreamPacketizer](#)

public class **LiveStreamPacketizerSanJose**

extends LiveStreamPacketizerBase

implements [ILiveStreamPacketizer](#), IdleNotify, Runnable, [ISanJoseChunkWriter](#)

Field Summary

public static final	DEFAULT_MAXCHUNKCOUNT Value: 10
public static final	DEFAULT_PLAYLISTCHUNKCOUNT Value: 4
public static final	DEFAULT_REPEATERCHUNKCOUNT Value: -1
protected	originRepeaterContext
public static final	STREAMMODE_AAC Value: 3
public static final	STREAMMODE_MP3 Value: 2
public static final	STREAMMODE_TS Value: 1

Fields inherited from class com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase

appInstance, captionDefaultLanguages, captionIngestType, captionsEnabled, captionUseStreamNameGroups, checkTimeoutInterval, DEFAULT_STREAMTIMEOUT, EVENT_PACKET, EVENT_RESETSTREAM, EVENT_STARTSTREAM, eventProcessCount, events, id, inProcessEvent, isActive, isRepeater, isRepeaterEdge, isRunning, lastCheckTime, lastEventProcessTC, lastStreamStartTime, lastStreamUpdate, liveStreamPacketizerItem, liveTimedTextProvider, maxEventCount, maxEventCountErrors, maxEventsPerRun, MAXEVENTSPERRUN, packetizeAudio, packetizeData, packetizerName, packetizeVideo, properties, runnerLock, startStream, streamName, streamStartupTimeout, streamTimeout, timeoutLock

Constructor Summary

public	LiveStreamPacketizerSanJose()
--------	---

Method Summary

void	addToChunk (SanJosePacketHolder holder)
void	addToChunkTS (SanJoseTSHolder tsHolder)
void	debugDumpRepeater ()
void	encryptTS (SanJoseTSHolder tsHolder)
void	endChunk (long timecode)
void	endChunkTS (long timecode)
int	getABSTBootstrapVersion ()
byte[]	getABSTFullData ()
byte[]	getABSTStartData ()
int	getCalculatedBitrate ()
LiveStreamPacketizerSanJoseChunk	getChunkByCustomIndex (long chunkIndex)
LiveStreamPacketizerSanJoseChunk	getChunkByFilename (String filename)
LiveStreamPacketizerSanJoseChunk	getChunkByIndex (long chunkIndex)
int	getChunkCount ()
long[]	getChunkCustomRange ()
int	getChunkDurationTarget ()
IHTTPStreamerSanJoseLiveStreamPacketizerChunkIdHandler	getChunkIdHandler ()
long[]	getChunkRange ()
int	getDebugRepeaterItemsSize ()
SanJoseEncInfo	getEncryptionInfo ()

byte[]	getEncryptionKeyBytes()
String	getEncryptionURL()
int	getFirstChunkId()
long	getFirstCustomChunkId()
int	getLastChunkId()
long	getLastCustomChunkId()
Object	getLock()
SanJoseTSHolder	getMetaDataChunk()
static String	getMultibitratePlaylistF4M (String smilStreamName, IHTTPStreamerSanJoseIndex fileIndex, java.util.List liveStreamPacketizerOrder , java.util.Map liveStreamPacketizers)
int	getPlaylistChunkCount()
String	getPlaylistFragmentStr()
String	getPlaylistStr()
int	getProfileIDC()
String	getRandomSessionStr()
void	getRepeaterItemsSanJose (java.util.List items, long seq)
long	getRepeaterLastSeqence()
String	getTitleStr()
void	init (String streamName, String packetizerName, IApplicationInstance appInstance, LiveStreamPacketizerItem liveStreamPacketizerItem)
void	internalHandlePacket (IMediaStream stream, AMFPacket packet)
void	internalResetStream (IMediaStream stream)
void	internalStartStream (IMediaStream stream)
boolean	isCustomChunkId()
boolean	isPlaylistReady()

void	resetStream()
void	setChunkIdHandler(IHTTPStreamerSanJoseLiveStreamPacketizerChunkIdHandler chunkIdHandler)
void	setCodecInfoAudio (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	setCodecInfoVideo (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	setMetaData (SanJosePacketHolder holder)
void	setMetaData (SanJoseTSHolder tsHolder)
void	setTitleStr (String titleStr)
void	sortTS (SanJoseTSHolder tsHolder, boolean doFlush)
void	startChunk (int streamMode, int videoCodec, int audioCodec, long timecode)
void	startChunkTS (int chunkId, boolean isRepeater, int streamMode, int videoCodec, int audioCodec, long timecode, String encUrl, byte[] encRepeaterBytes, String originRepeaterContext)
static String	xmlCleanStr (String name)

Methods inherited from class [com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase](#)

addPacketizerEvent, checkTimeout, getAndSetStartStream, getApplicationInstance, getCaptionProvider, getContextStr, getLiveStreamPacketizerId, getMaxEventCount, getProperties, getRepeaterItems, getRepeaterItemsSanJose, getRepeaterLastSequence, getStreamStartupTimeout, getStreamTimeout, handlePacket, init, initLiveCaptionIngestor, internalHandlePacket, internalResetStream, internalStartStream, isActive, isCEA608IngestModuleInstalled, isPacketizeAudio, isPacketizeData, isPacketizeVideo, isRepeaterEdge, onIdle, resetStream, run, setLiveStreamPacketizerId, setMaxEventCount, setPacketizeAudio, setPacketizeData, setPacketizeVideo, setRepeaterEdge, setStreamStartupTimeout, setStreamTimeout, shutdown, startStream, touch

Methods inherited from class [java.lang.Object](#)

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.livepacketizer.ILiveStreamPacketizer](#)

[getAndSetStartStream](#), [getApplicationInstance](#), [getLiveStreamPacketizerId](#), [getProperties](#), [getRepeaterLastSequence](#), [handlePacket](#), [init](#), [isActive](#), [isPacketizeAudio](#), [isPacketizeData](#), [isPacketizeVideo](#), [isRepeaterEdge](#), [resetStream](#), [setLiveStreamPacketizerId](#), [setPacketizeAudio](#), [setPacketizeData](#), [setPacketizeVideo](#), [setRepeaterEdge](#), [shutdown](#), [startStream](#), [touch](#)

Methods inherited from interface [com.wowza.wms.util.IIdleNotify](#)

onIdle

Methods inherited from interface `java.lang.Runnable`

run

Methods inherited from interface

[com.wowza.wms.httpstreamer.sanjosestreaming.livestreampacketizer.ISanJoseChunkWriter](#)

[addToChunk](#), [endChunk](#), [isPacketizeAudio](#), [isPacketizeData](#), [isPacketizeVideo](#),
[resetStream](#), [setCodecInfoAudio](#), [setCodecInfoVideo](#), [setMetaData](#), [startChunk](#)

Fields

DEFAULT_REPEATERCHUNKCOUNT

```
public static final int DEFAULT_REPEATERCHUNKCOUNT
```

Constant value: **-1**

DEFAULT_PLAYLISTCHUNKCOUNT

```
public static final int DEFAULT_PLAYLISTCHUNKCOUNT
```

Constant value: **4**

DEFAULT_MAXCHUNKCOUNT

```
public static final int DEFAULT_MAXCHUNKCOUNT
```

Constant value: **10**

STREAMMODE_TS

```
public static final int STREAMMODE_TS
```

Constant value: **1**

STREAMMODE_MP3

```
public static final int STREAMMODE_MP3
```

Constant value: **2**

STREAMMODE_AAC

```
public static final int STREAMMODE_AAC
```

Constant value: **3**

originRepeaterContext

protected java.lang.String **originRepeaterContext**

Constructors

LiveStreamPacketizerSanJose

```
public LiveStreamPacketizerSanJose()
```

Methods

init

```
public void init(String streamName,  
                 String packetizerName,  
                 IApplicationInstance appInstance,  
                 LiveStreamPacketizerItem liveStreamPacketizerItem)
```

isCustomChunkId

```
public boolean isCustomChunkId()
```

getEncryptionKeyBytes

```
public byte[] getEncryptionKeyBytes()
```

getEncryptionURL

```
public String getEncryptionURL()
```

getEncryptionInfo

```
public SanJoseEncInfo getEncryptionInfo()
```

internalStartStream

```
public void internalStartStream(IMediaStream stream)
```

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internalResetStream

```
public void internalResetStream(IMediaStream stream)
```

resetStream

```
public void resetStream()
```

internalHandlePacket

```
public void internalHandlePacket(IMediaStream stream,  
    AMFPacket packet)
```

setMetaData

```
public void setMetaData(SanJosePacketHolder holder)
```

setMetaData

```
public void setMetaData(SanJoseTSHolder tsHolder)
```

setCodecInfoAudio

```
public void setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
    codecInfoAudio)
```

setCodecInfoVideo

```
public void setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
    codecInfoVideo)
```

debugDumpRepeater

```
public void debugDumpRepeater()
```

startChunk

```
public void startChunk(int streamMode,  
    int videoCodec,  
    int audioCodec,  
    long timecode)
```

endChunk

```
public void endChunk(long timecode)
```

sortTS

```
public void sortTS(SanJoseTSHolder tsHolder,  
    boolean doFlush)
```

encryptTS

```
public void encryptTS(SanJoseTSHolder tsHolder)
```

addToChunk

```
public void addToChunk(SanJosePacketHolder holder)
```

startChunkTS

```
public void startChunkTS(int chunkId,  
    boolean isRepeater,  
    int streamMode,  
    int videoCodec,  
    int audioCodec,  
    long timecode,  
    String encUrl,  
    byte[] encRepeaterBytes,  
    String originRepeaterContext)
```

endChunkTS

```
public void endChunkTS(long timecode)
```

addToChunkTS

```
public void addToChunkTS(SanJoseTSHolder tsHolder)
```

getRepeaterLastSequence

```
public long getRepeaterLastSequence()
```

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getRepeaterItemsSanJose

```
public void getRepeaterItemsSanJose(java.util.List items,  
    long seq)
```

getChunkByFilename

```
public LiveStreamPacketizerSanJoseChunk getChunkByFilename(String filename)
```

getChunkRange

```
public long[] getChunkRange()
```

getChunkCustomRange

```
public long[] getChunkCustomRange()
```

getChunkByIndex

```
public LiveStreamPacketizerSanJoseChunk getChunkByIndex(long chunkIndex)
```

getChunkByCustomIndex

```
public LiveStreamPacketizerSanJoseChunk getChunkByCustomIndex(long chunkIndex)
```

isPlaylistReady

```
public boolean isPlaylistReady()
```

getPlaylistStr

```
public String getPlaylistStr()
```

getPlaylistFragmentStr

```
public String getPlaylistFragmentStr()
```

getABSTFullData

```
public byte[] getABSTFullData()
```

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getABSTStartData

```
public byte[] getABSTStartData()
```

getABSTBootstrapVersion

```
public int getABSTBootstrapVersion()
```

getLock

```
public Object getLock()
```

getTitleStr

```
public String getTitleStr()
```

setTitleStr

```
public void setTitleStr(String titleStr)
```

xmlCleanStr

```
public static String xmlCleanStr(String name)
```

getMultibitratePlaylistF4M

```
public static String getMultibitratePlaylistF4M(String smilStreamName,  
    IHTTPStreamerSanJoseIndex fileIndex,  
    java.util.List liveStreamPacketizerOrder,  
    java.util.Map liveStreamPacketizers)
```

getMetaDataChunk

```
public SanJoseTSHolder getMetaDataChunk()
```

getProfileIDC

```
public int getProfileIDC()
```

getDebugRepeaterItemsSize

```
public int getDebugRepeaterItemsSize()
```

getFirstChunkId

```
public int getFirstChunkId()
```

getFirstCustomChunkId

```
public long getFirstCustomChunkId()
```

getLastChunkId

```
public int getLastChunkId()
```

getLastCustomChunkId

```
public long getLastCustomChunkId()
```

getChunkCount

```
public int getChunkCount()
```

getCalculatedBitrate

```
public int getCalculatedBitrate()
```

getChunkDurationTarget

```
public int getChunkDurationTarget()
```

getPlaylistChunkCount

```
public int getPlaylistChunkCount()
```

getRandomSessionStr

```
public String getRandomSessionStr()
```

(continued from last page)

getChunkIdHandler

```
public IHTTPStreamerSanJoseLiveStreamPacketizerChunkIdHandler getChunkIdHandler()
```

setChunkIdHandler

```
public void setChunkIdHandler(IHTTPStreamerSanJoseLiveStreamPacketizerChunkIdHandler  
chunkIdHandler)
```

com.wowza.wms.httpstreamer.sanjosestreaming.livestreampacketizer Class LiveStreamPacketizerSanJoseChunk

java.lang.Object



com.wowza.wms.httpstreamer.sanjosestreaming.livestreampacketizer.LiveStreamPacketizerSanJoseChunk

```
public class LiveStreamPacketizerSanJoseChunk
extends Object
```

Constructor Summary

public	LiveStreamPacketizerSanJoseChunk (int chunkIndex)
--------	---

Method Summary

void	addBlock (byte[] buffer, int offset, int len)
void	addMDATHeader ()
void	addRTMPFooter (int size)
void	addRTMPHeader (int type, int size, long timecode)
int	getAudioCount ()
int	getBlockCount ()
java.util.List	getBlockList ()
int	getChunkIndex ()
long	getChunkIndexByTime ()
com.wowza.wms.media.model.MediaCodecInfoAudio	getCodecInfoAudio ()
com.wowza.wms.media.model.MediaCodecInfoVideo	getCodecInfoVideo ()
int	getDataSize ()
long	getDuration ()
byte[]	getEncRepeaterBytes ()

String	getEncUrl()
SanJoseTSHolder	getMetaDataHolder()
int	getSize()
long	getStartTimeCode()
int	getStreamMode()
int	getVideoCount()
int	getVideoKeyCount()
void	incAudioCount()
void	incDataSize(int incSize)
void	incVideoCount()
void	incVideoKeyCount()
void	insertBlock(int pos, byte[] buffer, int offset, int len)
boolean	isCacheable()
boolean	isFillSuccessful()
boolean	isWritePAT()
void	setAudioCount(int audioCount)
void	setBlockList(java.util.List blocks)
void	setCacheable(boolean cacheable)
void	setChunkIndexByTime(long chunkIndexByTime)
void	setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	setDataSize(int dataSize)
void	setDuration(long duration)

void	setEncRepeaterBytes (byte[] encRepeaterBytes)
void	setEncUrl (String encUrl)
void	setFillSuccessful (boolean fillSuccessful)
void	setMetaDataHolder (SanJoseTSHolder metaDataHolder)
void	setSize (int size)
void	setStartTimecode (long startTimecode)
void	setStreamMode (int streamMode)
void	setVideoCount (int videoCount)
void	setVideoKeyCount (int videoKeyCount)
void	setWritePAT (boolean writePAT)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

LiveStreamPacketizerSanJoseChunk

```
public LiveStreamPacketizerSanJoseChunk(int chunkIndex)
```

Methods

getChunkIndex

```
public int getChunkIndex()
```

addBlock

```
public void addBlock(byte[] buffer,
                    int offset,
                    int len)
```

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insertBlock

```
public void insertBlock(int pos,  
    byte[] buffer,  
    int offset,  
    int len)
```

getSize

```
public int getSize()
```

setSize

```
public void setSize(int size)
```

getStartTimecode

```
public long getStartTimecode()
```

setStartTimecode

```
public void setStartTimecode(long startTimecode)
```

getDuration

```
public long getDuration()
```

setDuration

```
public void setDuration(long duration)
```

getBlockList

```
public java.util.List getBlockList()
```

setBlockList

```
public void setBlockList(java.util.List blocks)
```

(continued from last page)

isCacheable

```
public boolean isCacheable()
```

setCacheable

```
public void setCacheable(boolean cacheable)
```

getBlockCount

```
public int getBlockCount()
```

getEncUrl

```
public String getEncUrl()
```

setEncUrl

```
public void setEncUrl(String encUrl)
```

getEncRepeaterBytes

```
public byte[] getEncRepeaterBytes()
```

setEncRepeaterBytes

```
public void setEncRepeaterBytes(byte[] encRepeaterBytes)
```

getDataSize

```
public int getDataSize()
```

setDataSize

```
public void setDataSize(int dataSize)
```

incDataSize

```
public void incDataSize(int incSize)
```

(continued from last page)

isWritePAT

```
public boolean isWritePAT()
```

setWritePAT

```
public void setWritePAT(boolean writePAT)
```

incAudioCount

```
public void incAudioCount()
```

incVideoCount

```
public void incVideoCount()
```

incVideoKeyCount

```
public void incVideoKeyCount()
```

getAudioCount

```
public int getAudioCount()
```

setAudioCount

```
public void setAudioCount(int audioCount)
```

getVideoCount

```
public int getVideoCount()
```

setVideoCount

```
public void setVideoCount(int videoCount)
```

(continued from last page)

getVideoKeyCount

```
public int getVideoKeyCount()
```

setVideoKeyCount

```
public void setVideoKeyCount(int videoKeyCount)
```

getStreamMode

```
public int getStreamMode()
```

setStreamMode

```
public void setStreamMode(int streamMode)
```

addRTMPHeader

```
public void addRTMPHeader(int type,  
                           int size,  
                           long timecode)
```

addRTMPFooter

```
public void addRTMPFooter(int size)
```

addMDATHeader

```
public void addMDATHeader()
```

getCodecInfoAudio

```
public com.wowza.wms.media.model.MediaCodecInfoAudio getCodecInfoAudio()
```

setCodecInfoAudio

```
public void setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
codecInfoAudio)
```

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getCodecInfoVideo

```
public com.wowza.wms.media.model.MediaCodecInfoVideo getCodecInfoVideo()
```

setCodecInfoVideo

```
public void setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo)
```

getMetaDataHolder

```
public SanJoseTSHolder getMetaDataHolder()
```

setMetaDataHolder

```
public void setMetaDataHolder(SanJoseTSHolder metaDataHolder)
```

isFillSuccessful

```
public boolean isFillSuccessful()
```

setFillSuccessful

```
public void setFillSuccessful(boolean fillSuccessful)
```

getChunkIndexByTime

```
public long getChunkIndexByTime()
```

setChunkIndexByTime

```
public void setChunkIndexByTime(long chunkIndexByTime)
```

Package

**com.wowza.wms.httpstreamer.sanjosestream
ing.util**

com.wowza.wms.httpstreamer.sanjosestreaming.util Class SanJoseUtilities

java.lang.Object

└-com.wowza.wms.httpstreamer.sanjosestreaming.util.SanJoseUtilities

public class **SanJoseUtilities**
extends Object

Constructor Summary

public	SanJoseUtilities()
--------	------------------------------------

Method Summary

static int	getABSTStringLength (String value)
static byte[]	holderToRTMPBlock (SanJosePacketHolder holder)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

SanJoseUtilities

public **SanJoseUtilities**()

Methods

holderToRTMPBlock

public static byte[] **holderToRTMPBlock**(SanJosePacketHolder holder)

getABSTStringLength

public static int **getABSTStringLength**(String value)

Package

**com.wowza.wms.httpstreamer.smoothstream
ing.file**

com.wowza.wms.httpstreamer.smoothstreaming.file Interface IHTTPStreamerSmoothStreamerIndex

public interface **IHTTPStreamerSmoothStreamerIndex**
extends

Method Summary

void	close()
IHTTPStreamerApplicationContext	getApplicationContext()
byte[]	getEncryptionIVBytes()
SmoothStreamerFileFragmentList	getFragment (int fragmentType, int bitrate, long chunkTimecode, boolean isInfo)
IHTTPStreamerSession	getHttpStreamerSession()
long	getIndexVideoStartTimecode()
String	getPlaylistStr()
com.wowza.wms.drm.playready.PlayReadyEncryptor	getPlayReadyEncryptorAudio()
com.wowza.wms.drm.playready.PlayReadyEncryptor	getPlayReadyEncryptorVideo()
com.wowza.wms.drm.playready.PlayReadyKeyInfo	getPlayReadyKeyInfo()
String	getStreamName()
java.util.List	getStreamNames()
String	getTitleStr()
void	indexFile()
void	init (IHTTPStreamerSession httpStreamerSession, IHTTPStreamerApplicationContext appContext, String streamExt, String streamName, long playStart, long playDuration, long playSeek, String vodTranscodeNGRP)
boolean	isEncryptionRandomIV()

boolean	isReloadMediaList()
void	open()
void	setEncryptionIVBytes (byte[] encryptionIVBytes)
void	setEncryptionRandomIV (boolean encryptionRandomIV)
void	setIndexVideoStartTimeCode (long indexVideoStartTimeCode)
void	setTitleStr (String titleStr)

Methods

getPlaylistStr

```
public String getPlaylistStr()
```

getStreamNames

```
public java.util.List getStreamNames()
```

init

```
public void init(IHTTPStreamerSession httpStreamerSession,  
                IHTTPStreamerApplicationContext appContext,  
                String streamExt,  
                String streamName,  
                long playStart,  
                long playDuration,  
                long playSeek,  
                String vodTranscodeNGRP)
```

indexFile

```
public void indexFile()
```

close

```
public void close()
```

open

```
public void open()
```

(continued from last page)

getTitleStr

```
public String getTitleStr()
```

setTitleStr

```
public void setTitleStr(String titleStr)
```

getFragment

```
public SmoothStreamerFileFragmentList getFragment(int fragmentType,
    int bitrate,
    long chunkTimecode,
    boolean isInfo)
```

getHttpStreamerSession

```
public IHTTPStreamerSession getHttpStreamerSession()
```

getStreamName

```
public String getStreamName()
```

getPlayReadyKeyInfo

```
public com.wowza.wms.drm.playready.PlayReadyKeyInfo getPlayReadyKeyInfo()
```

getPlayReadyEncryptorAudio

```
public com.wowza.wms.drm.playready.PlayReadyEncryptor getPlayReadyEncryptorAudio()
```

getPlayReadyEncryptorVideo

```
public com.wowza.wms.drm.playready.PlayReadyEncryptor getPlayReadyEncryptorVideo()
```

getIndexVideoStartTimecode

```
public long getIndexVideoStartTimecode()
```

setIndexVideoStartTimeCode

```
public void setIndexVideoStartTimeCode(long indexVideoStartTimeCode)
```

getAppContext

```
public IHTTPStreamerApplicationContext getAppContext()
```

isReloadMediaList

```
public boolean isReloadMediaList()
```

isEncryptionRandomIV

```
public boolean isEncryptionRandomIV()
```

setEncryptionRandomIV

```
public void setEncryptionRandomIV(boolean encryptionRandomIV)
```

getEncryptionIVBytes

```
public byte[] getEncryptionIVBytes()
```

setEncryptionIVBytes

```
public void setEncryptionIVBytes(byte[] encryptionIVBytes)
```

com.wowza.wms.httpstreamer.smoothstreaming.file Interface IHTTPStreamerSmoothStreamerIndexItem

public interface IHTTPStreamerSmoothStreamerIndexItem
extends

Method Summary

int	getIndex()
long	getStartTimecode()
long	getStopTimecode()
void	setIndex(int index)
void	setStartTimecode(long startTimecode)
void	setStopTimecode(long stopTimecode)

Methods

getStartTimecode

public long **getStartTimecode**()

setStartTimecode

public void **setStartTimecode**(long startTimecode)

getStopTimecode

public long **getStopTimecode**()

setStopTimecode

public void **setStopTimecode**(long stopTimecode)

(continued from last page)

getIndex

```
public int getIndex()
```

setIndex

```
public void setIndex(int index)
```


com.wowza.wms.httpstreamer.smoothstreaming.file Interface IMediaReaderSmoothStreamer

All Superinterfaces:

[IMediaReader](#)

public interface **IMediaReaderSmoothStreamer**

extends [IMediaReader](#)

Field Summary

public static final	MEDIAREADER_POSTFIX Value: smooth
---------------------	---

Fields inherited from interface [com.wowza.wms.stream.IMediaReader](#)

[CONTENTTYPE_MEDIA](#), [CONTENTTYPE_MEDIALIST](#), [DEFAULT_RANDOMACCESSREADER](#),
[DEFAULT_RANDOMACCESSREADEROPTIMIZER](#), [PLAYEVENT_AFTERBUFFERFILL](#), [PLAYEVENT_AFTERMETADATA](#),
[PLAYEVENT_BEFOREBUFFERFILL](#), [PLAYEVENT_BEFOREMETADATA](#), [PLAYEVENT_STARTPLAYBACK](#), [SEEK_EXACT](#),
[SEEK_KEYCLOSE](#), [SEEK_KEYDOWN](#), [SEEK_KEYUP](#), [SEEKTARGET_AUDIO](#), [SEEKTARGET_ENHANCED](#),
[SEEKTARGET_VIDEOKEYFRAME](#)

Method Summary

SmoothStreamerFileFragmentList	getAudioFragment (HTTPStreamerSmoothStreamerIndexEntry entry, long chunkTimecode, int bitrate)
IHTTPStreamerSession	getHttpStreamerSession ()
int	getSmoothStreamingMediaMajorVersion ()
int	getSmoothStreamingMediaMinorVersion ()
SmoothStreamerFileFragmentList	getVideoFragment (HTTPStreamerSmoothStreamerIndexEntry entry, long chunkTimecode, int bitrate)
void	indexEntry (HTTPStreamerSmoothStreamerIndexEntry entry)
boolean	isSmoothAudio ()
boolean	isSmoothVideo ()
void	setHttpStreamerSession (IHTTPStreamerSession httpStreamerSession)
void	setSmoothAudio (boolean isSmoothAudio)
void	setSmoothStreamingMediaMajorVersion (int smoothStreamingMediaMajorVersion)

void	setSmoothStreamingMediaMinorVersion (int smoothStreamingMediaMinorVersion)
void	setSmoothVideo (boolean isSmoothVideo)

Methods inherited from interface [com.wowza.wms.stream.IMediaReader](#)

[close](#), [getDuration](#), [getLength](#), [getMediaExtension](#), [getMetadata](#), [getPath](#), [getStreamPosition](#), [init](#), [isOpen](#), [open](#), [rewind](#), [seek](#), [sendZeroLengthPacket](#), [setMediaReaderItem](#), [setProperties](#), [setStreamPosition](#), [startPlayback](#), [writeGeneratedKeyFrame](#), [writePackets](#), [writePackets](#)

Fields

MEDIAREADER_POSTFIX

```
public static final java.lang.String MEDIAREADER_POSTFIX
```

Constant value: **smooth**

Methods

indexEntry

```
public void indexEntry(HTTPStreamerSmoothStreamerIndexEntry entry)
```

getSmoothStreamingMediaMajorVersion

```
public int getSmoothStreamingMediaMajorVersion()
```

setSmoothStreamingMediaMajorVersion

```
public void setSmoothStreamingMediaMajorVersion(int smoothStreamingMediaMajorVersion)
```

getSmoothStreamingMediaMinorVersion

```
public int getSmoothStreamingMediaMinorVersion()
```

setSmoothStreamingMediaMinorVersion

```
public void setSmoothStreamingMediaMinorVersion(int smoothStreamingMediaMinorVersion)
```

(continued from last page)

getAudioFragment

```
public SmoothStreamerFileFragmentList  
getAudioFragment(HTTPStreamerSmoothStreamerIndexEntry entry,  
                 long chunkTimecode,  
                 int bitrate)
```

getVideoFragment

```
public SmoothStreamerFileFragmentList  
getVideoFragment(HTTPStreamerSmoothStreamerIndexEntry entry,  
                 long chunkTimecode,  
                 int bitrate)
```

isSmoothVideo

```
public boolean isSmoothVideo()
```

setSmoothVideo

```
public void setSmoothVideo(boolean isSmoothVideo)
```

isSmoothAudio

```
public boolean isSmoothAudio()
```

setSmoothAudio

```
public void setSmoothAudio(boolean isSmoothAudio)
```

getHttpStreamerSession

```
public IHTTPStreamerSession getHttpStreamerSession()
```

setHttpStreamerSession

```
public void setHttpStreamerSession(IHTTPStreamerSession httpStreamerSession)
```

Package

**com.wowza.wms.httpstreamer.smoothstream
ing.httpstreamer**

com.wowza.wms.httpstreamer.smoothstreaming.httpstreamer Class HTTPStreamerSessionSmoothStreamer

java.lang.Object

└─ com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

└─

com.wowza.wms.httpstreamer.smoothstreaming.httpstreamer.HTTPStreamerSessionSmoothStreamer

All Implemented Interfaces:

[IHTTPSessionNotify](#), [IHTTPStreamerSession](#)

```
public class HTTPStreamerSessionSmoothStreamer
extends HTTPStreamerSessionBase
implements IHTTPStreamerSession, IHTTPSessionNotify
```

Fields inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

acceptSession, appInstance, connectionHolder, cookieStr, corsHeaders, DATEFORMAT, elapsedTime, fastDateFormat, fileInfoMap, firstCheck, httpHeaders, httpStreamerAdapter, ioPerformanceCounter, ipAddress, isActive, isDelete, isHTTPOrigin, isPlayLogged, isSecure, lastRequest, liveStreamingPacketizer, lock, mediaCasterStreamLock, notifyCreate, playDuration, playSeek, playStart, properties, queryStr, redirectSession, redirectSessionBody, redirectSessionCode, redirectSessionContentType, redirectSessionURL, referrer, serverIp, serverPort, sessionId, sessionProtocol, sessionTimeout, sessionType, stream, streamDomainStrSet, streamExt, streamName, streamNamePartMap, streamPosition, timeoutSession, totalIOPerformance2Last, totalIOPerformanceLast, transcoderVODIndex, transcoderVODIndexDestinationsMap, transcoderVODIndexDestinationsOrder, transcoderVODListeners, transcoderVODSession, uri, userAgent, userHTTPHeaders, userManifestHeaders, userQueryStr, vhost, vodTranscodeNGRP

Fields inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[SESSIONPROTOCOL_COUNT](#), [SESSIONPROTOCOL_CUPERTINOSTREAMING](#), [SESSIONPROTOCOL_DIRECTSTREAMING](#), [SESSIONPROTOCOL_DVRCHUNKSTREAMING](#), [SESSIONPROTOCOL_MPEGDASHSTREAMING](#), [SESSIONPROTOCOL_SANJOSESTREAMING](#), [SESSIONPROTOCOL_SMOOTHSTREAMING](#), [SESSIONPROTOCOL_TSSTREAMING](#), [SESSIONPROTOCOL_UNKNOWN](#), [SESSIONPROTOCOL_WEBMSTREAMING](#), [SESSIONTYPE_LIVE](#), [SESSIONTYPE_LIVEDVR](#), [SESSIONTYPE_UNKNOWN](#), [SESSIONTYPE_VOD](#)

Constructor Summary

public	HTTPStreamerSessionSmoothStreamer()
--------	---

Method Summary

void	clearLoggingValues()
------	--------------------------------------

boolean	containsIndex (String streamName)
---------	---

IHTTPStreamerSmoothStreamerIndex	getIndex(IHTTPStreamerSession httpStreamerSession, IHTTPStreamerApplicationContext appContext, String streamExt, String streamName, long playStart, long playDuration, long playSeek, String vodTranscodeNGRP)
SmoothStreamingLivePlaylist	getLivePlaylist()
Object	getPublishData()
void	indexTranscoderVOD(IHTTPStreamerApplicationContext appContext, String vodTranscodeNGRP)
void	logLiveFragment(SmoothStreamerFragmentId fragmentId, PacketFragmentList fragmentData)
void	logVODFragment(SmoothStreamerFragmentId fragmentId, PacketFragmentList fragmentData)
void	notifyHTTPSessionCreate(IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)
void	notifyHTTPSessionDestroy(IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)
void	setLivePlaylist(SmoothStreamingLivePlaylist livePlaylist)
void	setPublishData(Object publishData)
void	shutdown()
void	updateLoggingValues()

Methods inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

```

acceptSession, addHTTPSessionToTCPSTSession, addIOPerformance, addIOPerformance2,
addStreamDomainStr, addStreamDomainStrs, addTranscoderVODListener,
addUserHTTPHeaders, checkAndSetPlayLogged, clearLoggingValues,
containsStreamDomainStr, containsStreamNameParts, doSessionRedirect,
doSessionRedirect, extractHTTPRequestInfo, getAndClearNotifyCreate, getAppInstance,
getConnectionHolder, getCookieStr, getCORSHheaders, getDvrSessionInfo, getElapsedTime,
getFileInfo, getHTTPDate, getHTTPHeader, getHTTPHeaderMap, getHTTPHeaderNames,
getHTTPIntHeader, getHTTPStreamerAdapter, getIOPerformanceCounter, getIpAddress,
getLastRequest, getLiveStreamingPacketizer, getLock, getPlayDuration, getPlaySeek,
getPlayStart, getProperties, getQueryStr, getRedirectSessionBody,
getRedirectSessionCode, getRedirectSessionContentType, getRedirectSessionURL,
getReferrer, getServerIp, getServerPort, getSessionId, getSessionProtocol,
getSessionTimeout, getSessionType, getStream, getStreamDomainStr,
getStreamDomainStrList, getStreamExt, getStreamName, getStreamNameParts,
getStreamPosition, getTimeRunning, getTimeRunningSeconds, getTranscoderVODIndex,
getTranscoderVODIndex, getTranscoderVODIndexDestinationsMap,
getTranscoderVODIndexDestinationsOrder, getTranscoderVODSession, getUri,
getUserAgent, getUserHTTPHeaders, getUserQueryStr, getVHost, getVODTranscodeNGRP,
indexTranscoderVOD, isAcceptSession, isActive, isDelete, isDeleteSession, isFileInfo,
isHTTPOrigin, isPlayLogged, isRedirectSession, isSecure, isTimeout, isTimeoutSession,
isValidated, isValidStreamDomainStr, lockRepeaterStreams,
notifyTranscoderVODFillChunkStart, notifyTranscoderVODFillChunkStop,
notifyTranscoderVODFillChunkTranscode, putFileInfo, putStreamNameParts,
redirectSession, redirectSession, rejectSession, removeStreamDomainStr,
removeTranscoderVODListener, setAcceptSession, setActive, setAppInstance,
setCookieStr, setDeleteSession, setDvrSessionInfo, setHTTPOrigin,
setHTTPStreamerAdapter, setIpAddress, setLiveStreamingPacketizer, setPlayDuration,
setPlayLogged, setPlaySeek, setPlayStart, setQueryStr, setRedirectSession,
setRedirectSessionBody, setRedirectSessionCode, setRedirectSessionContentType,
setRedirectSessionURL, setReferrer, setSecure, setServerIp, setServerPort,
setSessionId, setSessionProtocol, setSessionTimeout, setSessionType, setStream,
setStreamExt, setStreamName, setStreamPosition, setThreadContext, setTimeoutSession,
setTranscoderVODIndex, setTranscoderVODSession, setUri, setUserAgent,
setUserHTTPHeader, setUserQueryStr, setValidated, setVHost, setVODTranscodeNGRP,
shutdown, shutdownLocked, touch, updateLoggingValues, validStreamDomainToString

```

Methods inherited from class java.lang.Object

```

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

```

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[acceptSession](#), [addHTTPSessionToTCPSession](#), [addIOPerformance](#), [addIOPerformance2](#),
[addStreamDomainStr](#), [addStreamDomainStrs](#), [addTranscoderVODListener](#),
[addUserHTTPHeaders](#), [checkAndSetPlayLogged](#), [clearLoggingValues](#),
[containsStreamDomainStr](#), [containsStreamNameParts](#), [doSessionRedirect](#),
[doSessionRedirect](#), [extractHTTPRequestInfo](#), [getAndClearNotifyCreate](#), [getAppInstance](#),
[getConnectionHolder](#), [getCookieStr](#), [getCORSHaders](#), [getDvrSessionInfo](#), [getElapsedTime](#),
[getFileInfo](#), [getHTTPHeader](#), [getHTTPHeaderMap](#), [getHTTPHeaderNames](#), [getHTTPIntHeader](#),
[getHTTPStreamerAdapter](#), [getIOPerformanceCounter](#), [getIpAddress](#), [getLastRequest](#),
[getLiveStreamingPacketizer](#), [getLock](#), [getPlayDuration](#), [getPlaySeek](#), [getPlayStart](#),
[getProperties](#), [getQueryStr](#), [getRedirectSessionBody](#), [getRedirectSessionCode](#),
[getRedirectSessionContentType](#), [getRedirectSessionURL](#), [getReferrer](#), [getServerIp](#),
[getServerPort](#), [getSessionId](#), [getSessionProtocol](#), [getSessionTimeout](#), [getSessionType](#),
[getStream](#), [getStreamExt](#), [getStreamName](#), [getStreamNameParts](#), [getStreamPosition](#),
[getTimeRunning](#), [getTimeRunningSeconds](#), [getTranscoderVODIndex](#), [getTranscoderVODIndex](#),
[getTranscoderVODIndexDestinationsMap](#), [getTranscoderVODIndexDestinationsOrder](#),
[getTranscoderVODSession](#), [getUri](#), [getUserAgent](#), [getUserHTTPHeaders](#), [getUserQueryStr](#),
[getVHost](#), [getVODTranscodeNGRP](#), [indexTranscoderVOD](#), [isAcceptSession](#), [isActive](#),
[isDelete](#), [isDeleteSession](#), [isFileInfo](#), [isHTTPOrigin](#), [isPlayLogged](#), [isRedirectSession](#),
[isSecure](#), [isTimeout](#), [isTimeoutSession](#), [isValidated](#), [isValidStreamDomainStr](#),
[lockRepeaterStreams](#), [notifyTranscoderVODFillChunkStart](#),
[notifyTranscoderVODFillChunkStop](#), [notifyTranscoderVODFillChunkTranscode](#), [putFileInfo](#),
[putStreamNameParts](#), [redirectSession](#), [redirectSession](#), [rejectSession](#),
[removeStreamDomainStr](#), [removeTranscoderVODListener](#), [setAcceptSession](#), [setActive](#),
[setAppInstance](#), [setCookieStr](#), [setDeleteSession](#), [setDvrSessionInfo](#), [setHTTPOrigin](#),
[setHTTPStreamerAdapter](#), [setIpAddress](#), [setLiveStreamingPacketizer](#), [setPlayDuration](#),
[setPlayLogged](#), [setPlaySeek](#), [setPlayStart](#), [setQueryStr](#), [setRedirectSession](#),
[setRedirectSessionBody](#), [setRedirectSessionCode](#), [setRedirectSessionContentType](#),
[setRedirectSessionURL](#), [setReferrer](#), [setSecure](#), [setServerIp](#), [setServerPort](#),
[setSessionId](#), [setSessionProtocol](#), [setSessionTimeout](#), [setSessionType](#), [setStream](#),
[setStreamExt](#), [setStreamName](#), [setStreamPosition](#), [setTimeoutSession](#),
[setTranscoderVODIndex](#), [setTranscoderVODSession](#), [setUri](#), [setUserAgent](#),
[setUserHTTPHeader](#), [setUserQueryStr](#), [setVHost](#), [setVODTranscodeNGRP](#), [shutdown](#), [touch](#),
[updateLoggingValues](#), [validStreamDomainToString](#)

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPSessionNotify](#)

[notifyHTTPSessionCreate](#), [notifyHTTPSessionDestroy](#)

Constructors

HTTPStreamerSessionSmoothStreamer

```
public HTTPStreamerSessionSmoothStreamer()
```

Methods

shutdown

```
public void shutdown()
```


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containsIndex

```
public boolean containsIndex(String streamName)
```

getIndex

```
public IHTTPStreamerSmoothStreamerIndex getIndex(IHTTPStreamerSession  
httpStreamerSession,  
    IHTTPStreamerApplicationContext appContext,  
    String streamExt,  
    String streamName,  
    long playStart,  
    long playDuration,  
    long playSeek,  
    String vodTranscodeNGRP)
```

updateLoggingValues

```
public void updateLoggingValues()
```

clearLoggingValues

```
public void clearLoggingValues()
```

getLivePlaylist

```
public SmoothStreamingLivePlaylist getLivePlaylist()
```

setLivePlaylist

```
public void setLivePlaylist(SmoothStreamingLivePlaylist livePlaylist)
```

logLiveFragment

```
public void logLiveFragment(SmoothStreamerFragmentId fragmentId,  
    PacketFragmentList fragmentData)
```

logVODFragment

```
public void logVODFragment(SmoothStreamerFragmentId fragmentId,  
    PacketFragmentList fragmentData)
```

(continued from last page)

notifyHTTPSessionCreate

```
public void notifyHTTPSessionCreate(IApplicationInstance appInstance,  
    IHTTPStreamerSession httpStreamerSession)
```

notifyHTTPSessionDestroy

```
public void notifyHTTPSessionDestroy(IApplicationInstance appInstance,  
    IHTTPStreamerSession httpStreamerSession)
```

indexTranscoderVOD

```
public void indexTranscoderVOD(IHTTPStreamerApplicationContext appContext,  
    String vodTranscodeNGRP)
```

getPublishData

```
public Object getPublishData()
```

setPublishData

```
public void setPublishData(Object publishData)
```

Package

com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer

com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer Interface IHTTPStreamerSmoothLivePacketizerDataHandler

public interface IHTTPStreamerSmoothLivePacketizerDataHandler
extends

Method Summary

void	onFillChunkDataPacket (AMFPacket packet)
------	---

Methods

onFillChunkDataPacket

public void **onFillChunkDataPacket**([AMFPacket](#) packet)

com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer Interface IHTTPStreamerSmoothLivePacketizerDataTrackHandler

public interface IHTTPStreamerSmoothLivePacketizerDataTrackHandler
extends

Interface for defining the

Method Summary

String	getTrackData (long timeCode) Called to return track data for the given timecode.
SmoothStreamingDataTrack	getTrackInfo () Get the track info for this data track.

Methods

getTrackData

public String **getTrackData**(long timeCode)

Called to return track data for the given timecode.

Parameters:

timeCode - ms

Returns:

track data

getTrackInfo

public SmoothStreamingDataTrack **getTrackInfo**()

Get the track info for this data track.

Returns:

track data

com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer Class LiveStreamPacketizerSmoothStreaming

java.lang.Object

└-com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase

└-

com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.LiveStreamPacketizerSmoothStreaming

All Implemented Interfaces:

Runnable, IdleNotify, [ILiveStreamPacketizer](#)

```
public class LiveStreamPacketizerSmoothStreaming
extends LiveStreamPacketizerBase
```

Field Summary

protected	alignAudioWithVideo
protected	appContext
protected	audioFragments
protected	contextStr
protected	dataEventFrequency
protected	dataFragments
protected	dataTracks
public static final	DEFAULT_ALIGNAUDIOWITHVIDEO Value: false
public static final	DEFAULT_PACKETSORTTIME Value: 0
public static final	DEFAULT_SMOOTHBUFFERMINFRAGMENTCOUNT Value: 4
public static final	DEFAULT_SMOOTHFRAGMENTTARGETAUDIODURATION Value: 2000
public static final	DEFAULT_SMOOTHMANIFESTMINFRAGMENTCOUNT Value: 4

public static final	DEFAULT_SMOOTHMANIFESTTARGETDURATION Value: 24000
public static final	DEFAULT_SMOOTHREPEATERMINFRAGMENTCOUNT Value: 4
public static final	DEFAULT_SMOOTHREPEATERTARGETDURATION Value: 24000
protected	enableDataEvents
protected	ismcXMLLock
public static final	MAX_READAHEAD_TIMECODES Value: 8
protected	maxChunkLogCount
public static final	MAXTIMECODE_BIGINTEGER Value: 922337203685
public static final	MILLISTOSILVERLIGHT Value: 10000
protected	nextFragmentIdAudio
protected	nextFragmentIdData
protected	nextFragmentIdVideo
protected	packetHandler
protected	packetSortTime
protected	pendingAudioFragments
protected	pendingVideoFragments
protected	playReadyEmptyLicenseSize
protected	playReadyEncryptorAudio
protected	playReadyEncryptorVideo
protected	playReadyKeyInfo
protected	readAheadSize

protected	readAheadTimecodesAudio
protected	readAheadTimecodesVideo
protected	repeaterItemsLock
protected	repeaterListAudio
protected	repeaterListVideo
protected	repeaterSeq
public static final	SECONDDSTOSILVERLIGHT Value: 10000000
protected	smoothBufferMinFragmentCount
protected	smoothBufferTargetDuration
protected	smoothFragmentMaximumAudioDuration
protected	smoothFragmentTargetAudioDuration
protected	smoothManifestMinFragmentCount
protected	smoothManifestTargetDuration
protected	smoothMinimumVideoFragmentDuration
protected	smoothPlayReadyH264ClearSize
protected	smoothRepeaterMinFragmentCount
protected	smoothRepeaterTargetDuration
protected	smoothStreamingMediaMajorVersion
protected	smoothStreamingMediaMinorVersion
protected	videoFragments
protected	xmlData
protected	xmlIsAudio
protected	xmlIsData
protected	xmlIsLiveData

protected	xmlISMC
protected	xmlIsProtection
protected	xmlIsVideo
protected	xmlProtection
protected	xmlQualityLevelAudio
protected	xmlQualityLevelVideo
protected	xmlSamplesAudio
protected	xmlSamplesVideo
protected	xmlSmoothStreamingMedia
protected	xmlStreamIndexAudio
protected	xmlStreamIndexVideo

Fields inherited from class com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase

appInstance, captionDefaultLanguages, captionIngestType, captionsEnabled, captionUseStreamNameGroups, checkTimeoutInterval, DEFAULT_STREAMTIMEOUT, EVENT_PACKET, EVENT_RESETSTREAM, EVENT_STARTSTREAM, eventProcessCount, events, id, inProcessEvent, isActive, isRepeater, isRepeaterEdge, isRunning, lastCheckTime, lastEventProcessTC, lastStreamStartTime, lastStreamUpdate, liveStreamPacketizerItem, liveTimedTextProvider, maxEventCount, maxEventCountErrors, maxEventsPerRun, MAXEVENTSPERRUN, packetizeAudio, packetizeData, packetizerName, packetizeVideo, properties, runnerLock, startStream, streamName, streamStartupTimeout, streamTimeout, timeoutLock

Constructor Summary

public	LiveStreamPacketizerSmoothStreaming()
--------	---

Method Summary

void	addDataFragment (long startTime, long duration, SmoothStreamingFragmentHeader fragmentHeader)
void	addFragmentAudioMediaPacket (long startTime, SmoothStreamingMediaPacket mediaPacket)
void	addFragmentVideoMediaPacket (long startTime, SmoothStreamingMediaPacket mediaPacket)
void	addReadAheadTimecodeAudio (long timecode)

void	addReadAheadTimecodeVideo (long timecode)
void	clearFragmentAudio ()
void	clearFragmentData ()
void	clearFragmentVideo ()
void	endFragmentAudio (long startTime, long endTime)
void	endFragmentVideo (long startTime, long endTime)
int	getAudioBitrate ()
PacketFragmentList	getAudioPacket (long timecode, boolean isInfo)
IHTTPStreamerSmoothLivePacketizerDataHandler	getDataHandler ()
byte[]	getDataPacket (long timecode, boolean isInfo)
IHTTPStreamerSmoothLivePacketizerDataTrackHandler	getDataTrackHandler ()
SmoothStreamingDataTracks	getDataTracks ()
int	getDisplayHeight ()
int	getDisplayWidth ()
Object	getManifestLock ()
int	getMaxReadAheadTimecodes ()
long	getPlaylistDuration ()
com.wowza.wms.drm.playready.PlayReadyKeyInfo	getPlayReadKeyInfo ()
int	getPlayReadyEmptyLicenseSize ()
void	getRepeaterAudioItems (java.util.List items, long seq)
long	getRepeaterAudioLastSequence ()
long	getRepeaterLastSequence ()
void	getRepeaterVideoItems (java.util.List items, long seq)

long	getRepeaterVideoLastSequence()
int	getVideoBitrate()
int	getVideoHeight()
PacketFragmentList	getVideoPacket(long timecode, boolean isInfo)
PacketFragmentList	getVideoPacket(long timecode, boolean isInfo, int keyFrameTolerance)
int	getVideoWidth()
String	getXMLData()
String	getXMLISMC()
String	getXMLProtection()
String	getXMLQualityLevelAudio()
String	getXMLQualityLevelVideo()
String	getXMLSamplesAudio()
String	getXMLSamplesVideo()
String	getXMLSmoothStreamingMedia()
String	getXMLStreamIndexAudio()
String	getXMLStreamIndexVideo()
void	init(String streamName, String packetizerName, IApplicationInstance appInstance, LiveStreamPacketizerItem liveStreamPacketizerItem)
void	internalHandlePacket(IMediaStream stream, AMFPacket packet)
void	internalResetStream(IMediaStream stream)
void	internalStartStream(IMediaStream stream)
boolean	isAudioFragmentDeleted(long timecode)
boolean	isAudioFragmentDeleted(long timecode, int tolerance)
boolean	isReadAheadTimecodeAudio(long timecode)
boolean	isReadAheadTimecodeVideo(long timecode)

boolean	isVideoFragmentDeleted (long timecode)
boolean	isVideoFragmentDeleted (long timecode, int tolerance)
boolean	isXMLIsAudio ()
boolean	isXMLIsData ()
boolean	isXMLIsProtection ()
boolean	isXMLIsVideo ()
long	recalculateDuration (SmoothStreamingPendingFragment fragment, long nextTimecode)
void	setDataHandler (IHTTPStreamerSmoothLivePacketizerDataHandler dataHandler)
void	setDataTrackHandler (IHTTPStreamerSmoothLivePacketizerDataTrackHandler handler)
void	setFragmentAudioHeader (long startTime, SmoothStreamingFragmentHeader fragmentHeader, SmoothStreamingMediaInfoAudio mediaInfo)
void	setFragmentVideoHeader (long startTime, SmoothStreamingFragmentHeader fragmentHeader, SmoothStreamingMediaInfoVideo mediaInfo)
void	setMaxReadAheadTimecodes (int maxReadAheadTimecodes)
void	setPlayReadyKeyInfo (com.wowza.wms.drm.playready.PlayReadyKeyInfo playReadyKeyInfo)
void	setPlayReadyEmptyLicenseSize (int playReadyEmptyLicenseSize)
void	startFragmentAudio (long startTime)
void	startFragmentVideo (long startTime)
boolean	testPlaylistDuration (long testDuration)
void	updateISMFXML ()

Methods inherited from class com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase

```
addPacketizerEvent, checkTimeout, getAndSetStartStream, getApplicationInstance,
getCaptionProvider, getContextStr, getLiveStreamPacketizerId, getMaxEventCount,
getProperties, getRepeaterItems, getRepeaterItemsSanJose, getRepeaterLastSequence,
getStreamStartupTimeout, getStreamTimeout, handlePacket, init,
initLiveCaptionIngestor, internalHandlePacket, internalResetStream,
internalStartStream, isActive, isCEA608IngestModuleInstalled, isPacketizeAudio,
isPacketizeData, isPacketizeVideo, isRepeaterEdge, onIdle, resetStream, run,
setLiveStreamPacketizerId, setMaxEventCount, setPacketizeAudio, setPacketizeData,
setPacketizeVideo, setRepeaterEdge, setStreamStartupTimeout, setStreamTimeout,
shutdown, startStream, touch
```

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Methods inherited from interface [com.wowza.wms.stream.livepacketizer.ILiveStreamPacketizer](#)

```
getAndSetStartStream, getApplicationInstance, getLiveStreamPacketizerId,
getProperties, getRepeaterLastSequence, handlePacket, init, isActive,
isPacketizeAudio, isPacketizeData, isPacketizeVideo, isRepeaterEdge, resetStream,
setLiveStreamPacketizerId, setPacketizeAudio, setPacketizeData, setPacketizeVideo,
setRepeaterEdge, shutdown, startStream, touch
```

Methods inherited from interface `com.wowza.wms.util.IIdleNotify`

```
onIdle
```

Methods inherited from interface `java.lang.Runnable`

```
run
```

Fields

DEFAULT_SMOOTHFRAGMENTTARGETAUDIODURATION

```
public static final int DEFAULT_SMOOTHFRAGMENTTARGETAUDIODURATION
```

Constant value: **2000**

DEFAULT_SMOOTHREPEATERMINFRAGMENTCOUNT

```
public static final int DEFAULT_SMOOTHREPEATERMINFRAGMENTCOUNT
```

Constant value: **4**

DEFAULT_SMOOTHREPEATERTARGETDURATION

```
public static final int DEFAULT_SMOOTHREPEATERTARGETDURATION
```

Constant value: **24000**

DEFAULT_SMOOTHMANIFESTMINFRAGMENTCOUNT

```
public static final int DEFAULT_SMOOTHMANIFESTMINFRAGMENTCOUNT
```

Constant value: **4**

DEFAULT_SMOOTHMANIFESTTARGETDURATION

```
public static final int DEFAULT_SMOOTHMANIFESTTARGETDURATION
```

Constant value: **24000**

DEFAULT_SMOOTHBUFFERMINFRAGMENTCOUNT

```
public static final int DEFAULT_SMOOTHBUFFERMINFRAGMENTCOUNT
```

Constant value: **4**

DEFAULT_ALIGNAUDIOWITHVIDEO

```
public static final boolean DEFAULT_ALIGNAUDIOWITHVIDEO
```

Constant value: **false**

DEFAULT_PACKETSORTTIME

```
public static final int DEFAULT_PACKETSORTTIME
```

Constant value: **0**

MILLISTOSILVERLIGHT

```
public static final int MILLISTOSILVERLIGHT
```

Constant value: **10000**

SECONDESTOSILVERLIGHT

```
public static final long SECONDESTOSILVERLIGHT
```

Constant value: **10000000**

MAXTIMECODE_BIGINTEGER

```
public static final long MAXTIMECODE_BIGINTEGER
```

Constant value: **922337203685**

MAX_READAHEAD_TIMECODES

```
public static final int MAX_READAHEAD_TIMECODES
```

(continued from last page)

Constant value: **8**

videoFragments

protected
com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.SmoothStreamingFragments **videoFragments**

audioFragments

protected
com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.SmoothStreamingFragments **audioFragments**

pendingVideoFragments

protected java.util.Map **pendingVideoFragments**

pendingAudioFragments

protected java.util.Map **pendingAudioFragments**

readAheadTimecodesVideo

protected java.util.List **readAheadTimecodesVideo**

readAheadTimecodesAudio

protected java.util.List **readAheadTimecodesAudio**

xmlISMC

protected java.lang.String **xmlISMC**

xmlSmoothStreamingMedia

protected java.lang.String **xmlSmoothStreamingMedia**

xmlIsVideo

protected boolean **xmlIsVideo**

(continued from last page)

xmlStreamIndexVideo

protected java.lang.String **xmlStreamIndexVideo**

xmlQualityLevelVideo

protected java.lang.String **xmlQualityLevelVideo**

xmlSamplesVideo

protected java.lang.String **xmlSamplesVideo**

xmlIsAudio

protected boolean **xmlIsAudio**

xmlStreamIndexAudio

protected java.lang.String **xmlStreamIndexAudio**

xmlQualityLevelAudio

protected java.lang.String **xmlQualityLevelAudio**

xmlSamplesAudio

protected java.lang.String **xmlSamplesAudio**

xmlIsData

protected boolean **xmlIsData**

xmlData

protected java.lang.String **xmlData**

(continued from last page)

xmlIsProtection

protected boolean **xmlIsProtection**

xmlProtection

protected java.lang.String **xmlProtection**

ismcXMLLock

protected java.lang.Object **ismcXMLLock**

packetHandler

protected
com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.SmoothStreamingPacketHandler **packetHandler**

readAheadSize

protected int **readAheadSize**

smoothStreamingMediaMajorVersion

protected int **smoothStreamingMediaMajorVersion**

smoothStreamingMediaMinorVersion

protected int **smoothStreamingMediaMinorVersion**

smoothBufferTargetDuration

protected int **smoothBufferTargetDuration**

smoothMinimumVideoFragmentDuration

protected int **smoothMinimumVideoFragmentDuration**

(continued from last page)

smoothBufferMinFragmentCount

protected int **smoothBufferMinFragmentCount**

smoothManifestTargetDuration

protected int **smoothManifestTargetDuration**

smoothManifestMinFragmentCount

protected int **smoothManifestMinFragmentCount**

smoothRepeaterTargetDuration

protected int **smoothRepeaterTargetDuration**

smoothRepeaterMinFragmentCount

protected int **smoothRepeaterMinFragmentCount**

smoothPlayReadyH264ClearSize

protected int **smoothPlayReadyH264ClearSize**

smoothFragmentTargetAudioDuration

protected int **smoothFragmentTargetAudioDuration**

smoothFragmentMaximumAudioDuration

protected int **smoothFragmentMaximumAudioDuration**

nextFragmentIdVideo

protected long **nextFragmentIdVideo**

nextFragmentIdAudio

protected long **nextFragmentIdAudio**

(continued from last page)

maxChunkLogCount

protected int **maxChunkLogCount**

packetSortTime

protected int **packetSortTime**

alignAudioWithVideo

protected boolean **alignAudioWithVideo**

repeaterItemsLock

protected java.lang.Object **repeaterItemsLock**

repeaterSeq

protected long **repeaterSeq**

repeaterListAudio

protected
com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.SmoothStreamingRepeaterList **repeaterListAudio**

repeaterListVideo

protected
com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.SmoothStreamingRepeaterList **repeaterListVideo**

dataTracks

protected com.wowza.wms.httpstreamer.smoothstreaming.model.SmoothStreamingDataTracks
dataTracks

playReadyKeyInfo

protected com.wowza.wms.drm.playready.PlayReadyKeyInfo **playReadyKeyInfo**

(continued from last page)

playReadyEncryptorAudio

protected com.wowza.wms.drm.playready.PlayReadyEncryptor **playReadyEncryptorAudio**

playReadyEncryptorVideo

protected com.wowza.wms.drm.playready.PlayReadyEncryptor **playReadyEncryptorVideo**

contextStr

protected java.lang.String **contextStr**

appContext

protected com.wowza.wms.httpstreamer.model.IHTTPStreamerApplicationContext **appContext**

playReadyEmptyLicenseSize

protected int **playReadyEmptyLicenseSize**

dataFragments

protected
com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.SmoothStreamingFragments **dataFragments**

nextFragmentIdData

protected long **nextFragmentIdData**

xmlIsLiveData

protected boolean **xmlIsLiveData**

enableDataEvents

protected boolean **enableDataEvents**

dataEventFrequency

protected int **dataEventFrequency**

Constructors

LiveStreamPacketizerSmoothStreaming

```
public LiveStreamPacketizerSmoothStreaming()
```

Methods

getManifestLock

```
public Object getManifestLock()
```

init

```
public void init(String streamName,  
                String packetizerName,  
                IApplicationInstance appInstance,  
                LiveStreamPacketizerItem liveStreamPacketizerItem)
```

setPlayReadKeyInfo

```
public void setPlayReadKeyInfo(com.wowza.wms.drm.playready.PlayReadyKeyInfo  
playReadyKeyInfo)
```

getPlayReadKeyInfo

```
public com.wowza.wms.drm.playready.PlayReadyKeyInfo getPlayReadKeyInfo()
```

internalStartStream

```
public void internalStartStream(IMediaStream stream)
```

internalResetStream

```
public void internalResetStream(IMediaStream stream)
```

(continued from last page)

internalHandlePacket

```
public void internalHandlePacket(IMediaStream stream,  
    AMFPacket packet)
```

getRepeaterAudioLastSequence

```
public long getRepeaterAudioLastSequence()
```

getRepeaterAudioItems

```
public void getRepeaterAudioItems(java.util.List items,  
    long seq)
```

getRepeaterVideoLastSequence

```
public long getRepeaterVideoLastSequence()
```

getRepeaterLastSequence

```
public long getRepeaterLastSequence()
```

getRepeaterVideoItems

```
public void getRepeaterVideoItems(java.util.List items,  
    long seq)
```

clearFragmentAudio

```
public void clearFragmentAudio()
```

startFragmentAudio

```
public void startFragmentAudio(long startTime)
```

addFragmentAudioMediaPacket

```
public void addFragmentAudioMediaPacket(long startTime,  
    SmoothStreamingMediaPacket mediaPacket)
```

(continued from last page)

setFragmentAudioHeader

```
public void setFragmentAudioHeader(long startTime,
    SmoothStreamingFragmentHeader fragmentHeader,
    SmoothStreamingMediaInfoAudio mediaInfo)
```

recalculateDuration

```
public long recalculateDuration(SmoothStreamingPendingFragment fragment,
    long nextTimecode)
```

endFragmentAudio

```
public void endFragmentAudio(long startTime,
    long endTime)
```

clearFragmentVideo

```
public void clearFragmentVideo()
```

startFragmentVideo

```
public void startFragmentVideo(long startTime)
```

addFragmentVideoMediaPacket

```
public void addFragmentVideoMediaPacket(long startTime,
    SmoothStreamingMediaPacket mediaPacket)
```

setFragmentVideoHeader

```
public void setFragmentVideoHeader(long startTime,
    SmoothStreamingFragmentHeader fragmentHeader,
    SmoothStreamingMediaInfoVideo mediaInfo)
```

endFragmentVideo

```
public void endFragmentVideo(long startTime,
    long endTime)
```

updateISMFXML

```
public void updateISMFXML()
```

(continued from last page)

getVideoBitrate

```
public int getVideoBitrate()
```

getAudioBitrate

```
public int getAudioBitrate()
```

isAudioFragmentDeleted

```
public boolean isAudioFragmentDeleted(long timecode)
```

isAudioFragmentDeleted

```
public boolean isAudioFragmentDeleted(long timecode,  
int tolerance)
```

isVideoFragmentDeleted

```
public boolean isVideoFragmentDeleted(long timecode)
```

isVideoFragmentDeleted

```
public boolean isVideoFragmentDeleted(long timecode,  
int tolerance)
```

getAudioPacket

```
public PacketFragmentList getAudioPacket(long timecode,  
boolean isInfo)
```

getVideoPacket

```
public PacketFragmentList getVideoPacket(long timecode,  
boolean isInfo)
```

(continued from last page)

getVideoPacket

```
public PacketFragmentList getVideoPacket(long timecode,  
    boolean isInfo,  
    int keyFrameTolerance)
```

getXMLSmoothStreamingMedia

```
public String getXMLSmoothStreamingMedia()
```

isXMLIsVideo

```
public boolean isXMLIsVideo()
```

getXMLStreamIndexVideo

```
public String getXMLStreamIndexVideo()
```

getXMLQualityLevelVideo

```
public String getXMLQualityLevelVideo()
```

getXMLSamplesVideo

```
public String getXMLSamplesVideo()
```

isXMLIsAudio

```
public boolean isXMLIsAudio()
```

isXMLIsData

```
public boolean isXMLIsData()
```

isXMLIsProtection

```
public boolean isXMLIsProtection()
```

(continued from last page)

getXMLStreamIndexAudio

```
public String getXMLStreamIndexAudio()
```

getXMLQualityLevelAudio

```
public String getXMLQualityLevelAudio()
```

getXMLSamplesAudio

```
public String getXMLSamplesAudio()
```

getXMLData

```
public String getXMLData()
```

getXMLProtection

```
public String getXMLProtection()
```

getXMLISMC

```
public String getXMLISMC()
```

getPlaylistDuration

```
public long getPlaylistDuration()
```

testPlaylistDuration

```
public boolean testPlaylistDuration(long testDuration)
```

getDataTracks

```
public SmoothStreamingDataTracks getDataTracks()
```

getDataHandler

```
public IHTTPStreamerSmoothLivePacketizerDataHandler getDataHandler()
```

(continued from last page)

setDataHandler

```
public void setDataHandler(IHTTPStreamerSmoothLivePacketizerDataHandler dataHandler)
```

getDataTrackHandler

```
public IHTTPStreamerSmoothLivePacketizerDataTrackHandler getDataTrackHandler()
```

setDataTrackHandler

```
public void setDataTrackHandler(IHTTPStreamerSmoothLivePacketizerDataTrackHandler handler)
```

clearFragmentData

```
public void clearFragmentData()
```

addDataFragment

```
public void addDataFragment(long startTime,
                             long duration,
                             SmoothStreamingFragmentHeader fragmentHeader)
```

getDataPacket

```
public byte[] getDataPacket(long timecode,
                             boolean isInfo)
```

isReadAheadTimecodeVideo

```
public boolean isReadAheadTimecodeVideo(long timecode)
```

addReadAheadTimecodeVideo

```
public void addReadAheadTimecodeVideo(long timecode)
```

isReadAheadTimecodeAudio

```
public boolean isReadAheadTimecodeAudio(long timecode)
```

addReadAheadTimecodeAudio

```
public void addReadAheadTimecodeAudio(long timecode)
```

getMaxReadAheadTimecodes

```
public int getMaxReadAheadTimecodes()
```

setMaxReadAheadTimecodes

```
public void setMaxReadAheadTimecodes(int maxReadAheadTimecodes)
```

getVideoHeight

```
public int getVideoHeight()
```

getVideoWidth

```
public int getVideoWidth()
```

getDisplayHeight

```
public int getDisplayHeight()
```

getDisplayWidth

```
public int getDisplayWidth()
```

getPlayReadyEmptyLicenseSize

```
public int getPlayReadyEmptyLicenseSize()
```

setPlayReadyEmptyLicenseSize

```
public void setPlayReadyEmptyLicenseSize(int playReadyEmptyLicenseSize)
```

com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer Class SmoothStreamingFragment

java.lang.Object



com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.SmoothStreamingFragment

```
public class SmoothStreamingFragment
extends Object
```

Constructor Summary

public	SmoothStreamingFragment()
--------	---

Method Summary

long	getDuration()
PacketFragmentList	getFragmentList()
SmoothStreamingMediaInfoAudio	getMediaInfoAudio()
SmoothStreamingMediaInfoVideo	getMediaInfoVideo()
long	getStartTimecode()
long	getStopTimecode()
void	setDuration(long duration)
void	setMediaInfoAudio(SmoothStreamingMediaInfoAudio mediaInfoAudio)
void	setMediaInfoVideo(SmoothStreamingMediaInfoVideo mediaInfoVideo)
void	setStartTimecode(long startTimecode)
void	setStopTimecode(long stopTimecode)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

(continued from last page)

SmoothStreamingFragment

```
public SmoothStreamingFragment()
```

Methods

getStartTimeCode

```
public long getStartTimeCode()
```

setStartTimeCode

```
public void setStartTimeCode(long startTimeCode)
```

getStopTimeCode

```
public long getStopTimeCode()
```

setStopTimeCode

```
public void setStopTimeCode(long stopTimeCode)
```

getFragmentList

```
public PacketFragmentList getFragmentList()
```

getMediaInfoVideo

```
public SmoothStreamingMediaInfoVideo getMediaInfoVideo()
```

setMediaInfoVideo

```
public void setMediaInfoVideo(SmoothStreamingMediaInfoVideo mediaInfoVideo)
```

getMediaInfoAudio

```
public SmoothStreamingMediaInfoAudio getMediaInfoAudio()
```

(continued from last page)

setMediaInfoAudio

```
public void setMediaInfoAudio(SmoothStreamingMediaInfoAudio mediaInfoAudio)
```

getDuration

```
public long getDuration()
```

setDuration

```
public void setDuration(long duration)
```

com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer Class SmoothStreamingFragmentHeader

java.lang.Object



com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.SmoothStreamingFragmentHeader

```
public class SmoothStreamingFragmentHeader
extends Object
```

Constructor Summary

public	SmoothStreamingFragmentHeader()
--------	---

Method Summary

PacketFragment	getHeaderData()
java.util.List	getReadAheadTimecodes()
void	setHeaderData(PacketFragment headerData)
void	setReadAheadTimecodes (java.util.List readAheadTimecodes)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

SmoothStreamingFragmentHeader

```
public SmoothStreamingFragmentHeader()
```

Methods

getHeaderData

```
public PacketFragment getHeaderData()
```


(continued from last page)

setHeaderData

```
public void setHeaderData(PacketFragment headerData)
```

setReadAheadTimecodes

```
public void setReadAheadTimecodes(java.util.List readAheadTimecodes)
```

getReadAheadTimecodes

```
public java.util.List getReadAheadTimecodes()
```

com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer Class SmoothStreamingFragments

java.lang.Object



com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.SmoothStreamingFragments

```
public class SmoothStreamingFragments
extends Object
```

Field Summary

public static final	DEFAULT_DELETEFRAGMENT_MAX Value: 2000
---------------------	--

Constructor Summary

public	SmoothStreamingFragments (int contentType)
--------	--

Method Summary

void	addFragment (long timecode, SmoothStreamingFragment fragment)
void	clear ()
String	getContextStr ()
long	getDuration ()
PacketFragmentList	getFragmentBytes (long timecode, boolean isInfo)
PacketFragmentList	getFragmentBytes (long timecode, boolean isInfo, int tolerance)
int	getFragmentDeletedMax ()
long	getLastStartTimecode ()
long	getLastStopTimecode ()
Object	getLock ()
SmoothStreamingMediaI nfoAudio	getMediaInfoAudio ()
SmoothStreamingMediaI nfoVideo	getMediaInfoVideo ()

int	getSmoothBufferMinFragmentCount()
int	getSmoothBufferTargetDuration()
int	getSmoothManifestMinFragmentCount()
int	getSmoothManifestTargetDuration()
long[]	getStartStopTimecodes(int minCount)
java.util.List	getTimecodes()
java.util.List	getTimeInfo(long startTimecode, long stopTimecode, int minCount)
boolean	isFragmentDeleted(long timecode, int tolerance)
void	setContextStr(String contextStr)
void	setFragmentDeletedMax(int fragmentDeletedMax)
void	setSmoothBufferMinFragmentCount(int smoothBufferMinFragmentCount)
void	setSmoothBufferTargetDuration(int smoothBufferTargetDuration)
void	setSmoothManifestMinFragmentCount(int smoothManifestMinFragmentCount)
void	setSmoothManifestTargetDuration(int smoothManifestTargetDuration)
int	size()
void	trim(long lastStopTimecode)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

DEFAULT_DELETEFRAGMENT_MAX

```
public static final int DEFAULT_DELETEFRAGMENT_MAX
```

Constant value: **2000**

Constructors

(continued from last page)

SmoothStreamingFragments

```
public SmoothStreamingFragments(int contentType)
```

Methods

getLock

```
public Object getLock()
```

clear

```
public void clear()
```

getDuration

```
public long getDuration()
```

getMediaInfoAudio

```
public SmoothStreamingMediaInfoAudio getMediaInfoAudio()
```

getMediaInfoVideo

```
public SmoothStreamingMediaInfoVideo getMediaInfoVideo()
```

getLastStopTimecode

```
public long getLastStopTimecode()
```

getLastStartTimecode

```
public long getLastStartTimecode()
```

getStartStopTimecodes

```
public long[] getStartStopTimecodes(int minCount)
```

(continued from last page)

trim

```
public void trim(long lastStopTimecode)
```

addFragment

```
public void addFragment(long timecode,  
    SmoothStreamingFragment fragment)
```

size

```
public int size()
```

getFragmentBytes

```
public PacketFragmentList getFragmentBytes(long timecode,  
    boolean isInfo)
```

isFragmentDeleted

```
public boolean isFragmentDeleted(long timecode,  
    int tolerance)
```

getFragmentBytes

```
public PacketFragmentList getFragmentBytes(long timecode,  
    boolean isInfo,  
    int tolerance)
```

getTimeInfo

```
public java.util.List getTimeInfo(long startTimecode,  
    long stopTimecode,  
    int minCount)
```

getSmoothBufferTargetDuration

```
public int getSmoothBufferTargetDuration()
```

setSmoothBufferTargetDuration

```
public void setSmoothBufferTargetDuration(int smoothBufferTargetDuration)
```

(continued from last page)

getSmoothBufferMinFragmentCount

```
public int getSmoothBufferMinFragmentCount()
```

setSmoothBufferMinFragmentCount

```
public void setSmoothBufferMinFragmentCount(int smoothBufferMinFragmentCount)
```

getSmoothManifestTargetDuration

```
public int getSmoothManifestTargetDuration()
```

setSmoothManifestTargetDuration

```
public void setSmoothManifestTargetDuration(int smoothManifestTargetDuration)
```

getSmoothManifestMinFragmentCount

```
public int getSmoothManifestMinFragmentCount()
```

setSmoothManifestMinFragmentCount

```
public void setSmoothManifestMinFragmentCount(int smoothManifestMinFragmentCount)
```

getContextStr

```
public String getContextStr()
```

setContextStr

```
public void setContextStr(String contextStr)
```

getTimecodes

```
public java.util.List getTimecodes()
```

(continued from last page)

getFragmentDeletedMax

```
public int getFragmentDeletedMax()
```

setFragmentDeletedMax

```
public void setFragmentDeletedMax(int fragmentDeletedMax)
```

Package

com.wowza.wms.httpstreamer.smoothstreaming.util

com.wowza.wms.httpstreamer.smoothstreaming.util Class LiveStreamPacketizerSmoothStreamerUtils

java.lang.Object



com.wowza.wms.httpstreamer.smoothstreaming.util.LiveStreamPacketizerSmoothStreamerUtils

```
public class LiveStreamPacketizerSmoothStreamerUtils
extends Object
```

Field Summary

public static final	AUDIOBITRATEPLACHOLDER Value: {audiobitrate}
public static final	CRLF_STR Value:
public static final	DEFAULT_CORS_ENABLED Value: true
public static final	EMPTYISMFXML Value: <code><?xml version="1.0" encoding="utf-8"?> <SmoothStreamingMedia></SmoothStreamingMedia></code>
public static final	NGRPNAME Value: {ngrp}
public static final	PLAYDURATIONNAME Value: {playDurationName}
public static final	PLAYSEEKNAME Value: {playSeekName}
public static final	PLAYSTARTNAME Value: {playStartName}
public static final	PROTECTIONHEADER_SYSTEMID Value: 9A04F079-9840-4286-AB92-E65BE0885F95
public static final	QUALITYINDEXPLACHOLDER Value: Index="0"
public static final	QUALITYLEVELSPLACHOLDER Value: {qualitylevels}

public static final	QUERYPRESENTPLACHOLDER Value: {queryPresent}
public static final	QUERYSTRPLACHOLDER Value: {query}
public static final	SESSIONIDPLACHOLDER Value: {sessionid}
public static final	SMOOTHSTREAMINGMEDIAEND Value: </SmoothStreamingMedia>
public static final	STREAMINDEXEND Value: </StreamIndex>
public static final	VIDEOBITRATEPLACHOLDER Value: {videobitrate}
public static final	VIDEODISPLAYHEIGHTPLACHOLDER Value: {videodisplayheight}
public static final	VIDEODISPLAYWIDTHPLACHOLDER Value: {videodisplaywidth}
public static final	VIDEOMAXHEIGHTPLACHOLDER Value: {videomaxheight}
public static final	VIDEOMAXWIDTHPLACHOLDER Value: {videomaxwidth}
public static final	XMLHEADER Value: <?xml version="1.0" encoding="utf-8"?>

Constructor Summary

public	LiveStreamPacketizerSmoothStreamerUtils()
--------	---

Method Summary

static com.wowza.wms.drm.pla yready.PlayReadyKeyIn fo	getEncInfo(IApplicationInstance appInstance, String streamName)
static SmoothStreamingLivePl aylist	parseLivePlaylist(IHTTPStreamerApplicationContext appContext, String streamName, String streamExt, IHTTPStreamerSession httpStreamerSession)

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Fields

PROTECTIONHEADER_SYSTEMID

```
public static final java.lang.String PROTECTIONHEADER_SYSTEMID
```

Constant value: **9A04F079-9840-4286-AB92-E65BE0885F95**

EMPTYISMFXML

```
public static final java.lang.String EMPTYISMFXML
```

Constant value: **<?xml version="1.0" encoding="utf-8"?>
<SmoothStreamingMedia></SmoothStreamingMedia>**

CRLF_STR

```
public static final java.lang.String CRLF_STR
```

Constant value:

PLAYSTARTNAME

```
public static final java.lang.String PLAYSTARTNAME
```

Constant value: **{playStartName}**

PLAYDURATIONNAME

```
public static final java.lang.String PLAYDURATIONNAME
```

Constant value: **{playDurationName}**

PLAYSEEKNAME

```
public static final java.lang.String PLAYSEEKNAME
```

Constant value: **{playSeekName}**

NGRPNAME

```
public static final java.lang.String NGRPNAME
```

Constant value: **{ngrp}**

(continued from last page)

QUERYSTRPLACHOLDER

```
public static final java.lang.String QUERYSTRPLACHOLDER
```

Constant value: {**query**}

QUERYPRESENTPLACHOLDER

```
public static final java.lang.String QUERYPRESENTPLACHOLDER
```

Constant value: {**queryPresent**}

SESSIONIDPLACHOLDER

```
public static final java.lang.String SESSIONIDPLACHOLDER
```

Constant value: {**sessionid**}

VIDEOBITRATEPLACHOLDER

```
public static final java.lang.String VIDEOBITRATEPLACHOLDER
```

Constant value: {**videobitrate**}

AUDIOBITRATEPLACHOLDER

```
public static final java.lang.String AUDIOBITRATEPLACHOLDER
```

Constant value: {**audiobitrate**}

QUALITYLEVELSPLACHOLDER

```
public static final java.lang.String QUALITYLEVELSPLACHOLDER
```

Constant value: {**qualitylevels**}

VIDEOMAXHEIGHTPLACHOLDER

```
public static final java.lang.String VIDEOMAXHEIGHTPLACHOLDER
```

Constant value: {**videomaxheight**}

VIDEOMAXWIDTHPLACHOLDER

```
public static final java.lang.String VIDEOMAXWIDTHPLACHOLDER
```

Constant value: {**videomaxwidth**}

VIDEODISPLAYHEIGHTPLACHOLDER

```
public static final java.lang.String VIDEODISPLAYHEIGHTPLACHOLDER
```

(continued from last page)

Constant value: `{videodisplayheight}`

VIDEODISPLAYWIDTHPLACHOLDER

```
public static final java.lang.String VIDEODISPLAYWIDTHPLACHOLDER
```

Constant value: `{videodisplaywidth}`

XMLHEADER

```
public static final java.lang.String XMLHEADER
```

Constant value: `<?xml version="1.0" encoding="utf-8"?>`

STREAMINDEXEND

```
public static final java.lang.String STREAMINDEXEND
```

Constant value: `</StreamIndex>`

SMOOTHSTREAMINGMEDIAEND

```
public static final java.lang.String SMOOTHSTREAMINGMEDIAEND
```

Constant value: `</SmoothStreamingMedia>`

QUALITYINDEXPLACHOLDER

```
public static final java.lang.String QUALITYINDEXPLACHOLDER
```

Constant value: `Index="0"`

DEFAULT_CORS_ENABLED

```
public static final boolean DEFAULT_CORS_ENABLED
```

Constant value: `true`

Constructors

LiveStreamPacketizerSmoothStreamerUtils

```
public LiveStreamPacketizerSmoothStreamerUtils()
```

Methods

(continued from last page)

getEncInfo

```
public static com.wowza.wms.drm.playready.PlayReadyKeyInfo  
getEncInfo(IApplicationInstance appInstance,  
           String streamName)
```

parseLivePlaylist

```
public static SmoothStreamingLivePlaylist  
parseLivePlaylist(IHTTPStreamerApplicationContext appContext,  
                 String streamName,  
                 String streamExt,  
                 IHTTPStreamerSession httpStreamerSession)
```

Package

**com.wowza.wms.httpstreamer.tsstreaming.ht
tpstreamer**

com.wowza.wms.httpstreamer.tssstreaming.httpstreamer Class HTTPStreamerSessionTS

java.lang.Object

└-com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

└-com.wowza.wms.httpstreamer.tssstreaming.httpstreamer.HTTPStreamerSessionTS

All Implemented Interfaces:

[IHTTPStreamerSession](#)

```
public class HTTPStreamerSessionTS
extends HTTPStreamerSessionBase
```

Fields inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

acceptSession, appInstance, connectionHolder, cookieStr, corsHeaders, DATEFORMAT, elapsedTime, fastDateFormat, fileInfoMap, firstCheck, httpHeaders, httpStreamerAdapter, ioPerformanceCounter, ipAddress, isActive, isDelete, isHTTPOrigin, isPlayLogged, isSecure, lastRequest, liveStreamingPacketizer, lock, mediaCasterStreamLock, notifyCreate, playDuration, playSeek, playStart, properties, queryStr, redirectSession, redirectSessionBody, redirectSessionCode, redirectSessionContentType, redirectSessionURL, referrer, serverIp, serverPort, sessionId, sessionProtocol, sessionTimeout, sessionType, stream, streamDomainStrSet, streamExt, streamName, streamNamePartMap, streamPosition, timeoutSession, totalIOPerformance2Last, totalIOPerformanceLast, transcoderVODIndex, transcoderVODIndexDestinationsMap, transcoderVODIndexDestinationsOrder, transcoderVODListeners, transcoderVODSession, uri, userAgent, userHTTPHeaders, userManifestHeaders, userQueryStr, vhost, vodTranscodeNGRP

Fields inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[SESSIONPROTOCOL_COUNT](#), [SESSIONPROTOCOL_CUPERTINOSTREAMING](#), [SESSIONPROTOCOL_DIRECTSTREAMING](#), [SESSIONPROTOCOL_DVRCHUNKSTREAMING](#), [SESSIONPROTOCOL_MPEGDASHSTREAMING](#), [SESSIONPROTOCOL_SANJOSESTREAMING](#), [SESSIONPROTOCOL_SMOOTHSTREAMING](#), [SESSIONPROTOCOL_TSSSTREAMING](#), [SESSIONPROTOCOL_UNKNOWN](#), [SESSIONPROTOCOL_WEBMSTREAMING](#), [SESSIONTYPE_LIVE](#), [SESSIONTYPE_LIVEDVR](#), [SESSIONTYPE_UNKNOWN](#), [SESSIONTYPE_VOD](#)

Constructor Summary

public	HTTPStreamerSessionTS()
--------	---

Method Summary

TSPacketizerSessionTracker	getSessionTracker()
void	setSessionTracker (TSPacketizerSessionTracker sessionTracker)
void	shutdown()

Methods inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

acceptSession, addHTTPSessionToTCPSession, addIOPerformance, addIOPerformance2, addStreamDomainStr, addStreamDomainStrs, addTranscoderVODListener, addUserHTTPHeaders, checkAndSetPlayLogged, clearLoggingValues, containsStreamDomainStr, containsStreamNameParts, doSessionRedirect, doSessionRedirect, extractHTTPRequestInfo, getAndClearNotifyCreate, getAppInstance, getConnectionHolder, getCookieStr, getCORSHaders, getDvrSessionInfo, getElapsedTime, getFileInfo, getHTTPDate, getHTTPHeader, getHTTPHeaderMap, getHTTPHeaderNames, getHTTPIntHeader, getHTTPStreamerAdapter, getIOPerformanceCounter, getIpAddress, getLastRequest, getLiveStreamingPacketizer, getLock, getPlayDuration, getPlaySeek, getPlayStart, getProperties, getQueryStr, getRedirectSessionBody, getRedirectSessionCode, getRedirectSessionContentType, getRedirectSessionURL, getReferrer, getServerIp, getServerPort, getSessionId, getSessionProtocol, getSessionTimeout, getSessionType, getStream, getStreamDomainStr, getStreamDomainStrList, getStreamExt, getStreamName, getStreamNameParts, getStreamPosition, getTimeRunning, getTimeRunningSeconds, getTranscoderVODIndex, getTranscoderVODIndex, getTranscoderVODIndexDestinationsMap, getTranscoderVODIndexDestinationsOrder, getTranscoderVODSession, getUri, getUserAgent, getUserHTTPHeaders, getUserQueryStr, getVHost, getVODTranscodeNGRP, indexTranscoderVOD, isAcceptSession, isActive, isDelete, isDeleteSession, isFileInfo, isHTTPOrigin, isPlayLogged, isRedirectSession, isSecure, isTimeout, isTimeoutSession, isValidated, isValidStreamDomainStr, lockRepeaterStreams, notifyTranscoderVODFillChunkStart, notifyTranscoderVODFillChunkStop, notifyTranscoderVODFillChunkTranscode, putFileInfo, putStreamNameParts, redirectSession, redirectSession, rejectSession, removeStreamDomainStr, removeTranscoderVODListener, setAcceptSession, setActive, setAppInstance, setCookieStr, setDeleteSession, setDvrSessionInfo, setHTTPOrigin, setHTTPStreamerAdapter, setIpAddress, setLiveStreamingPacketizer, setPlayDuration, setPlayLogged, setPlaySeek, setPlayStart, setQueryStr, setRedirectSession, setRedirectSessionBody, setRedirectSessionCode, setRedirectSessionContentType, setRedirectSessionURL, setReferrer, setSecure, setServerIp, setServerPort, setSessionId, setSessionProtocol, setSessionTimeout, setSessionType, setStream, setStreamExt, setStreamName, setStreamPosition, setThreadContext, setTimeoutSession, setTranscoderVODIndex, setTranscoderVODSession, setUri, setUserAgent, setUserHTTPHeader, setUserQueryStr, setValidated, setVHost, setVODTranscodeNGRP, shutdown, shutdownLocked, touch, updateLoggingValues, validStreamDomainToString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[acceptSession](#), [addHTTPSessionToTCPSession](#), [addIOPerformance](#), [addIOPerformance2](#),
[addStreamDomainStr](#), [addStreamDomainStrs](#), [addTranscoderVODListener](#),
[addUserHTTPHeaders](#), [checkAndSetPlayLogged](#), [clearLoggingValues](#),
[containsStreamDomainStr](#), [containsStreamNameParts](#), [doSessionRedirect](#),
[doSessionRedirect](#), [extractHTTPRequestInfo](#), [getAndClearNotifyCreate](#), [getAppInstance](#),
[getConnectionHolder](#), [getCookieStr](#), [getCORSHaders](#), [getDvrSessionInfo](#), [getElapsedTime](#),
[getFileInfo](#), [getHTTPHeader](#), [getHTTPHeaderMap](#), [getHTTPHeaderNames](#), [getHTTPIntHeader](#),
[getHTTPStreamerAdapter](#), [getIOPerformanceCounter](#), [getIpAddress](#), [getLastRequest](#),
[getLiveStreamingPacketizer](#), [getLock](#), [getPlayDuration](#), [getPlaySeek](#), [getPlayStart](#),
[getProperties](#), [getQueryStr](#), [getRedirectSessionBody](#), [getRedirectSessionCode](#),
[getRedirectSessionContentType](#), [getRedirectSessionURL](#), [getReferrer](#), [getServerIp](#),
[getServerPort](#), [getSessionId](#), [getSessionProtocol](#), [getSessionTimeout](#), [getSessionType](#),
[getStream](#), [getStreamExt](#), [getStreamName](#), [getStreamNameParts](#), [getStreamPosition](#),
[getTimeRunning](#), [getTimeRunningSeconds](#), [getTranscoderVODIndex](#), [getTranscoderVODIndex](#),
[getTranscoderVODIndexDestinationsMap](#), [getTranscoderVODIndexDestinationsOrder](#),
[getTranscoderVODSession](#), [getUri](#), [getUserAgent](#), [getUserHTTPHeaders](#), [getUserQueryStr](#),
[getVHost](#), [getVODTranscodeNGRP](#), [indexTranscoderVOD](#), [isAcceptSession](#), [isActive](#),
[isDelete](#), [isDeleteSession](#), [isFileInfo](#), [isHTTPOrigin](#), [isPlayLogged](#), [isRedirectSession](#),
[isSecure](#), [isTimeout](#), [isTimeoutSession](#), [isValidated](#), [isValidStreamDomainStr](#),
[lockRepeaterStreams](#), [notifyTranscoderVODFillChunkStart](#),
[notifyTranscoderVODFillChunkStop](#), [notifyTranscoderVODFillChunkTranscode](#), [putFileInfo](#),
[putStreamNameParts](#), [redirectSession](#), [redirectSession](#), [rejectSession](#),
[removeStreamDomainStr](#), [removeTranscoderVODListener](#), [setAcceptSession](#), [setActive](#),
[setAppInstance](#), [setCookieStr](#), [setDeleteSession](#), [setDvrSessionInfo](#), [setHTTPOrigin](#),
[setHTTPStreamerAdapter](#), [setIpAddress](#), [setLiveStreamingPacketizer](#), [setPlayDuration](#),
[setPlayLogged](#), [setPlaySeek](#), [setPlayStart](#), [setQueryStr](#), [setRedirectSession](#),
[setRedirectSessionBody](#), [setRedirectSessionCode](#), [setRedirectSessionContentType](#),
[setRedirectSessionURL](#), [setReferrer](#), [setSecure](#), [setServerIp](#), [setServerPort](#),
[getSessionId](#), [getSessionProtocol](#), [getSessionTimeout](#), [getSessionType](#), [setStream](#),
[setStreamExt](#), [setStreamName](#), [setStreamPosition](#), [setTimeoutSession](#),
[setTranscoderVODIndex](#), [setTranscoderVODSession](#), [setUri](#), [setUserAgent](#),
[setUserHTTPHeader](#), [setUserQueryStr](#), [setVHost](#), [setVODTranscodeNGRP](#), [shutdown](#), [touch](#),
[updateLoggingValues](#), [validStreamDomainToString](#)

Constructors

HTTPStreamerSessionTS

```
public HTTPStreamerSessionTS()
```

Methods

getSessionTracker

```
public TSPacketizerSessionTracker getSessionTracker()
```

setSessionTracker

```
public void setSessionTracker(TSPacketizerSessionTracker sessionTracker)
```

shutdown

```
public void shutdown()
```

Package

**com.wowza.wms.httpstreamer.webmstreami
ng.httpstreamer**

com.wowza.wms.httpstreamer.webmstreaming.httpstreamer

Class HTTPStreamerSessionWebM

```
java.lang.Object
```

```
├--com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase
```

```
├--com.wowza.wms.httpstreamer.webmstreaming.httpstreamer.HTTPStreamerSessionWebM
```

All Implemented Interfaces:

[IHTTPStreamerSession](#)

```
public class HTTPStreamerSessionWebM
extends HTTPStreamerSessionBase
```

Fields inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

acceptSession, appInstance, connectionHolder, cookieStr, corsHeaders, DATEFORMAT, elapsedTime, fastDateFormat, fileInfoMap, firstCheck, httpHeaders, httpStreamerAdapter, ioPerformanceCounter, ipAddress, isActive, isDelete, isHTTPOrigin, isPlayLogged, isSecure, lastRequest, liveStreamingPacketizer, lock, mediaCasterStreamLock, notifyCreate, playDuration, playSeek, playStart, properties, queryStr, redirectSession, redirectSessionBody, redirectSessionCode, redirectSessionContentType, redirectSessionURL, referrer, serverIp, serverPort, sessionId, sessionProtocol, sessionTimeout, sessionType, stream, streamDomainStrSet, streamExt, streamName, streamNamePartMap, streamPosition, timeoutSession, totalIOPerformance2Last, totalIOPerformanceLast, transcoderVODIndex, transcoderVODIndexDestinationsMap, transcoderVODIndexDestinationsOrder, transcoderVODListeners, transcoderVODSession, uri, userAgent, userHTTPHeaders, userManifestHeaders, userQueryStr, vhost, vodTranscodeNGRP

Fields inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[SESSIONPROTOCOL_COUNT](#), [SESSIONPROTOCOL_CUPERTINOSTREAMING](#), [SESSIONPROTOCOL_DIRECTSTREAMING](#), [SESSIONPROTOCOL_DVRCHUNKSTREAMING](#), [SESSIONPROTOCOL_MPEGDASHSTREAMING](#), [SESSIONPROTOCOL_SANJOSESTREAMING](#), [SESSIONPROTOCOL_SMOOTHSTREAMING](#), [SESSIONPROTOCOL_TSSTREAMING](#), [SESSIONPROTOCOL_UNKNOWN](#), [SESSIONPROTOCOL_WEBMSTREAMING](#), [SESSIONTYPE_LIVE](#), [SESSIONTYPE_LIVEDVR](#), [SESSIONTYPE_UNKNOWN](#), [SESSIONTYPE_VOD](#)

Constructor Summary

public	HTTPStreamerSessionWebM()
--------	---

Method Summary

WebMPacketizerSessionTracker	getSessionTracker()
void	setSessionTracker (WebMPacketizerSessionTracker sessionTracker)
void	shutdown()

Methods inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

acceptSession, addHTTPSessionToTCPSession, addIOPerformance, addIOPerformance2, addStreamDomainStr, addStreamDomainStrs, addTranscoderVODListener, addUserHTTPHeaders, checkAndSetPlayLogged, clearLoggingValues, containsStreamDomainStr, containsStreamNameParts, doSessionRedirect, doSessionRedirect, extractHTTPRequestInfo, getAndClearNotifyCreate, getAppInstance, getConnectionHolder, getCookieStr, getCORSHaders, getDvrSessionInfo, getElapsedTime, getFileInfo, getHTTPDate, getHTTPHeader, getHTTPHeaderMap, getHTTPHeaderNames, getHTTPIntHeader, getHTTPStreamerAdapter, getIOPerformanceCounter, getIpAddress, getLastRequest, getLiveStreamingPacketizer, getLock, getPlayDuration, getPlaySeek, getPlayStart, getProperties, getQueryStr, getRedirectSessionBody, getRedirectSessionCode, getRedirectSessionContentType, getRedirectSessionURL, getReferrer, getServerIp, getServerPort, getSessionId, getSessionProtocol, getSessionTimeout, getSessionType, getStream, getStreamDomainStr, getStreamDomainStrList, getStreamExt, getStreamName, getStreamNameParts, getStreamPosition, getTimeRunning, getTimeRunningSeconds, getTranscoderVODIndex, getTranscoderVODIndex, getTranscoderVODIndexDestinationsMap, getTranscoderVODIndexDestinationsOrder, getTranscoderVODSession, getUri, getUserAgent, getUserHTTPHeaders, getUserQueryStr, getVHost, getVODTranscodeNGRP, indexTranscoderVOD, isAcceptSession, isActive, isDelete, isDeleteSession, isFileInfo, isHTTPOrigin, isPlayLogged, isRedirectSession, isSecure, isTimeout, isTimeoutSession, isValidated, isValidStreamDomainStr, lockRepeaterStreams, notifyTranscoderVODFillChunkStart, notifyTranscoderVODFillChunkStop, notifyTranscoderVODFillChunkTranscode, putFileInfo, putStreamNameParts, redirectSession, redirectSession, rejectSession, removeStreamDomainStr, removeTranscoderVODListener, setAcceptSession, setActive, setAppInstance, setCookieStr, setDeleteSession, setDvrSessionInfo, setHTTPOrigin, setHTTPStreamerAdapter, setIpAddress, setLiveStreamingPacketizer, setPlayDuration, setPlayLogged, setPlaySeek, setPlayStart, setQueryStr, setRedirectSession, setRedirectSessionBody, setRedirectSessionCode, setRedirectSessionContentType, setRedirectSessionURL, setReferrer, setSecure, setServerIp, setServerPort, setSessionId, setSessionProtocol, setSessionTimeout, setSessionType, setStream, setStreamExt, setStreamName, setStreamPosition, setThreadContext, setTimeoutSession, setTranscoderVODIndex, setTranscoderVODSession, setUri, setUserAgent, setUserHTTPHeader, setUserQueryStr, setValidated, setVHost, setVODTranscodeNGRP, shutdown, shutdownLocked, touch, updateLoggingValues, validStreamDomainToString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[acceptSession](#), [addHTTPSessionToTCPSession](#), [addIOPerformance](#), [addIOPerformance2](#),
[addStreamDomainStr](#), [addStreamDomainStrs](#), [addTranscoderVODListener](#),
[addUserHTTPHeaders](#), [checkAndSetPlayLogged](#), [clearLoggingValues](#),
[containsStreamDomainStr](#), [containsStreamNameParts](#), [doSessionRedirect](#),
[doSessionRedirect](#), [extractHTTPRequestInfo](#), [getAndClearNotifyCreate](#), [getAppInstance](#),
[getConnectionHolder](#), [getCookieStr](#), [getCORSHeaders](#), [getDvrSessionInfo](#), [getElapsedTime](#),
[getFileInfo](#), [getHTTPHeader](#), [getHTTPHeaderMap](#), [getHTTPHeaderNames](#), [getHTTPIntHeader](#),
[getHTTPStreamerAdapter](#), [getIOPerformanceCounter](#), [getIpAddress](#), [getLastRequest](#),
[getLiveStreamingPacketizer](#), [getLock](#), [getPlayDuration](#), [getPlaySeek](#), [getPlayStart](#),
[getProperties](#), [getQueryStr](#), [getRedirectSessionBody](#), [getRedirectSessionCode](#),
[getRedirectSessionContentType](#), [getRedirectSessionURL](#), [getReferrer](#), [getServerIp](#),
[getServerPort](#), [getSessionId](#), [getSessionProtocol](#), [getSessionTimeout](#), [getSessionType](#),
[getStream](#), [getStreamExt](#), [getStreamName](#), [getStreamNameParts](#), [getStreamPosition](#),
[getTimeRunning](#), [getTimeRunningSeconds](#), [getTranscoderVODIndex](#), [getTranscoderVODIndex](#),
[getTranscoderVODIndexDestinationsMap](#), [getTranscoderVODIndexDestinationsOrder](#),
[getTranscoderVODSession](#), [getUri](#), [getUserAgent](#), [getUserHTTPHeaders](#), [getUserQueryStr](#),
[getVHost](#), [getVODTranscodeNGRP](#), [indexTranscoderVOD](#), [isAcceptSession](#), [isActive](#),
[isDelete](#), [isDeleteSession](#), [isFileInfo](#), [isHTTPOrigin](#), [isPlayLogged](#), [isRedirectSession](#),
[isSecure](#), [isTimeout](#), [isTimeoutSession](#), [isValidated](#), [isValidStreamDomainStr](#),
[lockRepeaterStreams](#), [notifyTranscoderVODFillChunkStart](#),
[notifyTranscoderVODFillChunkStop](#), [notifyTranscoderVODFillChunkTranscode](#), [putFileInfo](#),
[putStreamNameParts](#), [redirectSession](#), [redirectSession](#), [rejectSession](#),
[removeStreamDomainStr](#), [removeTranscoderVODListener](#), [setAcceptSession](#), [setActive](#),
[setAppInstance](#), [setCookieStr](#), [setDeleteSession](#), [setDvrSessionInfo](#), [setHTTPOrigin](#),
[setHTTPStreamerAdapter](#), [setIpAddress](#), [setLiveStreamingPacketizer](#), [setPlayDuration](#),
[setPlayLogged](#), [setPlaySeek](#), [setPlayStart](#), [setQueryStr](#), [setRedirectSession](#),
[setRedirectSessionBody](#), [setRedirectSessionCode](#), [setRedirectSessionContentType](#),
[setRedirectSessionURL](#), [setReferrer](#), [setSecure](#), [setServerIp](#), [setServerPort](#),
[getSessionId](#), [setSessionProtocol](#), [setSessionTimeout](#), [setSessionType](#), [setStream](#),
[setStreamExt](#), [setStreamName](#), [setStreamPosition](#), [setTimeoutSession](#),
[setTranscoderVODIndex](#), [setTranscoderVODSession](#), [setUri](#), [setUserAgent](#),
[setUserHTTPHeader](#), [setUserQueryStr](#), [setVHost](#), [setVODTranscodeNGRP](#), [shutdown](#), [touch](#),
[updateLoggingValues](#), [validStreamDomainToString](#)

Constructors

HTTPStreamerSessionWebM

```
public HTTPStreamerSessionWebM()
```

Methods

getSessionTracker

```
public WebMPacketizerSessionTracker getSessionTracker()
```

setSessionTracker

```
public void setSessionTracker(WebMPacketizerSessionTracker sessionTracker)
```

shutdown

```
public void shutdown()
```

Package

com.wowza.wms.livestreamrecord.manager

com.wowza.wms.livestreamrecord.manager

Interface `ILiveStreamRecordManager`

public interface `ILiveStreamRecordManager`
 extends

This interface provides access to the functionality of the `LiveStreamRecordManager`. The `LiveStreamRecordManger` is responsible for maintaining the list of `IStreamRecorders` as well as managing the `IStreamRecorder` life cycle.

Method Summary

ILiveStreamRecordManagerActionNotify	addListener(ILiveStreamRecordManagerActionNotify listener) Used to add a listener to receive <code>ILiveStreamRecordManagerActionNotify</code> events from the <code>LiveStreamRecordManager</code> .
IStreamRecorder	getRecorder(IApplicationInstance appInstance, String streamName) Used to get a specific <code>IStreamRecorder</code> from the <code>LiveStreamRecordManager</code> . Modifying the returned <code>IStreamRecorder</code> while a recording is active may result in undefined behavior.
<code>java.util.List</code>	getRecordersList(IApplicationInstance appInstance) Used to get the list of <code>IStreamRecorders</code> for a specific application instance.
<code>java.util.Map</code>	getRecordersMap(IApplicationInstance appInstance) Used to get the Map of stream Name to <code>IStreamRecorder</code> for a specific application instance.
<code>void</code>	init(IVHost vhost) Called by vhost init to initialize the <code>LiveStreamRecordManager</code>
<code>boolean</code>	removeListener(ILiveStreamRecordManagerActionNotify listener) Used to remove an <code>ILiveStreamRecordManagerActionNotify</code> listener from the <code>LiveStreamRecordManager</code> .
<code>void</code>	splitRecording(IApplicationInstance appInstance, String streamName) Used to tell the <code>LiveStreamRecordManager</code> to split (a.k.a segment) a recording immediately for a specific stream in a specific application instance.
<code>void</code>	startRecording(IApplicationInstance appInstance, StreamRecorderParameters params) Used to tell the <code>LiveStreamRecordManager</code> to create <code>StreamRecorders</code> for all streams which are published to the specified application instance.
<code>void</code>	startRecording(IApplicationInstance appInstance, String streamName, StreamRecorderParameters params) Used to tell the <code>LiveStreamRecordManager</code> to create a <code>StreamRecorder</code> for a specific stream in a specific application instance.
<code>void</code>	stopRecording(IApplicationInstance appInstance) Used to tell the <code>LiveStreamRecordManager</code> to stop all <code>StreamRecorders</code> on a specific application instance.
<code>void</code>	stopRecording(IApplicationInstance appInstance, String streamName) Used to tell the <code>LiveStreamRecordManager</code> to stop a <code>StreamRecorder</code> for a specific stream in a specific application instance.

Methods

(continued from last page)

init

```
public void init(IVHost vhost)
```

Called by vhost init to initialize the LiveStreamRecordManager

Parameters:

vhost - The vhost to associated with the instance of LiveStreamRecordManager

getRecorder

```
public IStreamRecorder getRecorder(IApplicationInstance appInstance,  
    String streamName)
```

Used to get a specific IStreamRecorder from the LiveStreamRecordManager. Modifying the returned IStreamRecorder while a recording is active may result in undefined behavior.

Parameters:

appInstance - The application instance associated with the desired IStreamRecorder

streamName - The stream name associated with the desired IStreamRecorder

Returns:

The requested IStreamRecorder or null if it does not exist

getRecordersList

```
public java.util.List getRecordersList(IApplicationInstance appInstance)
```

Used to get the list of IStreamRecorders for a specific application instance. Making changes to the returned list (e.g. removing an IStreamRecorder from the list) does not affect the LiveStreamRecordManager's list, however, changes made to the IStreamRecorders themselves will be reflected in the LiveStreamRecordManager's IStreamRecorder. Therefore, changing IStreamRecorders while a recording is active may result in undefined behavior.

Parameters:

appInstance - The application instance associated with the desired IStreamRecorder List

Returns:

The requested IStreamRecorder List. The list can be empty if no IStreamRecorders are set.

getRecordersMap

```
public java.util.Map getRecordersMap(IApplicationInstance appInstance)
```

Used to get the Map of stream Name to IStreamRecorder for a specific application instance. Making changes to the returned map (e.g. removing a mapping entry from the map) does not affect the LiveStreamRecordManager's map, however, changes made to the IStreamRecorders themselves will be reflected in the LiveStreamRecordManager's IStreamRecorder. Therefore, changing IStreamRecorders while a recording is active may result in undefined behavior.

Parameters:

appInstance - The application instance associated with the desired IStreamRecorder List

Returns:

The requested stream name to IStreamRecorder mappings. The map can be empty if no IStreamRecorders are set.

startRecording

```
public void startRecording(IApplicationInstance appInstance,  
    StreamRecorderParameters params)
```

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Used to tell the LiveStreamRecordManager to create StreamRecorders for all streams which are published to the specified application instance. The StreamRecorderParameters specified will be used for each StreamRecorder created. If the StreamRecordParameters are null the default StreamRecordParameters will be used.

Parameters:

appInstance - The application instance on which to record all incoming streams
params - The StreamRecorderParameters to use for all recorders

See Also:

[StreamRecorderParameters](#)
[IStreamRecorderConstants](#)

startRecording

```
public void startRecording(IApplicationInstance appInstance,  
    String streamName,  
    StreamRecorderParameters params)
```

Used to tell the LiveStreamRecordManager to create a StreamRecorder for a specific stream in a specific application instance. The StreamRecorderParameters specified will be used for the StreamRecorder. If the StreamRecordParameters are null the default StreamRecordParameters will be used.

Parameters:

appInstance - The application instance on which to record the requested stream
streamName - The stream name associated with the incoming stream to record
params - The StreamRecorderParameters to use for the StreamRecorder

See Also:

[StreamRecorderParameters](#)
[IStreamRecorderConstants](#)

stopRecording

```
public void stopRecording(IApplicationInstance appInstance,  
    String streamName)
```

Used to tell the LiveStreamRecordManager to stop a StreamRecorder for a specific stream in a specific application instance. If a StreamRecorder already exists for the specified application instance and stream name, nothing is done.

Parameters:

appInstance - The application instance of the StreamRecorder to stop
streamName - The stream name associated with the StreamRecorder to stop

stopRecording

```
public void stopRecording(IApplicationInstance appInstance)
```

Used to tell the LiveStreamRecordManager to stop all StreamRecorders on a specific application instance. If no StreamRecorders exist for the specified application instance, nothing is done.

Parameters:

appInstance - The application instance on which to stop all StreamRecorders

splitRecording

```
public void splitRecording(IApplicationInstance appInstance,  
    String streamName)
```

Used to tell the LiveStreamRecordManager to split (a.k.a segment) a recording immediately for a specific stream in a specific application instance. If no StreamRecorder exists for the specified application instance and stream name, nothing is done.

(continued from last page)

Parameters:

appInstance - The application instance of the StreamRecorder to split
streamName - The stream name associated with the StreamRecorder to split

addListener

```
public ILiveStreamRecordManagerActionNotify  
addListener(ILiveStreamRecordManagerActionNotify listener)
```

Used to add a listener to receive [ILiveStreamRecordManagerActionNotify](#) events from the [LiveStreamRecordManager](#). Listeners are notified in the order in which they are added.

Parameters:

listener - An instance of a class which implements the [ILiveStreamRecordManagerActionNotify](#) interface

Returns:

The listener instance passed in

See Also:

[ILiveStreamRecordManagerActionNotify](#)

removeListener

```
public boolean removeListener(ILiveStreamRecordManagerActionNotify listener)
```

Used to remove an [ILiveStreamRecordManagerActionNotify](#) listener from the [LiveStreamRecordManager](#).

Parameters:

listener - The listener passed into the [addListener](#) method.

Returns:

true if the listener was found in the list otherwise false.

com.wowza.wms.livestreamrecord.manager Interface **ILiveStreamRecordManagerActionNotify**

public interface **ILiveStreamRecordManagerActionNotify**
extends

This interface provides notifications to registered listeners for LiveStreamRecordManager events as it operates on IStreamRecorders. These notification are sent prior to invoking the associated method for a recorder.

Multiple Listener's can be registered for the LiveStreamRecordManager. The listeners are notified in the order in which they were added.

See Also:
[for API's to add and remove listeners](#)

Method Summary

void	onCreateRecord (IStreamRecorder recorder)	This notification occurs when a new recorder is created due to a call to one of the ILiveStreamRecordManager startRecording API's.
void	onSplitRecord (IStreamRecorder recorder)	This notification occurs due to a call to the ILiveStreamRecordManager splitRecording API.
void	onStartRecord (IStreamRecorder recorder)	This notification occurs due to a call to one of the ILiveStreamRecordManager startRecording API's.
void	onStopRecord (IStreamRecorder recorder)	This notification occurs due to a call to the ILiveStreamRecordManager stopRecording API.
void	onSwitchRecord (IStreamRecorder recorder, IMediaStream newStream)	This notification occurs when an existing stream is replaced with a stream of the same name.
IStreamRecorder	recordFactory (String streamName, StreamRecorderParameters recordParams)	This notification is the first one to occur when the ILiveStreamRecordManager is requested to start a recording via any of the ILiveStreamRecordManager startRecording API's It gives the listener the opportunity to return a custom class which implements the IStreamRecorder interface to handle the recording. If the listener returns null, the LiveStreamRecordManager will internally create a new StreamRecorder to handle the recording.

Methods

recordFactory

```
public IStreamRecorder recordFactory(String streamName,
StreamRecorderParameters recordParams)
```

(continued from last page)

This notification is the first one to occur when the `ILiveStreamRecordManager` is requested to start a recording via any of the `ILiveStreamRecordManager` `startRecording` API's

It gives the listener the opportunity to return a custom class which implements the `IStreamRecorder` interface to handle the recording.

If the listener returns null, the `LiveStreamRecordManager` will internally create a new `StreamRecorder` to handle the recording. Since multiple listeners can be registered, `LiveStreamRecordManager` notifies listeners in the order in which they were added, and will use the first `IStreamRecorder` returned which is not null, however, remaining listeners will receive the notification.

Called before `LiveStreamRecordManager` internal action is taken

Parameters:

`recordParams` - the parameters passed into `IStreamRecordManager` `startRecording` API
`streamName` - the stream name passed into `IStreamRecordManager` `startRecording` API

Returns:

the `IStreamRecorder` which will handled recording or null

onCreateRecord

```
public void onCreateRecord(IStreamRecorder recorder)
```

This notification occurs when a new recorder is created due to a call to one of the `ILiveStreamRecordManager` `startRecording` API's.

Called after the `recordFactory` notification is called, but before `LiveStreamRecordManager` calls the recorders own `createRecorder` method.

Parameters:

`recorder` - The new recorder

onStartRecord

```
public void onStartRecord(IStreamRecorder recorder)
```

This notification occurs due to a call to one of the `ILiveStreamRecordManager` `startRecording` API's.

Called after the `onCreateRecord` notification is called, but before `LiveStreamRecordManager` calls the recorders own `startRecorder` method.

Parameters:

`recorder` - The recorder which is starting

onSplitRecord

```
public void onSplitRecord(IStreamRecorder recorder)
```

This notification occurs due to a call to the `ILiveStreamRecordManager` `splitRecording` API.

Called before `LiveStreamRecordManager` calls the recorders own `splitRecorder` method.

Parameters:

`recorder` - The recorder for which the split has been requested.

onStopRecord

```
public void onStopRecord(IStreamRecorder recorder)
```

This notification occurs due to a call to the `ILiveStreamRecordManager` `stopRecording` API.

Called before `LiveStreamRecordManager` calls the recorders own `stopRecorder` method.

Parameters:

`recorder` - The recorder for which a stop has been requested.

onSwitchRecord

```
public void onSwitchRecord(IStreamRecorder recorder,  
                           IMediaStream newStream)
```

This notification occurs when an existing stream is replaced with a stream of the same name. This can occur when a stream is published from an encoder, and then a different encoder publishes a stream using the same stream name.

Called before `LiveStreamRecordManager` calls the recorders own `switchRecorder` method.

Parameters:

`recorder` - The recorder for the existing stream

`newStream` - The new `IMediaStream` associated with the existing stream name

com.wowza.wms.livestreamrecord.manager Interface IStreamRecorder

public interface **IStreamRecorder**
extends

This interface provides access to into a StreamRecorder.

The StreamRecorder is responsible for performing the actual recording functionality of a live stream, as directed by the LiveStreamRecordManager.

Method Summary	
IStreamRecorderActionNotify	<p>addListener(IStreamRecorderActionNotify listener) Called to add a listener for IStreamRecorderActionNotify events generated by the recorder. Multiple listeners can be added.</p>
void	<p>createRecorder() Called to tell the recorder to initialize itself after it has been created.</p>
IApplicationInstance	<p>getAppInstance() Called to get the application Instance the recorder is associated with</p>
String	<p>getBaseFilePath() Called to get the full path and filename used by the recorder as the PRIOR to any changes made due to the selected segmentationType and versioningOption.</p>
long	<p>getCurrentDuration() Called to get the current segment duration regardless of segmentationType. This value is updated continuously while the recorder state is RECORDER_STATE_RECORDING.</p>
String	<p>getCurrentFile() Called to get the current segments fully qualified file name regardless of segmentationType. This value is updated continuously while the recorder state is RECORDER_STATE_RECORDING.</p>
long	<p>getCurrentSize() Called to get the current segment size regardless of segmentationType This value is updated continuously while the recorder state is RECORDER_STATE_RECORDING.</p>
org.joda.time.DateTim e	<p>getEndTime() Called to get the end time of the recording regardless of segmentationType. When the recording is still active, the returned value is null. When the recording has been stopped, the returned value is for the time when the recording stopped.</p>
String	<p>getErrorString() Called to get an error string describing the error, when the recorder state is RECORDER_STATE_ERROR.</p>
String	<p>getFileFormat() Called to get output file format being used by the recorder.</p>
String	<p>getFilePath() Called to get the full path and filename used by the recorder AFTER changes made due to the selected segmentationType and versioningOption. NOTE: When the recorder is not in RECORDER_STATE_RECORDING state, the returned value will be the basefilePath value.</p>

IStreamRecorderFileVersionDelegate	getFileVersionDelegate() Called to get the IStreamRecorderFileVersionDelegate being used by the recorder.
StreamRecorderParameters	getRecorderParams() Called to get the StreamRecorderParameters for the recorder This is typically used to check or set the StreamRecorderParameters used to configure a recorder.
int	getRecorderState() Called to get the current state of the recorder
String	getRecorderStateString() Called to get the current state of the recorder as a text string.
String	getSegmentationType() Called to get the SegmentationType being used by the recorder.
long	getSegmentDuration() Called to get the segment duration used by the recorder when segmentationType is set to SEGMENT_BY_DURATION.
int	getSegmentNumber() Called to get the current segment number regardless of segmentationType. This value is updated continuously while the recorder state is RECORDER_STATE_RECORDING.
CrontabEvent	getSegmentSchedule() Called to get the CrontabEvent object associated with the recorder when the segmentationType is set to SEGMENT_BY_SCHEDULE When the recorder state is RECORDER_STATE_ERROR, RECORDER_STATE_PENDING or RECORDER_STATE_WAITING, the return value is null, otherwise the CrontabEvent use by the recorder is returned.
String	getSegmentScheduleString() Called to get the segment schedule crontab string used by the recorder when segmentationType is set to SEGMENT_BY_SCHEDULE.
long	getSegmentSize() Called to get the segment size used by the recorder when segmentationType is set to SEGMENT_BY_SIZE.
org.joda.time.DateTime	getStartTime() Called to get the start time of the current recording regardless of segmentationType.
IMediaStream	getStream() Called to get the IMediaStream object being used by the recorder
String	getStreamName() Called to get the stream name being used by the recorder
String	getVersioningOption() Called to get the method used by the recorder to version a file when a file exists of the same name.
boolean	isAppendFile() Called to check the versioningOption used by the recorder. Users should use getVersioningOption instead.
boolean	isMoveFirstVideoFrameToZero() Called to check the value of MoveFirstVideoFrameToZero being used by the recorder.
boolean	isRecordData() Called to check the value of RecordData being used by the recorder.

boolean	isSplitOnTcDiscontinuity() Called to check the value of splitOnTcDiscontinuity being used by the recorder.
boolean	isStartOnKeyFrame() Called to check the value of StartOnKeyFrame being used by the recorder.
boolean	isVersionFile() Called to check the versioningOption used by the recorder. Users should use getVersioningOption instead.
boolean	removeListener(IStreamRecorderActionNotify listener) Called to remove a listener from the the recorder.
void	setInternalRecorder(ILiveStreamRecord internalRecorder) Called to set the internal recorder used by the StreamRecorder This method should only be used if existing recorder workflows cannot be implemented using the IStreamRecorderActionNotify API's.
void	setStream(IMediaStream stream) Called to set the IMediaStream object the recorder will use NOTE: This method is used by LiveStreamRecordManager to manage recorders and associated IMediaStream objects and should NOT be used directly when a StreamRecorder is under the control of LiveStreamRecordManager
void	splitRecorder() Called to tell the recorder to stop writing to the current file, create a new file and write begin writing data to the new file. The recorder should start writing data to the new file beginning with a video key frame.
void	startRecorder() Called to tell the recorder to start recording.
void	stopRecorder() Called to tell the recorder to stop recording.
void	switchRecorder(IMediaStream newStream) Called to tell the recorder to switch over to the data from a new IMediaStream. This occurs when an existing stream is replaced with a stream of the same name.

Methods

createRecorder

```
public void createRecorder()
```

Called to tell the recorder to initialize itself after it has been created. This API should be called prior to calling the startRecorder() method.

startRecorder

```
public void startRecorder()
```

Called to tell the recorder to start recording. This API should be called after createRecorder() method has been called to ensure the recorder has been properly initialized

switchRecorder

```
public void switchRecorder(IMediaStream newStream)
```

(continued from last page)

Called to tell the recorder to switch over to the data from a new IMediaStream.
This occurs when an existing stream is replaced with a stream of the same name.

For example: When a stream is published from an encoder, and then a different encoder publishes a stream using the same stream name. Called before LiveStreamRecordManager calls the recorders own switchRecorder method.

Parameters:

`newStream` - The new IMediaStream the recorder should switch to.

stopRecorder

```
public void stopRecorder()
```

Called to tell the recorder to stop recording.

splitRecorder

```
public void splitRecorder()
```

Called to tell the recorder to stop writing to the current file, create a new file and write begin writing data to the new file.
The recorder should start writing data to the new file beginning with a video key frame.

getRecorderParams

```
public StreamRecorderParameters getRecorderParams()
```

Called to get the StreamRecorderParameters for the recorder
This is typically used to check or set the StreamRecorderParameters used to configure a recorder. To get the actual value used by the recorder, use the appropriate get method found below.

See Also:

[StreamRecorderParameters](#)

getAppInstance

```
public IApplicationInstance getAppInstance()
```

Called to get the application Instance the recorder is associated with

Returns:

IApplicationInstance

getStreamName

```
public String getStreamName()
```

Called to get the stream name being used by the recorder

Returns:

String Stream name

getStream

```
public IMediaStream getStream()
```

Called to get the IMediaStream object being used by the recorder

Returns:

IMediaStream Stream object

setStream

```
public void setStream(IMediaStream stream)
```

Called to set the IMediaStream object the recorder will use

NOTE: This method is used by LiveStreamRecordManager to manage recorders and associated IMediaStream objects and should NOT be used directly when a StreamRecorder is under the control of LiveStreamRecordManager

Parameters:

stream - IMediaStream The new Stream object

getRecorderState

```
public int getRecorderState()
```

Called to get the current state of the recorder

Returns:

int Current state

See Also:

[IStreamRecorderConstants.RECORDER_STATE_ERROR](#)

[IStreamRecorderConstants.RECORDER_STATE_PENDING](#)

[IStreamRecorderConstants.RECORDER_STATE_WAITING](#)

[IStreamRecorderConstants.RECORDER_STATE_RECORDING](#)

getRecorderStateString

```
public String getRecorderStateString()
```

Called to get the current state of the recorder as a text string.

Returns:

String Current state as a string

(continued from last page)

See Also:

[IStreamRecorderConstants.RECORDER_STATE_ERROR_STRING](#)
[IStreamRecorderConstants.RECORDER_STATE_PENDING_STRING](#)
[IStreamRecorderConstants.RECORDER_STATE_WAITING_STRING](#)
[IStreamRecorderConstants.RECORDER_STATE_RECORDING_STRING](#)

getFileFormat

```
public String getFileFormat()
```

Called to get output file format being used by the recorder.

Returns:

String Output file format

See Also:

[IStreamRecorderConstants.FORMAT_MP4](#)
[IStreamRecorderConstants.FORMAT_FLV](#)

isStartOnKeyFrame

```
public boolean isStartOnKeyFrame()
```

Called to check the value of StartOnKeyFrame being used by the recorder.

Returns:

boolean true, false

See Also:

[StreamRecorderParameters.startOnKeyFrame](#)

isRecordData

```
public boolean isRecordData()
```

Called to check the value of RecordData being used by the recorder.

Returns:

boolean true, false

See Also:

[StreamRecorderParameters.recordData](#)

(continued from last page)

isSplitOnTcDiscontinuity

```
public boolean isSplitOnTcDiscontinuity()
```

Called to check the value of splitOnTcDiscontinuity being used by the recorder.

Returns:

boolean true, false

See Also:

[StreamRecorderParameters.splitOnTcDiscontinuity](#)

isMoveFirstVideoFrameToZero

```
public boolean isMoveFirstVideoFrameToZero()
```

Called to check the value of MoveFirstVideoFrameToZero being used by the recorder.

Returns:

boolean true, false

See Also:

[StreamRecorderParameters.moveFirstVideoFrameToZero](#)

getSegmentationType

```
public String getSegmentationType()
```

Called to get the SegmentationType being used by the recorder.

Returns:

String Segmentation type

See Also:

[StreamRecorderParameters.segmentationType](#)
[IStreamRecorderConstants.SEGMENT_NONE](#)
[IStreamRecorderConstants.SEGMENT_BY_DURATION](#)
[IStreamRecorderConstants.SEGMENT_BY_SIZE](#)
[IStreamRecorderConstants.SEGMENT_BY_SCHEDULE](#)

getVersioningOption

```
public String getVersioningOption()
```

(continued from last page)

Called to get the method used by the recorder to version a file when a file exists of the same name.

Returns:

String Versioning option

See Also:

[StreamRecorderParameters.versioningOption](#)
[IStreamRecorderConstants.APPEND_FILE](#)
[IStreamRecorderConstants.OVERWRITE_FILE](#)
[IStreamRecorderConstants.VERSION_FILE](#)

getSegmentSize

public long **getSegmentSize()**

Called to get the segment size used by the recorder when segmentationType is set to SEGMENT_BY_SIZE.

Returns:

long Segment size in bytes

See Also:

[StreamRecorderParameters.segmentSize](#)

getSegmentDuration

public long **getSegmentDuration()**

Called to get the segment duration used by the recorder when segmentationType is set to SEGMENT_BY_DURATION.

Returns:

long Segment duration in milliseconds

See Also:

[StreamRecorderParameters.segmentDuration](#)

getSegmentScheduleString

public String **getSegmentScheduleString()**

Called to get the segment schedule crontab string used by the recorder when segmentationType is set to SEGMENT_BY_SCHEDULE.

Returns:

(continued from last page)

String Segment schedule

See Also:[StreamRecorderParameters.segmentSchedule](#)

getFilePath

```
public String getFilePath()
```

Called to get the full path and filename used by the recorder AFTER changes made due to the selected segmentationType and versioningOption.

NOTE: When the recorder is not in RECORDER_STATE_RECORDING state, the returned value will be the basefilePath value.

Returns:

String Full path and filename

See Also:[getBaseFilePath\(\)](#)

getBaseFilePath

```
public String getBaseFilePath()
```

Called to get the full path and filename used by the recorder as the PRIOR to any changes made due to the selected segmentationType and versioningOption.

Returns:

String Full path and filename

See Also:[getFilePath\(\)](#)

getCurrentSize

```
public long getCurrentSize()
```

Called to get the current segment size regardless of segmentationType

This value is updated continuously while the recorder state is RECORDER_STATE_RECORDING.

Returns:

long Segment size in bytes

getCurrentDuration

```
public long getCurrentDuration()
```

(continued from last page)

Called to get the current segment duration regardless of segmentationType.
This value is updated continuously while the recorder state is RECORDER_STATE_RECORDING.

Returns:

long Segment duration in milliseconds

getCurrentFile

```
public String getCurrentFile()
```

Called to get the current segments fully qualified file name regardless of segmentationType.
This value is updated continuously while the recorder state is RECORDER_STATE_RECORDING.

Returns:

String The current fully qualified file name, packets are being written to.

getSegmentNumber

```
public int getSegmentNumber()
```

Called to get the current segment number regardless of segmentationType.
This value is updated continuously while the recorder state is RECORDER_STATE_RECORDING.

Returns:

int Current segment number.

getStartTime

```
public org.joda.time.DateTime getStartTime()
```

Called to get the start time of the current recording regardless of segmentationType.

Returns:

DateTime Current segment's start time.

getEndTime

```
public org.joda.time.DateTime getEndTime()
```

Called to get the end time of the recording regardless of segmentationType.
When the recording is still active, the returned value is null.
When the recording has been stopped, the returned value is for the time when the recording stopped.

Returns:

DateTime Segment end time.

getErrorString

```
public String getErrorString()
```

(continued from last page)

Called to get an error string describing the error, when the recorder state is RECORDER_STATE_ERROR.

Returns:

String Error description string

getFileVersionDelegate

```
public IStreamRecorderFileVersionDelegate getFileVersionDelegate()
```

Called to get the IStreamRecorderFileVersionDelegate being used by the recorder.

Returns:

IStreamRecorderFileVersionDelegate

See Also:

[IStreamRecorderFileVersionDelegate](#)

[StreamRecorderFileVersionDelegate](#)

[StreamRecorderSimpleFileVersionDelegate](#)

addListener

```
public IStreamRecorderActionNotify addListener(IStreamRecorderActionNotify listener)
```

Called to add a listener for IStreamRecorderActionNotify events generated by the recorder.

Multiple listeners can be added. All listeners will be called for each event, in the order in which they were added.

Parameters:

listener - An object which implements the IStreamRecorderActionNotify interface

Returns:

IStreamRecorderActionNotify The listener object passed in.

See Also:

[IStreamRecorderActionNotify](#)

removeListener

```
public boolean removeListener(IStreamRecorderActionNotify listener)
```

Called to remove a listener from the the recorder.

Parameters:

listener - The listener which is to be removed

Returns:

(continued from last page)

boolean true, if listener was found in list, else false

isVersionFile

```
public boolean isVersionFile()
```

Called to check the versioningOption used by the recorder.
Users should use getVersioningOption instead.

Returns:

boolean true when versioningOption is set to VERISON_FILE, otherwise false

isAppendFile

```
public boolean isAppendFile()
```

Called to check the versioningOption used by the recorder.
Users should use getVersioningOption instead.

Returns:

boolean true when versioningOption is set to APPEND_FILE, otherwise false

getSegmentSchedule

```
public CrontabEvent getSegmentSchedule()
```

Called to get the CrontabEvent object associated with the recorder when the segmentationType is set to SEGMENT_BY_SCHEDULE
When the recorder state is RECORDER_STATE_ERROR, RECORDER_STATE_PENDING or RECORDER_STATE_WAITING, the return value is null,
otherwise the CrontabEvent use by the recorder is returned.

Returns:

CrontabEvent

setInternalRecorder

```
public void setInternalRecorder(ILiveStreamRecord internalRecorder)
```

Called to set the internal recorder used by the StreamRecorder
This method should only be used if existing recorder workflows cannot be implemented using the IStreamRecorderActionNotify API's.

Parameters:

internalRecorder

com.wowza.wms.livestreamrecord.manager Interface IStreamRecorderActionNotify

public interface **IStreamRecorderActionNotify**
extends

This interface provides notifications to registered listeners throughout the life cycle of a StreamRecorder. These events are similar to the ILiveStreamRecordManageActionNotify events, however, they are called by the StreamRecorder deeper in the action processing.

Multiple Listener's can be registered for each StreamRecorder. The listeners are notified in the order in which they were added.

See Also:
[for API's to add and remove listeners](#)

Method Summary

void	onCreateRecorder (IStreamRecorder recorder)	This notification occurs when a new recorder has been created, but before recording has started.
void	onSegmentEnd (IStreamRecorder recorder)	This notification occurs when a recorder stops writing to the current file
void	onSegmentStart (IStreamRecorder recorder)	This notification occurs when a recorder starts writing to the current file
void	onSplitRecorder (IStreamRecorder recorder)	This notification occurs when a recorder is directed to split the active recording.
void	onStartRecorder (IStreamRecorder recorder)	This notification occurs when a recorder starts recording.
void	onStopRecorder (IStreamRecorder recorder)	This notification occurs when a recorder stops recording.
void	onSwitchRecorder (IStreamRecorder recorder, IMediaStream newStream)	This notification occurs when an existing stream has been replaced by a new stream of the same name.

Methods

onCreateRecorder

public void **onCreateRecorder**([IStreamRecorder](#) recorder)

This notification occurs when a new recorder has been created, but before recording has started. Within this method, changes can be made to the StreamRecorder's StreamRecorderParameters, which will then take affect when the recorder is started.

Called before action is taken

Parameters:

recorder - the new recorder

(continued from last page)

onStartRecorder

```
public void onStartRecorder(IStreamRecorder recorder)
```

This notification occurs when a recorder starts recording.

Called after all configuration of the recorder is complete, but before the recording actually starts.

Parameters:

recorder - the recorder which is starting

onSplitRecorder

```
public void onSplitRecorder(IStreamRecorder recorder)
```

This notification occurs when a recorder is directed to split the active recording.

Called after all configuration of the recorder is complete, but before the recording actually starts.

Parameters:

recorder - the recorder which is starting

onStopRecorder

```
public void onStopRecorder(IStreamRecorder recorder)
```

This notification occurs when a recorder stops recording.

NOTE: Recorders are stopped whenever a stream is unpublished, or when a stream is "reset".

Within this method, calling; `getCurrentFile()`, `getCurrentDuration()`, `getCurrentSize()`, `segmentNumber()`, `getStartTime()`, `getEndTime()` will return the values accumulated from the time the `onStartRecorder` notification was called, to the time this notification was called.

Called after the recorder is stopped.

Parameters:

recorder - the recorder which is starting

onSwitchRecorder

```
public void onSwitchRecorder(IStreamRecorder recorder,  
    IMediaStream newStream)
```

This notification occurs when an existing stream has been replaced by a new stream of the same name. The `StreamRecorder` will stop the recording associated with the existing stream and start a new recording for the new stream, using the same parameters as those used to originally start the recording.

Called before any action is taken

Parameters:

recorder - the current recorder for existing stream

newStream - the new stream which will be recorded

onSegmentStart

```
public void onSegmentStart(IStreamRecorder recorder)
```

This notification occurs when a recorder starts writing to the current file

Called after a the file has been opened for writing, but before any data is written to the file.

Parameters:

(continued from last page)

recorder - the recorder which is writing the segment

onSegmentEnd

```
public void onSegmentEnd(IStreamRecorder recorder)
```

This notification occurs when a recorder stops writing to the current file

Called after all packets have been written to the file and the file has been closed.

Parameters:

recorder - the recorder which wrote the segment

com.wowza.wms.livestreamrecord.manager Interface IStreamRecorderConstants

public interface **IStreamRecorderConstants**
extends

Defines the static constants used by the StreamRecorder system

The Properties for StreamRecorders should be placed in application.xml within the StreamRecorder properties container

for example:

```
</StreamRecorder>
  </Properties>
    </Property>
      </Name>streamRecorderDebugEnable</Name>
      </Value>>true</Value>
      </Type>Boolean</Type>
    </Property>
  </Properties>
</StreamRecorder>
```

Field Summary

public static final	APPEND_FILE Appends new stream data to the existing file. Value: append
public static final	FORMAT_FLV Value: flv
public static final	FORMAT_MP4 Value: mp4
public static final	OVERWRITE_FILE Overwrites the existing file with the new file Value: overwrite
public static final	PROPERTY_BACK_BUFFER_TIME Application Property "streamRecorderBackBufferTime": for specifying the number of milliseconds of packets to pull from the incoming stream buffer and write to file, before beginning the recording. Value: streamRecorderBackBufferTime
public static final	PROPERTY_DEBUG_ENABLE Application Property "streamRecorderDebugEnable": for enabling additional log statements throughout StreamRecorder Value: streamRecorderDebugEnable
public static final	PROPERTY_DEFAULT_AUDIO_SEARCH_POSITION Application Property "streamRecorderDefaultAudioSearchPosition": for specifying how audio is found when it may not be in sync with the video Value: streamRecorderDefaultAudioSearchPosition

public static final	PROPERTY_FILE_FORMAT Application Property "streamRecorderFileFormat": for specifying the default file format used by StreamRecorder. Value: streamRecorderFileFormat
public static final	PROPERTY_FILE_VERSION_DELEGATE Application Property "streamRecorderFileVersionDelegate": for specifying a default custom file version delegate. Value: streamRecorderFileVersionDelegate
public static final	PROPERTY_FILE_VERSION_TEMPLATE Application Property "streamRecorderFileVersionTemplate": for specifying a default file version template string. Value: streamRecorderFileVersionTemplate
public static final	PROPERTY_MOVE_FIRST_VIDEO_FRAME_TO_ZERO Application Property "streamRecorderMoveFirstVideoFrameToZero": for specifying the default moveFirstVideoFrameToZero value used by StreamRecorder. Value: streamRecorderMoveFirstVideoFrameToZero
public static final	PROPERTY_NOTIFY_LISTENER Application Property "streamRecorderNotifyListener": for specifying the default listener which will receive StreamRecorder notifications. Value: streamRecorderNotifyListener
public static final	PROPERTY_OUTPUT_FILE Application Property "streamRecorderOutputFile": for specifying the default filename used by StreamRecorder for recordings. Value: streamRecorderOutputFile
public static final	PROPERTY_OUTPUT_PATH Application Property "streamRecorderOutputPath": for specifying the default path used by StreamRecorder to write recordings. Value: streamRecorderOutputPath
public static final	PROPERTY_RECORD_DATA Application Property "streamRecorderRecordData": for specifying the default recordData value used by StreamRecorders. Value: streamRecorderRecordData
public static final	PROPERTY_SEGMENT_DURATION Application Property "streamRecorderSegmentDuration": for specifying the default SegmentDuration used by StreamRecorder when the segmentationType is set to SEGMENT_BY_DURATION. Value: streamRecorderSegmentDuration
public static final	PROPERTY_SEGMENT_SCHEDULE Application Property "streamRecorderSegmentSchedule": for specifying the default SegmentSchedule string used by StreamRecorder when the segmentationType is set to SEGMENT_BY_SCHEDULE. Value: streamRecorderSegmentSchedule
public static final	PROPERTY_SEGMENT_SIZE Application Property "streamRecorderSegmentSize": for specifying the default SegmentSize used by StreamRecorder when the segmentationType is set to SEGMENT_BY_SIZE. Value: streamRecorderSegmentSize

public static final	PROPERTY_SEGMENTATION_TYPE Application Property "streamRecorderSegmentationType": for specifying the default segmentation type used by StreamRecorder. Value: streamRecorderSegmentationType
public static final	PROPERTY_SKIP_KEYFRAME_AUDIO_TIMEOUT Application Property "streamRecorderSkipKeyFrameUntilAudioTimeout": for specifying how long audio is waited for. Value: streamRecorderSkipKeyFrameUntilAudioTimeout
public static final	PROPERTY_SPLIT_ON_TC_DISCONTINUITY Application Property "streamRecorderSplitOnTcDiscontinuity": for specifying the default splitOnTcDiscontinuity value used by StreamRecorder. Value: streamRecorderSplitOnTcDiscontinuity
public static final	PROPERTY_START_ON_KEYFRAME Application Property "streamRecorderStartOnKeyFrame": for specifying the default startOnKeyFrame value used by StreamRecorder. Value: streamRecorderStartOnKeyFrame
public static final	PROPERTY_TIMESCALE Application Property "streamRecorderTimescale": for specifying the timescale used when writing packets to a file. Value: streamRecorderTimeScale
public static final	PROPERTY_USE_SIMPLE_FILE_VERSION_NAMING Application Property "streamRecorderUseSimpleFileVersionNaming": for using StreamRecorderSimpleFileVersionDelegate instead of StreamRecorderFileVersionDelegate as the default file version naming delegate Value: streamRecorderUseSimpleFileVersionNaming
public static final	PROPERTY_VERSIONING_OPTION Application Property "streamRecorderVersioningOption": for specifying the default file versioning method used by StreamRecorders Value: streamRecorderVersioningOption
public static final	RECORDER_STATE_ERROR Value returned by IStreamRecorder getRecorderState() to indicate an error has occurred in the recorder. Value: -1
public static final	RECORDER_STATE_ERROR_STRING String value returned by IStreamRecorder getRecorderStateString() when the recorder state is RECORDER_STATE_ERROR. Value: Recorder Error
public static final	RECORDER_STATE_PENDING Value returned by IStreamRecorder getRecorderState() to indicate the recorder has been created but it's IStreamRecorder startRecording() method has not yet been called. Value: 0
public static final	RECORDER_STATE_PENDING_STRING String value returned by IStreamRecorder getRecorderStateString() when the recorder state is RECORDER_STATE_PENDING. Value: Pending

public static final	RECORDER_STATE_RECORDING Value returned by IStreamRecorder getRecorderState() to indicate the recorder is actively recording data to file. Value: 2
public static final	RECORDER_STATE_RECORDING_STRING String value returned by IStreamRecorder getRecorderStateString() when the recorder state is RECORDER_STATE_RECORDING. Value: Recording
public static final	RECORDER_STATE_WAITING Value returned by IStreamRecorder getRecorderState() to indicate the recorder has been started but the associated stream is not currently being received by the server (for example the stream is not being published from the encoder) Value: 1
public static final	RECORDER_STATE_WAITING_STRING String value returned by IStreamRecorder getRecorderStateString() when the recorder state is RECORDER_STATE_WAITING. Value: Waiting for Stream
public static final	SEGMENT_BY_DURATION Value: duration
public static final	SEGMENT_BY_SCHEDULE Value: schedule
public static final	SEGMENT_BY_SIZE Value: size
public static final	SEGMENT_NONE Value: none
public static final	VERSION_FILE Uses the file name returned by the configured fileVersionDelegate to version the new file Value: version

Fields

PROPERTY_DEBUG_ENABLE

```
public static final java.lang.String PROPERTY_DEBUG_ENABLE
```

Application Property "streamRecorderDebugEnabled": for enabling additional log statements throughout StreamRecorder

Add the property to the StreamRecorder Properties section of Application.xml.

Default value is false

Valid values are true or false

Constant value: **streamRecorderDebugEnabled**

PROPERTY_USE_SIMPLE_FILE_VERSION_NAMING

```
public static final java.lang.String PROPERTY_USE_SIMPLE_FILE_VERSION_NAMING
```

(continued from last page)

Application Property "streamRecorderUseSimpleFileVersionNaming": for using StreamRecorderSimpleFileVersionDelegate instead of StreamRecorderFileVersionDelegate as the default file version naming delegate

Add the property to the StreamRecorder Properties section of Application.xml.

Default value is false
Valid values are true, false

Constant value: **streamRecorderUseSimpleFileVersionNaming**

See Also:

[StreamRecorderSimpleFileVersionDelegate](#)

PROPERTY_SEGMENTATION_TYPE

```
public static final java.lang.String PROPERTY_SEGMENTATION_TYPE
```

Application Property "streamRecorderSegmentationType": for specifying the default segmentation type used by StreamRecorder.

Add the property to the StreamRecorder Properties section of Application.xml.

Valid values are: none, schedule, size, duration

Constant value: **streamRecorderSegmentationType**

See Also:

[StreamRecorderParameters.segmentationType](#)

SEGMENT_NONE

```
public static final java.lang.String SEGMENT_NONE
```

Constant value: **none**

SEGMENT_BY_SCHEDULE

```
public static final java.lang.String SEGMENT_BY_SCHEDULE
```

Constant value: **schedule**

SEGMENT_BY_SIZE

```
public static final java.lang.String SEGMENT_BY_SIZE
```

Constant value: **size**

SEGMENT_BY_DURATION

```
public static final java.lang.String SEGMENT_BY_DURATION
```

Constant value: **duration**

(continued from last page)

PROPERTY_FILE_FORMAT

```
public static final java.lang.String PROPERTY_FILE_FORMAT
```

Application Property "streamRecorderFileFormat": for specifying the default file format used by StreamRecorder.

Add the property to the StreamRecorder Properties section of Application.xml.

Valid values are: flv, mp4

Constant value: **streamRecorderFileFormat**

See Also:

[StreamRecorderParameters.fileFormat](#)

FORMAT_FLV

```
public static final java.lang.String FORMAT_FLV
```

Constant value: **flv**

FORMAT_MP4

```
public static final java.lang.String FORMAT_MP4
```

Constant value: **mp4**

PROPERTY_VERSIONING_OPTION

```
public static final java.lang.String PROPERTY_VERSIONING_OPTION
```

Application Property "streamRecorderVersioningOption": for specifying the default file versioning method used by StreamRecorders

Add the property to the StreamRecorder Properties section of Application.xml.

Valid values are: version, append, overwrite

Constant value: **streamRecorderVersioningOption**

See Also:

[StreamRecorderParameters.versioningOption](#)

VERSION_FILE

```
public static final java.lang.String VERSION_FILE
```

Uses the file name returned by the configured fileVersionDelegate to version the new file

Constant value: **version**

See Also:

[IStreamRecorderFileVersionDelegate](#)

[StreamRecorderFileVersionDelegate](#)

[StreamRecorderSimpleFileVersionDelegate](#)

(continued from last page)

APPEND_FILE

```
public static final java.lang.String APPEND_FILE
```

Appends new stream data to the existing file. NOTE: To ensure playback compatibility, it is highly recommended that this option only be used if all streams recorded to the file will be using identical video and audio codecs and configurations.

Constant value: **append**

OVERWRITE_FILE

```
public static final java.lang.String OVERWRITE_FILE
```

Overwrites the existing file with the new file

Constant value: **overwrite**

PROPERTY_START_ON_KEYFRAME

```
public static final java.lang.String PROPERTY_START_ON_KEYFRAME
```

Application Property "streamRecorderStartOnKeyFrame": for specifying the default startOnKeyFrame value used by StreamRecorder.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderStartOnKeyFrame**

See Also:

[StreamRecorderParameters.startOnKeyFrame](#)

PROPERTY_RECORD_DATA

```
public static final java.lang.String PROPERTY_RECORD_DATA
```

Application Property "streamRecorderRecordData": for specifying the default recordData value used by StreamRecorders.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderRecordData**

See Also:

[StreamRecorderParameters.recordData](#)

PROPERTY_MOVE_FIRST_VIDEO_FRAME_TO_ZERO

```
public static final java.lang.String PROPERTY_MOVE_FIRST_VIDEO_FRAME_TO_ZERO
```

Application Property "streamRecorderMoveFirstVideoFrameToZero": for specifying the default moveFirstVideoFrameToZero value used by StreamRecorder.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderMoveFirstVideoFrameToZero**

See Also:

[StreamRecorderParameters.moveFirstVideoFrameToZero](#)

(continued from last page)

PROPERTY_SPLIT_ON_TC_DISCONTINUITY

```
public static final java.lang.String PROPERTY_SPLIT_ON_TC_DISCONTINUITY
```

Application Property "streamRecorderSplitOnTcDiscontinuity": for specifying the default splitOnTcDiscontinuity value used by StreamRecorder.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderSplitOnTcDiscontinuity**

See Also:

[StreamRecorderParameters.splitOnTcDiscontinuity](#)

PROPERTY_SEGMENT_SIZE

```
public static final java.lang.String PROPERTY_SEGMENT_SIZE
```

Application Property "streamRecorderSegmentSize": for specifying the default SegmentSize used by StreamRecorder when the segmentationType is set to SEGMENT_BY_SIZE.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderSegmentSize**

See Also:

[StreamRecorderParameters.segmentSize](#)

PROPERTY_SEGMENT_DURATION

```
public static final java.lang.String PROPERTY_SEGMENT_DURATION
```

Application Property "streamRecorderSegmentDuration": for specifying the default SegmentDuration used by StreamRecorder when the segmentationType is set to SEGMENT_BY_DURATION.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderSegmentDuration**

See Also:

[StreamRecorderParameters.segmentDuration](#)

PROPERTY_SEGMENT_SCHEDULE

```
public static final java.lang.String PROPERTY_SEGMENT_SCHEDULE
```

Application Property "streamRecorderSegmentSchedule": for specifying the default SegmentSchedule string used by StreamRecorder when the segmentationType is set to SEGMENT_BY_SCHEDULE.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderSegmentSchedule**

See Also:

[StreamRecorderParameters.segmentSchedule](#)

(continued from last page)

PROPERTY_OUTPUT_PATH

```
public static final java.lang.String PROPERTY_OUTPUT_PATH
```

Application Property "streamRecorderOutputPath": for specifying the default path used by StreamRecorder to write recordings.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderOutputPath**

See Also:

[StreamRecorderParameters.outputPath](#)

PROPERTY_OUTPUT_FILE

```
public static final java.lang.String PROPERTY_OUTPUT_FILE
```

Application Property "streamRecorderOutputFile": for specifying the default filename used by StreamRecorder for recordings.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderOutputFile**

See Also:

[StreamRecorderParameters.outputFile](#)

PROPERTY_BACK_BUFFER_TIME

```
public static final java.lang.String PROPERTY_BACK_BUFFER_TIME
```

Application Property "streamRecorderBackBufferTime": for specifying the number of milliseconds of packets to pull from the incoming stream buffer and write to file, before beginning the recording.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderBackBufferTime**

See Also:

[StreamRecorderParameters.backBufferTime](#)

PROPERTY_NOTIFY_LISTENER

```
public static final java.lang.String PROPERTY_NOTIFY_LISTENER
```

Application Property "streamRecorderNotifyListener": for specifying the default listener which will receive StreamRecorder notifications.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderNotifyListener**

See Also:

[StreamRecorderParameters.notifyListener](#)

(continued from last page)

PROPERTY_FILE_VERSION_DELEGATE

```
public static final java.lang.String PROPERTY_FILE_VERSION_DELEGATE
```

Application Property "streamRecorderFileVersionDelegate": for specifying a default custom file version delegate.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderFileVersionDelegate**

See Also:

[StreamRecorderParameters.fileVersionDelegate](#)

PROPERTY_FILE_VERSION_TEMPLATE

```
public static final java.lang.String PROPERTY_FILE_VERSION_TEMPLATE
```

Application Property "streamRecorderFileVersionTemplate": for specifying a default file version template string.

NOTE: only applicable when using the default fileVersionDelegate

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderFileVersionTemplate**

See Also:

[StreamRecorderParameters.fileTemplate](#)

[StreamRecorderParameters.fileVersionDelegate](#)

PROPERTY_TIMESCALE

```
public static final java.lang.String PROPERTY_TIMESCALE
```

Application Property "streamRecorderTimescale": for specifying the timescale used when writing packets to a file. It ONLY applies to MP4 file outputs. The only VALID values are 90000 or 100000

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderTimeScale**

See Also:

streamRecorderTimescale

PROPERTY_DEFAULT_AUDIO_SEARCH_POSITION

```
public static final java.lang.String PROPERTY_DEFAULT_AUDIO_SEARCH_POSITION
```

Application Property "streamRecorderDefaultAudioSearchPosition": for specifying how audio is found when it may not be in sync with the video

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderDefaultAudioSearchPosition**

See Also:

streamRecorderDefaultAudioSearchPosition

(continued from last page)

PROPERTY_SKIP_KEYFRAME_AUDIO_TIMEOUT

```
public static final java.lang.String PROPERTY_SKIP_KEYFRAME_AUDIO_TIMEOUT
```

Application Property "streamRecorderSkipKeyFrameUntilAudioTimeout": for specifying how long audio is waited for.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderSkipKeyFrameUntilAudioTimeout**

See Also:

[streamRecorderSkipKeyFrameUntilAudioTimeout](#)

RECORDER_STATE_ERROR

```
public static final int RECORDER_STATE_ERROR
```

Value returned by IStreamRecorder getRecorderState() to indicate an error has occurred in the recorder.

Constant value: **-1**

See Also:

[RECORDER_STATE_ERROR_STRING](#)

RECORDER_STATE_PENDING

```
public static final int RECORDER_STATE_PENDING
```

Value returned by IStreamRecorder getRecorderState() to indicate the recorder has been created but it's IStreamRecorder startRecording() method has not yet been called.

Constant value: **0**

See Also:

[RECORDER_STATE_PENDING_STRING](#)

RECORDER_STATE_WAITING

```
public static final int RECORDER_STATE_WAITING
```

Value returned by IStreamRecorder getRecorderState() to indicate the recorder has been started but the associated stream is not currently being received by the server (for example the stream is not being published from the encoder)

Constant value: **1**

See Also:

[RECORDER_STATE_WAITING_STRING](#)

RECORDER_STATE_RECORDING

```
public static final int RECORDER_STATE_RECORDING
```

Value returned by IStreamRecorder getRecorderState() to indicate the recorder is actively recording data to file.

Constant value: **2**

(continued from last page)

See Also:

[RECORDER_STATE_RECORDING_STRING](#)

RECORDER_STATE_ERROR_STRING

```
public static final java.lang.String RECORDER_STATE_ERROR_STRING
```

String value returned by IStreamRecorder getRecorderStateString() when the recorder state is RECORDER_STATE_ERROR.

Constant value: **Recorder Error**

See Also:

[RECORDER_STATE_ERROR](#)

RECORDER_STATE_PENDING_STRING

```
public static final java.lang.String RECORDER_STATE_PENDING_STRING
```

String value returned by IStreamRecorder getRecorderStateString() when the recorder state is RECORDER_STATE_PENDING.

Constant value: **Pending**

See Also:

[RECORDER_STATE_PENDING](#)

RECORDER_STATE_WAITING_STRING

```
public static final java.lang.String RECORDER_STATE_WAITING_STRING
```

String value returned by IStreamRecorder getRecorderStateString() when the recorder state is RECORDER_STATE_WAITING.

Constant value: **Waiting for Stream**

See Also:

[RECORDER_STATE_PENDING](#)

RECORDER_STATE_RECORDING_STRING

```
public static final java.lang.String RECORDER_STATE_RECORDING_STRING
```

String value returned by IStreamRecorder getRecorderStateString() when the recorder state is RECORDER_STATE_RECORDING.

Constant value: **Recording**

See Also:

[RECORDER_STATE_RECORDING](#)

com.wowza.wms.livestreamrecord.manager Interface IStreamRecorderFileVersionDelegate

All Known Implementing Classes:

[StreamRecorderSimpleFileVersionDelegate](#), [StreamRecorderFileVersionDelegate](#)

```
public interface IStreamRecorderFileVersionDelegate
extends
```

This interface is used to implement a custom file versioning scheme during live stream recording.

The `getFilename` method is called under 2 conditions

- 1 - when a recorder needs to create a new output file, and an file already exists by the same name.
- 2 - when a recorder creates a new file and has been configured to use any `segmentationType` other than none

The string returned must be a valid and fully qualified filename, including the full path.

For example:

```
c:\test\myFile.flv
usr/home/content/myFile.mp4
```

See Also:

[StreamRecorderParameters.segmentationType](#)

Method Summary

String	getFilename (IStreamRecorder recContext)
--------	---

Methods

`getFilename`

```
public String getFilename(IStreamRecorder recContext)
```

Parameters:

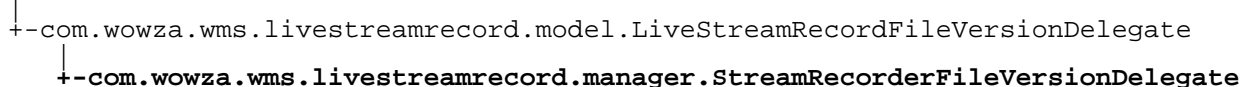
recContext - The `IStreamRecorder` requesting the file name

Returns:

String The versioned file name

com.wowza.wms.livestreamrecord.manager Class StreamRecorderFileVersionDelegate

java.lang.Object



All Implemented Interfaces:

[IStreamRecorderFileVersionDelegate](#), [ILiveStreamRecordFileVersionDelegate](#)

```

public class StreamRecorderFileVersionDelegate
  extends LiveStreamRecordFileVersionDelegate
  implements ILiveStreamRecordFileVersionDelegate, IStreamRecorderFileVersionDelegate
  
```

Default FileVersionDelegate class

This delegate allows the configuration of a custom FileName using a template string. The tags in the template string are replaced with their associated values, to generate a filename.

Valid template tags are;

`${SourceStreamName}` - The name of the stream

`${BaseFileName}` - The basefile name, which is the filename prior to any versioning changes

`${SegmentNumber}` - An incrementing value representing the current number of segments which have been created for this recording, starting at 0

`${RecordingStartTime}` - The time at which the recording was started formatted as yyyy-MM-dd-HH.mm.ss.SSS-zzzz

`${SegmentTime}` - Time time at which the segment was created

The default template string is

`${BaseFileName}_${RecordingStartTime}_${SegmentNumber}`

Fields inherited from class	
com.wowza.wms.livestreamrecord.model.LiveStreamRecordFileVersionDelegate	
BASE_NAME_TAG, DATETIME_LAYOUT_NORMAL, DATETIME_LAYOUT_NORMAL_ALT, SEGMENT_NUMBER_TAG, SEGMENT_TIME_TAG, START_TIME_TAG, STREAM_NAME_TAG	

Constructor Summary	
public	StreamRecorderFileVersionDelegate()

Method Summary	
String	getFilename(IStreamRecorder recContext) Creates a new filename using the default template string,

Methods inherited from class	
com.wowza.wms.livestreamrecord.model.LiveStreamRecordFileVersionDelegate	
createFileName, getFilename, getFileTemplate, getSegmentationType, setFileTemplate	

Methods inherited from class java.lang.Object	
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait	

Methods inherited from interface[com.wowza.wms.livestreamrecord.model.ILiveStreamRecordFileVersionDelegate](#)[getFilename](#)**Methods inherited from interface**[com.wowza.wms.livestreamrecord.manager.IStreamRecorderFileVersionDelegate](#)[getFilename](#)

Constructors

StreamRecorderFileVersionDelegate

```
public StreamRecorderFileVersionDelegate()
```

Methods

getFilename

```
public String getFilename(IStreamRecorder recContext)
```

Creates a new filename using the default template string,

Parameters:

recContext - The IStreamRecorder requesting the file name

Returns:

String The versioned file name

com.wowza.wms.livestreamrecord.manager Class StreamRecorderParameters

java.lang.Object

└-com.wowza.wms.livestreamrecord.manager.StreamRecorderParameters

public class **StreamRecorderParameters**
extends Object

This class is used to configure the recording parameters for the StreamRecorder class.
All members of this class are public and therefore can be accessed and modified directly.

Field Summary	
public	backBufferTime Configures the number of milliseconds of packets to pull from the incoming stream buffer and write to file, before before beginning the recording.
public	defaultAudioSearchPosition Configures the default search position for audio before starting to record.
public	fileFormat Configures the output file format
public	fileTemplate Configures the file version template string used by the default fileVersionDelegate, to generate a versioned file name for the recorder NOTE: if set to null then a default file template string, as defined by StreamRecorderFileVersionDelegate, will be used
public	fileVersionDelegate Configures the fileVersionDelegate for the recorder Valid values are the fully qualified class path to the class which implements the IStreamRecorderFileVersionDelegate interface. Default value is com.wowza.wms.livestreamrecord.manager.StreamRecorderFileVersionDelegate
public	moveFirstVideoFrameToZero Configures whether or not the recorder will set the first packet's timecode to 0, when recording fileFormat is FORMAT_MP4
public	notifyListener Configures the StreamRecorder listener for the recorder Valid values are the fully qualified class path to the class which implements the IStreamRecorderActionNotify interface.
public	outputFile Configures the output file name used for the recording If segmentationType is not SEGMENT_NONE, then this value is used as the base file name for the file segments when using either of the fileVersionDelegates NOTE 1: When set to null or "", the recorder will create the filename based upon the stream name and the value of fileFormat.
public	outputPath Configures the output directory where recorded file will be written NOTE: When set to null or "", the recorder will write files to the default content directory for the application.
public	recordData Configures whether or not the recorder will write data packets to the output file.

public	segmentationType Configures the type of recording segmentation the recorder will use Segmentation provides a means by which the recording of an incoming live stream can be split into a series of files in order to manage them more easily.
public	segmentDuration Configures the output file size in milliseconds for each recording segment, when segmentationType is SEGMENT_BY_DURATION. This value is specified in milliseconds
public	segmentSchedule Configures the crontab schedule used to segment a recording, when segmentationType is SEGMENT_BY_SCHEDULE.
public	segmentSize Configures the output file size in bytes for each recording segment, when segmentationType is SEGMENT_BY_SIZE. This value is specified in bytes
public	skipKeyFrameUntilAudioTimeout Configures the audio timeout when waiting for audio sync.
public	splitOnTcDiscontinuity Configures whether or not the recorder will create a new segment for a recording when packet timecode discontinuities are detected A discontinuity is said to occur when 10 consecutive packets have timecodes which jump backward in time.
public	startOnKeyFrame Configures whether or not the recorder will wait until a video key frame is received to start writing packets to the output file, thus ensuring the first packet in the file contains a video key frame.
public	timeScale Configures the timescale in milliseconds for the recording
public	versioningOption Configures the behavior when a new recording file is created with a name that already exists

Constructor Summary

public	StreamRecorderParameters (IApplicationInstance appInstance) The constructor will read any defaults set via properties in application.xml and will use those values as the default values for this class.
public	StreamRecorderParameters (IApplicationInstance appInstance, StreamRecorderParameters params) The constructor will copy another StreamRecorderParameters object.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

segmentationType

public java.lang.String **segmentationType**

(continued from last page)

Configures the type of recording segmentation the recorder will use

Segmentation provides a means by which the recording of an incoming live stream can be split into a series of files in order to manage them more easily. The files can be limited by; size, duration, or split at a specific time (e.g. at the top of every hour). If SEGMENT_NONE is used, then the recording is written to a single file.

Valid values are defined in IStreamRecorderConstants

See Also:

[IStreamRecorderConstants.SEGMENT_NONE](#)

[IStreamRecorderConstants.SEGMENT_BY_DURATION](#)

[IStreamRecorderConstants.SEGMENT_BY_SIZE](#)

[IStreamRecorderConstants.SEGMENT_BY_SCHEDULE](#)

versioningOption

```
public java.lang.String versioningOption
```

Configures the behavior when a new recording file is created with a name that already exists

NOTE: APPEND_FILE and OVERWRITE_FILE are only applicable when the segmentationType is SEGMENT_NONE

Valid values are defined in IStreamRecorderConstants

See Also:

[IStreamRecorderConstants.VERSION_FILE](#)

[IStreamRecorderConstants.APPEND_FILE](#)

[IStreamRecorderConstants.OVERWRITE_FILE](#)

[segmentSize](#)

[segmentDuration](#)

[segmentSchedule](#)

fileFormat

```
public java.lang.String fileFormat
```

Configures the output file format

Valid values are defined in IStreamRecorderConstants

See Also:

[IStreamRecorderConstants.FORMAT_FLV](#)

[IStreamRecorderConstants.FORMAT_MP4](#)

startOnKeyFrame

```
public boolean startOnKeyFrame
```

Configures whether or not the recorder will wait until a video key frame is received to start writing packets to the output file, thus ensuring the first packet in the file contains a video key frame.

Valid values are true, false
default value is true

recordData

```
public boolean recordData
```

Configures whether or not the recorder will write data packets to the output file.

Valid values are true, false
default value is false

moveFirstVideoFrameToZero

```
public boolean moveFirstVideoFrameToZero
```

Configures whether or not the recorder will set the first packet's timecode to 0, when recording fileFormat is FORMAT_MP4

Valid values are true, false
default value is true

splitOnTcDiscontinuity

```
public boolean splitOnTcDiscontinuity
```

Configures whether or not the recorder will create a new segment for a recording when packet timecode discontinuities are detected

A discontinuity is said to occur when 10 consecutive packets have timecodes which jump backward in time. i.e. the current packet's timecode is less than the previous packet's timecode.

Valid values are true, false
default value is false

backBufferTime

```
public long backBufferTime
```

Configures the number of milliseconds of packets to pull from the incoming stream buffer and write to file, before beginning the recording. This parameter is typically used with manual recordings to mitigate the delay between a start recording request and when data is actually written to file, thus ensuring that the beginning of an event is recorded to file.

This value is in milliseconds.
default value is 0

NOTE: The incoming stream buffer contains approximately 8 seconds of packets

segmentSize

```
public long segmentSize
```

Configures the output file size in bytes for each recording segment, when segmentationType is SEGMENT_BY_SIZE. This value is specified in bytes

Valid values are any positive long value greater than 0, however a minimum size of 1048576 bytes (1 MB) is highly recommended to ensure the recorded file segments can start on a video key frame if configured to do so.
default value is 10485760 bytes (10 MB)

segmentDuration

```
public long segmentDuration
```

Configures the output file size in milliseconds for each recording segment, when segmentationType is SEGMENT_BY_DURATION.

This value is specified in milliseconds

Valid values are any positive long value greater than 0, however a minimum size of 60000 ms (1 minute) is highly recommended to ensure the recorded file segments can start on a video key frame if configured to do so.
default value is 900000 ms (15 minutes)

segmentSchedule

```
public java.lang.String segmentSchedule
```

(continued from last page)

Configures the crontab schedule used to segment a recording, when segmentationType is SEGMENT_BY_SCHEDULE.

Crontab expressions

A crontab expression specifies the segmentation interval in minutes, hours, months, years, days of the month, or days of the week. The available crontab fields are (in order):

[Minute] [Hour] [Day_of_the_Month] [Month_of_the_Year] [Day_of_the_Week] [Year]

where:

Minute - Specifies the minute value (between 0 and 59) at which the segmentation occurs.

Hour - Specifies the hour (between 0 and 23 based on a 24-hour clock) at which the segmentation occurs.

Day_of_the_Month - Specifies the day (between 0 and 31) at which the split occurs. To specify that live recordings always be segmentation on the last day of the month, specify 31.

Month_of_the_Year - Specifies the month at which the segmentation occurs. You can specify the month by using the abbreviated name of the month (for example, Jan) or a numerical equivalent (for example, 1).

Day_of_the_Week - Specifies the day in a week at which the segmentation occurs. You can specify the day by using the abbreviated name of the day (for example, Mon) or a numerical equivalent (for example, 1).

Year - Specifies the year at which the segmentation occurs (for example, 2013).

Example

To segmentation a live recording every 30 minutes (at the top of each hour and every half-hour):

```
0,30 * * * * *
```

```
0,30 (simplified version)
```

for more details see (<http://www.nncron.ru/help/EN/working/cron-format.htm>).

Note: The nnCron nonstandard question mark character (?), which specifies that the server startup time is substituted into the cron expression, is NOT currently supported.

Valid values are any valid crontab expression exception for '?'

default value is "0 * * * * *" (segment every hour at the top of the hour)

outputFile

```
public java.lang.String outputFile
```

Configures the output file name used for the recording

If segmentationType is not SEGMENT_NONE, then this value is used as the base file name for the file segments when using either of the fileVersionDelegates

NOTE 1: When set to null or "", the recorder will create the filename based upon the stream name and the value of fileFormat.

NOTE 2: The fileFormat will be appended to the file name to ensure the file extension matches the actual file format written.

Example mytestRecording, with no fileFormat specified will result in the default fileFormat being used and a recorded file name of mytestRecording.mp4 myOtherTest.mp4, with the the fileFormat specified as 1 (FLV), will result in the recorded file name of myOtherTest.mp4.flv

Valid values are any valid filename

default value is null

outputPath

```
public java.lang.String outputPath
```

Configures the output directory where recorded file will be written

NOTE: When set to null or "", the recorder will write files to the default content directory for the application.

Examples c:\myfiles\recordings /home/user/myfiles/recordings

Valid values are any valid path.

default value is null

notifyListener

```
public com.wowza.wms.livestreamrecord.manager.IStreamRecorderActionNotify
notifyListener
```

(continued from last page)

Configures the StreamRecorder listener for the recorder

Valid values are the fully qualified class path to the class which implements the IStreamRecorderActionNotify interface. default value is null

See Also:

[IStreamRecorderActionNotify](#)

fileVersionDelegate

```
public com.wowza.wms.livestreamrecord.manager.IStreamRecorderFileVersionDelegate  
fileVersionDelegate
```

Configures the fileVersionDelegate for the recorder

Valid values are the fully qualified class path to the class which implements the IStreamRecorderFileVersionDelegate interface. Default value is com.wowza.wms.livestreamrecord.manager.StreamRecorderFileVersionDelegate

See Also:

[IStreamRecorderFileVersionDelegate](#)

[StreamRecorderFileVersionDelegate](#)

[StreamRecorderSimpleFileVersionDelegate](#)

fileTemplate

```
public java.lang.String fileTemplate
```

Configures the file version template string used by the default fileVersionDelegate, to generate a versioned file name for the recorder

NOTE: if set to null then a default file template string, as defined by StreamRecorderFileVersionDelegate, will be used

Valid values are null or a valid file version template string

Default value is null

See Also:

[StreamRecorderFileVersionDelegate](#)

timeScale

```
public long timeScale
```

Configures the timescale in milliseconds for the recording

This value is in milliseconds.

default value is 90000

NOTE: There are only two valid values 90000 and 100000

defaultAudioSearchPosition

```
public boolean defaultAudioSearchPosition
```

Configures the default search position for audio before starting to record.

Default value is LiveStreamRecorderBase.DEFAULT_FORCE_AUDIO_SEARCH

skipKeyFrameUntilAudioTimeout

```
public int skipKeyFrameUntilAudioTimeout
```

Configures the audio timeout when waiting for audio sync. This value is in milliseconds.
default balue is LiveStreamRecorderBase.DEFAULT_SKIPKEYFRAMESUNTILAUDIOTIMEOUT

Constructors

StreamRecorderParameters

```
public StreamRecorderParameters(IApplicationInstance appInstance)
```

The constructor will read any defaults set via properties in application.xml and will use those values as the default values for this class.

Parameters:

appInstance

StreamRecorderParameters

```
public StreamRecorderParameters(IApplicationInstance appInstance,  
StreamRecorderParameters params)
```

The constructor will copy another StreamRecorderParameters object.

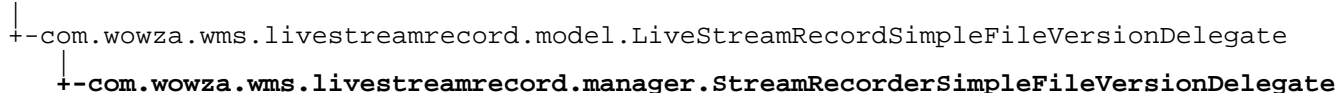
Parameters:

appInstance

params

com.wowza.wms.livestreamrecord.manager Class StreamRecorderSimpleFileVersionDelegate

java.lang.Object



All Implemented Interfaces:

[IStreamRecorderFileVersionDelegate](#), [ILiveStreamRecordFileVersionDelegate](#)

```

public class StreamRecorderSimpleFileVersionDelegate
extends LiveStreamRecordSimpleFileVersionDelegate
implements ILiveStreamRecordFileVersionDelegate, IStreamRecorderFileVersionDelegate
  
```

StreamRecorderSimpleFileVersionDelegate class

This delegate uses the simple file versioning method to generate a file version name. The simple method is to version the existing file and always use the "basename" for the current file

Simple File Versioning:

The simple file versioning scheme attempts to resolve file name conflicts by appending "_1" to the end of the existing file, so that the current recording can use the requested file name. If a file by that name already exists the appended number will be incremented and renaming will be tried again. This will continue until a non-conflicting file name is found.

For example: if the file name is "myStream.flv", and that file already exists, "myStream_1.flv" will be tried. If that still conflicts with an existing file, "myStream_2.flv" will be tried. This process continues until a non conflicting name is found. The recorder will then record to "mystream.flv"

Constructor Summary

public	StreamRecorderSimpleFileVersionDelegate()
--------	---

Method Summary

String	getFilename(IStreamRecorder recContext) Versions the existing file by appending _#, and returns the original file name for use as the current file.
--------	--

Methods inherited from class

com.wowza.wms.livestreamrecord.model.LiveStreamRecordSimpleFileVersionDelegate

createFileName, getFilename

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface

[com.wowza.wms.livestreamrecord.model.ILiveStreamRecordFileVersionDelegate](#)

[getFilename](#)

Methods inherited from interface[com.wowza.wms.livestreamrecord.manager.IStreamRecorderFileVersionDelegate](#)[getFilename](#)

Constructors

StreamRecorderSimpleFileVersionDelegate

```
public StreamRecorderSimpleFileVersionDelegate()
```

Methods

getFilename

```
public String getFilename(IStreamRecorder recContext)
```

Versions the existing file by appending _#, and returns the original file name for use as the current file.

Parameters:

recContext - The IStreamRecorder requesting the file name

Returns:

String The original file name

Package

com.wowza.wms.livestreamrecord.model

com.wowza.wms.livestreamrecord.model Interface **ILiveStreamRecord**

public interface **ILiveStreamRecord**
extends

Field Summary

public static final	RECORDER_ERROR Value: -1
public static final	RECORDER_NOT_RUNNING Value: 0
public static final	RECORDER_RUNNING Value: 1
public static final	SPLIT_ON_DISCONTINUITY_ALWAYS Value: 1
public static final	SPLIT_ON_DISCONTINUITY_DEFAULT Value: 0
public static final	SPLIT_ON_DISCONTINUITY_NEVER Value: 2
public static final	SPLIT_TYPE_BY_DURATION Value: 3
public static final	SPLIT_TYPE_BY_SCHEDULE Value: 1
public static final	SPLIT_TYPE_BY_SIZE Value: 2
public static final	SPLIT_TYPE_NONE Value: 0

Method Summary

ILiveStreamRecordNotify	addListener(ILiveStreamRecordNotify listener)
String	getBaseFilePath()
long	getCurrentDuration()

String	getCurrentFile()
long	getCurrentSize()
boolean	getDefaultAudioSearchPosition()
String	getErrorString()
String	getFilePath()
ILiveStreamRecordFileVersionDelegate	getFileVersionDelegate()
int	getRecorderState()
long	getSegmentDuration()
int	getSegmentNumber()
CrontabEvent	getSegmentSchedule()
long	getSegmentSize()
int	getSkipKeyFrameUntilAudioTimeout()
int	getSplitType()
org.joda.time.DateTim e	getStartTime()
String	getStreamName()
long	getTimeScale()
Object	getWriteLock()
void	init(IApplicationInstance appInstance)
void	init(IApplicationInstance appInstance, IStreamRecorder streamRecorder)
boolean	isAppendFile()
boolean	isMoveFirstVideoFrameToZero()
boolean	isRecordData()
boolean	isSplitOnTcDiscontinuity()
boolean	isStartOnKeyFrame()

boolean	isVersionFile()
void	onPublish()
void	onUnPublish()
boolean	removeListener(ILiveStreamRecordNotify listener)
void	setBackBufferTime(long size)
void	setDebug(boolean debug)
void	setDefaultAudioSearchPosition(boolean searchDefault)
void	setFileVersionDelegate(ILiveStreamRecordFileVersionDelegate delegate)
void	setMoveFirstVideoFrameToZero(boolean moveFirstVideoFrameToZero)
void	setRecordData(boolean recordData)
void	setSegmentDuration(long duration)
void	setSegmentSize(long size)
void	setSkipKeyFrameUntilAudioTimeout(int audioTimeout)
void	setSplitOnTcDiscontinuity(boolean splitOnTcDiscontinuity)
void	setStartOnKeyFrame(boolean startOnKeyFrame)
void	setTimeScale(long timescale)
void	setVersionFile(boolean versionFile)
void	splitRecordingNow()
void	startRecording(IMediaStream stream, boolean append)
void	startRecording(IMediaStream stream, String filePath, boolean append)
void	startRecording(IMediaStream stream, String filePath, boolean append, java.util.Map extraMetadata)
void	startRecording(IMediaStream stream, String filePath, boolean append, java.util.Map extraMetadata, int splitOnTcDiscontinuity)
void	startRecordingSegmentByDuration(IMediaStream stream, String filePath, java.util.Map extraMetadata, long duration)

void	startRecordingSegmentBySchedule (IMediaStream stream, String filePath, java.util.Map extraMetadata, String schedule)
void	startRecordingSegmentBySize (IMediaStream stream, String filePath, java.util.Map extraMetadata, long size)
void	stopRecording ()
void	work ()
void	workStop ()

Fields

SPLIT_TYPE_NONE

```
public static final int SPLIT_TYPE_NONE
```

Constant value: **0**

SPLIT_TYPE_BY_SCHEDULE

```
public static final int SPLIT_TYPE_BY_SCHEDULE
```

Constant value: **1**

SPLIT_TYPE_BY_SIZE

```
public static final int SPLIT_TYPE_BY_SIZE
```

Constant value: **2**

SPLIT_TYPE_BY_DURATION

```
public static final int SPLIT_TYPE_BY_DURATION
```

Constant value: **3**

SPLIT_ON_DISCONTINUITY_DEFAULT

```
public static final int SPLIT_ON_DISCONTINUITY_DEFAULT
```

Constant value: **0**

SPLIT_ON_DISCONTINUITY_ALWAYS

```
public static final int SPLIT_ON_DISCONTINUITY_ALWAYS
```

Constant value: **1**

SPLIT_ON_DISCONTINUITY_NEVER

```
public static final int SPLIT_ON_DISCONTINUITY_NEVER
```

Constant value: **2**

RECORDER_NOT_RUNNING

```
public static final int RECORDER_NOT_RUNNING
```

Constant value: **0**

RECORDER_RUNNING

```
public static final int RECORDER_RUNNING
```

Constant value: **1**

RECORDER_ERROR

```
public static final int RECORDER_ERROR
```

Constant value: **-1**

Methods

init

```
public void init(IApplicationInstance appInstance)
```

startRecording

```
public void startRecording(IMediaStream stream,  
    boolean append)
```

startRecording

```
public void startRecording(IMediaStream stream,  
    String filePath,  
    boolean append)
```

startRecording

```
public void startRecording(IMediaStream stream,  
    String filePath,  
    boolean append,  
    java.util.Map extraMetadata)
```

startRecording

```
public void startRecording(IMediaStream stream,  
    String filePath,  
    boolean append,  
    java.util.Map extraMetadata,  
    int splitOnTcDiscontiuity)
```

startRecordingSegmentBySize

```
public void startRecordingSegmentBySize(IMediaStream stream,  
    String filePath,  
    java.util.Map extraMetadata,  
    long size)
```

startRecordingSegmentByDuration

```
public void startRecordingSegmentByDuration(IMediaStream stream,  
    String filePath,  
    java.util.Map extraMetadata,  
    long duration)
```

startRecordingSegmentBySchedule

```
public void startRecordingSegmentBySchedule(IMediaStream stream,  
    String filePath,  
    java.util.Map extraMetadata,  
    String schedule)
```

stopRecording

```
public void stopRecording()
```

splitRecordingNow

```
public void splitRecordingNow()
```

onPublish

```
public void onPublish()
```

onUnPublish

```
public void onUnPublish()
```

(continued from last page)

workStop

```
public void workStop()
```

work

```
public void work()
```

getWriteLock

```
public Object getWriteLock()
```

isStartOnKeyFrame

```
public boolean isStartOnKeyFrame()
```

setStartOnKeyFrame

```
public void setStartOnKeyFrame(boolean startOnKeyFrame)
```

isRecordData

```
public boolean isRecordData()
```

setRecordData

```
public void setRecordData(boolean recordData)
```

isVersionFile

```
public boolean isVersionFile()
```

setVersionFile

```
public void setVersionFile(boolean versionFile)
```

(continued from last page)

isAppendFile

```
public boolean isAppendFile()
```

isMoveFirstVideoFrameToZero

```
public boolean isMoveFirstVideoFrameToZero()
```

setMoveFirstVideoFrameToZero

```
public void setMoveFirstVideoFrameToZero(boolean moveFirstVideoFrameToZero)
```

isSplitOnTcDiscontinuity

```
public boolean isSplitOnTcDiscontinuity()
```

setSplitOnTcDiscontinuity

```
public void setSplitOnTcDiscontinuity(boolean splitOnTcDiscontinuity)
```

setFileVersionDelegate

```
public void setFileVersionDelegate(ILiveStreamRecordFileVersionDelegate delegate)
```

getFileVersionDelegate

```
public ILiveStreamRecordFileVersionDelegate getFileVersionDelegate()
```

getSplitType

```
public int getSplitType()
```

getSegmentSize

```
public long getSegmentSize()
```

getSegmentDuration

```
public long getSegmentDuration()
```

(continued from last page)

getCurrentSize

```
public long getCurrentSize()
```

getCurrentDuration

```
public long getCurrentDuration()
```

getSegmentSchedule

```
public CrontabEvent getSegmentSchedule()
```

setSegmentSize

```
public void setSegmentSize(long size)
```

setSegmentDuration

```
public void setSegmentDuration(long duration)
```

getFilePath

```
public String getFilePath()
```

getBaseFilePath

```
public String getBaseFilePath()
```

getCurrentFile

```
public String getCurrentFile()
```

getStreamName

```
public String getStreamName()
```

(continued from last page)

getSegmentNumber

```
public int getSegmentNumber()
```

getStartTime

```
public org.joda.time.DateTime getStartTime()
```

setBackBufferTime

```
public void setBackBufferTime(long size)
```

addListener

```
public ILiveStreamRecordNotify addListener(ILiveStreamRecordNotify listener)
```

removeListener

```
public boolean removeListener(ILiveStreamRecordNotify listener)
```

init

```
public void init(IApplicationInstance appInstance,  
                IStreamRecorder streamRecorder)
```

setDebug

```
public void setDebug(boolean debug)
```

getRecorderState

```
public int getRecorderState()
```

getErrorString

```
public String getErrorString()
```

setTimeScale

```
public void setTimeScale(long timescale)
```

(continued from last page)

getTimeScale

```
public long getTimeScale()
```

setDefaultAudioSearchPosition

```
public void setDefaultAudioSearchPosition(boolean searchDefault)
```

getDefaultAudioSearchPosition

```
public boolean getDefaultAudioSearchPosition()
```

setSkipKeyFrameUntilAudioTimeout

```
public void setSkipKeyFrameUntilAudioTimeout(int audioTimeout)
```

getSkipKeyFrameUntilAudioTimeout

```
public int getSkipKeyFrameUntilAudioTimeout()
```

com.wowza.wms.livestreamrecord.model Interface **ILiveStreamRecordFileVersionDelegate**

public interface **ILiveStreamRecordFileVersionDelegate**
extends

Method Summary

String	getFilename (ILiveStreamRecord recorder)
--------	---

Methods

getFilename

public String **getFilename**([ILiveStreamRecord](#) recorder)

com.wowza.wms.livestreamrecord.model Interface **ILiveStreamRecordNotify**

public interface **ILiveStreamRecordNotify**
extends

Method Summary

void	onSegmentEnd (ILiveStreamRecord recorder)
void	onSegmentStart (ILiveStreamRecord recorder)

Methods

onSegmentStart

public void **onSegmentStart**([ILiveStreamRecord](#) recorder)

onSegmentEnd

public void **onSegmentEnd**([ILiveStreamRecord](#) recorder)

Package

com.wowza.wms.logging

com.wowza.wms.logging Interface Constants

public interface **Constants**
extends

Constants used internally throughout log4j.

Field Summary	
public static final	ABSOLUTE_FORMAT ABSOLUTE string literal. Value: ABSOLUTE
public static final	ABSOLUTE_TIME_PATTERN SimpleTimePattern for ABSOLUTE. Value: HH:mm:ss,SSS
public static final	APPLICATION_KEY application string literal. Value: application
public static final	CODES_HREF Codes URL string literal. Value: http://logging.apache.org/log4j/docs/codes.html
public static final	CONFIGURATOR_CLASS_KEY log4j.configuratorClass string literal. Value: log4j.configuratorClass
public static final	DATE_AND_TIME_FORMAT DATE string literal. Value: DATE
public static final	DATE_AND_TIME_PATTERN SimpleTimePattern for DATE. Value: dd MMM yyyy HH:mm:ss,SSS
public static final	DEFAULT_CONFIGURATION_FILE The default property file name for automatic configuration. Value: log4j.properties
public static final	DEFAULT_CONFIGURATION_KEY log4j.configuration string literal. Value: log4j.configuration
public static final	DEFAULT_REPOSITORY_NAME The name of the default repository is "default" (without the quotes). Value: default
public static final	DEFAULT_XML_CONFIGURATION_FILE The default XML configuration file name for automatic configuration. Value: log4j.xml

public static final	HOSTNAME_KEY hostname string literal. Value: hostname
public static final	ISO8601_FORMAT ISO8601 string literal. Value: ISO8601
public static final	ISO8601_PATTERN SimpleTimePattern for ISO8601. Value: yyyy-MM-dd HH:mm:ss,SSS
public static final	JNDI_CONTEXT_NAME JNDI context name string literal. Value: java:comp/env/log4j/context-name
public static final	LOG4J_ID_KEY log4jid string literal. Value: log4jid
public static final	LOG4J_PACKAGE_NAME log4j package name string literal. Value: org.apache.log4j
public static final	RECEIVER_NAME_KEY receiver string literal. Value: receiver
public static final	TEMP_CONSOLE_APPENDER_NAME TEMP_CONSOLE_APPENDER string literal. Value: TEMP_CONSOLE_APPENDER
public static final	TEMP_LIST_APPENDER_NAME TEMP_LIST_APPENDER string literal. Value: TEMP_LIST_APPENDER
public static final	TIMESTAMP_RULE_FORMAT time stamp pattern string literal. Value: yyyy/MM/dd HH:mm:ss

Fields

LOG4J_PACKAGE_NAME

```
public static final java.lang.String LOG4J_PACKAGE_NAME
```

log4j package name string literal.
Constant value: **org.apache.log4j**

DEFAULT_REPOSITORY_NAME

```
public static final java.lang.String DEFAULT_REPOSITORY_NAME
```

The name of the default repository is "default" (without the quotes).
Constant value: **default**

APPLICATION_KEY

```
public static final java.lang.String APPLICATION_KEY
```

application string literal.

Constant value: **application**

HOSTNAME_KEY

```
public static final java.lang.String HOSTNAME_KEY
```

hostname string literal.

Constant value: **hostname**

RECEIVER_NAME_KEY

```
public static final java.lang.String RECEIVER_NAME_KEY
```

receiver string literal.

Constant value: **receiver**

LOG4J_ID_KEY

```
public static final java.lang.String LOG4J_ID_KEY
```

log4jid string literal.

Constant value: **log4jid**

TIMESTAMP_RULE_FORMAT

```
public static final java.lang.String TIMESTAMP_RULE_FORMAT
```

time stamp pattern string literal.

Constant value: **yyyy/MM/dd HH:mm:ss**

DEFAULT_CONFIGURATION_FILE

```
public static final java.lang.String DEFAULT_CONFIGURATION_FILE
```

The default property file name for automatic configuration.

Constant value: **log4j.properties**

DEFAULT_XML_CONFIGURATION_FILE

```
public static final java.lang.String DEFAULT_XML_CONFIGURATION_FILE
```

The default XML configuration file name for automatic configuration.

Constant value: **log4j.xml**

DEFAULT_CONFIGURATION_KEY

```
public static final java.lang.String DEFAULT_CONFIGURATION_KEY
```

log4j.configuration string literal.

Constant value: **log4j.configuration**

(continued from last page)

CONFIGURATOR_CLASS_KEY

```
public static final java.lang.String CONFIGURATOR_CLASS_KEY
```

log4j.configuratorClass string literal.

Constant value: **log4j.configuratorClass**

JNDI_CONTEXT_NAME

```
public static final java.lang.String JNDI_CONTEXT_NAME
```

JNDI context name string literal.

Constant value: **java:comp/env/log4j/context-name**

TEMP_LIST_APPENDER_NAME

```
public static final java.lang.String TEMP_LIST_APPENDER_NAME
```

TEMP_LIST_APPENDER string literal.

Constant value: **TEMP_LIST_APPENDER**

TEMP_CONSOLE_APPENDER_NAME

```
public static final java.lang.String TEMP_CONSOLE_APPENDER_NAME
```

TEMP_CONSOLE_APPENDER string literal.

Constant value: **TEMP_CONSOLE_APPENDER**

CODES_HREF

```
public static final java.lang.String CODES_HREF
```

Codes URL string literal.

Constant value: **http://logging.apache.org/log4j/docs/codes.html**

ABSOLUTE_FORMAT

```
public static final java.lang.String ABSOLUTE_FORMAT
```

ABSOLUTE string literal.

Constant value: **ABSOLUTE**

ABSOLUTE_TIME_PATTERN

```
public static final java.lang.String ABSOLUTE_TIME_PATTERN
```

SimpleTimePattern for ABSOLUTE.

Constant value: **HH:mm:ss,SSS**

DATE_AND_TIME_FORMAT

```
public static final java.lang.String DATE_AND_TIME_FORMAT
```

DATE string literal.

Constant value: **DATE**

DATE_AND_TIME_PATTERN

```
public static final java.lang.String DATE_AND_TIME_PATTERN
```

(continued from last page)

SimpleTimePattern for DATE.
Constant value: **dd MMM yyyy HH:mm:ss,SSS**

ISO8601_FORMAT

```
public static final java.lang.String ISO8601_FORMAT
```

ISO8601 string literal.
Constant value: **ISO8601**

ISO8601_PATTERN

```
public static final java.lang.String ISO8601_PATTERN
```

SimpleTimePattern for ISO8601.
Constant value: **yyyy-MM-dd HH:mm:ss,SSS**

com.wowza.wms.logging Interface ILogNotify

All Known Implementing Classes:

[LogNotifyCalculateIncremental](#)

```
public interface ILogNotify
extends
```

ILogNotify: Interface to add custom fields to the Wowza Pro log files. To add your own custom log fields, define a class that implements this interface. The onLog method will be called each time the Wowza Pro server logs a message. Here is an example of a simple ILogNotify class that logs the current system time in milliseconds as a Long (systime-long) and as a String (systime-string).

```
package com.wowza.wms.plugin.newlogfields;

import org.apache.log4j.*;

import com.wowza.wms.logging.*;
import com.wowza.wms.stream.*;

public class LogNotifyDocs implements ILogNotify
{
    public void onLog(Level level, String comment, IMediaStream stream, String category,
String event, int status, String context)
    {
        long systime = System.currentTimeMillis();
        WMSLoggerFactory.putGlobalLogValue("systime-long", new Long(systime));
        WMSLoggerFactory.putGlobalLogValue("systime-string", systime+"");
    }
}
```

*Note: To get any of the values currently being logged use the logging API
WMSLoggerFactory.getGlobalLogValue(WMSLoggerIDs.FD_*)*

To add your class to Wowza Pro, compile your class into a .class file, bind the class into a .jar file and copy the .jar file into the Wowza Pro server /lib folder. Next, edit:

- [install-dir]/bin/setenv.bat (Windows)
- [install-dir]/bin/setenv.sh (Linux, OSX, Solaris)

Add **-Dcom.wowza.wms.logging.LogNotify=[full-path-to-your-ILogNotify-class]** to the **JAVA_OPTS**. For example for the class above the JAVA_OPTS would look like:

Linux/OSX

```
JAVA_OPTS=" -Xmx768M -
```

```
Dcom.wowza.wms.logging.LogNotify=com.wowza.wms.plugin.newlogfields.NewLogFields"
```

Windows

```
JAVA_OPTS=-Xmx768M -
```

```
Dcom.wowza.wms.logging.LogNotify=com.wowza.wms.plugin.newlogfields.NewLogFields
```

Next, edit `[install-dir]/conf/log4j.properties` and add the new field names to any `log4j.appender.[appender-name].layout.Fields` fields lists to which you want to log these values. For example:

```
log4j.appender.stdout.layout.Fields=x-severity,x-category,x-event,x-ctx,x-comment,systemtime-long,systemtime-string
```

Method Summary

void	onLog (org.apache.log4j.Level level, String comment, IMediaStream stream, String category, String event, int status, String context) Called each time the server logs a message.
------	---

Methods

onLog

```
public void onLog(org.apache.log4j.Level level,
    String comment,
    IMediaStream stream,
    String category,
    String event,
    int status,
    String context)
```

Called each time the server logs a message.

Parameters:

- level - log level as defined by (org.apache.log4j.Level)
- comment - comment part of the log statement
- stream - if stream category log message it's the source stream
- category - log category as defined by WMSLoggerIDs.CAT_*
- event - log event as defined by WMSLoggerIDs.EVT_*
- status - log status (same as HTTP status field) as defined by WMSLoggerIDs.STAT_*
- context - log context value like stream name, vhost name, application name

com.wowza.wms.logging Class LogNotifyCalculateIncremental

java.lang.Object

└-com.wowza.wms.logging.LogNotifyCalculateIncremental

All Implemented Interfaces:

[ILogNotify](#)

```
public class LogNotifyCalculateIncremental
extends Object
implements ILogNotify
```

LogNotifyCalculateIncremental: pre-built implementation of ILogNotify that adds 5 new log fields:

- cs-bytes-inc (client to server bytes streamed since last log entry)
- sc-bytes-inc (server to client bytesstreamed since last log entry)
- cs-stream-bytes-inc (client to server stream bytesstreamed since last log entry)
- sc-stream-bytes-inc (server to client stream bytesstreamed since last log entry)
- x-duration-inc (time in seconds that have passed since the last log event)

These are incremental versions of the regular log values. To add this to Wowza Pro edit:

- [install-dir]/bin/setenv.bat (Windows)
- [install-dir]/bin/setenv.sh (Linux, OSX)

Add `-Dcom.wowza.wms.logging.LogNotify=com.wowza.wms.logging.LogNotifyCalculateIncremental` to the `JAVA_OPTS`. Also, edit `[install-dir]/conf/log4j.properties` and add these field names to any `log4j.appender.[appender-name].layout.Fields` fields lists to which you want to log these values.

*NOTE: These new log values are only accurate if all the events are included for the **session** and **stream** log categories.*

Field Summary

public static final	FD_cs_bytes_inc Value: cs-bytes-inc
public static final	FD_cs_stream_bytes_inc Value: cs-stream-bytes-inc
public static final	FD_sc_bytes_inc Value: sc-bytes-inc
public static final	FD_sc_stream_bytes_inc Value: sc-stream-bytes-inc
public static final	FD_x_duration_inc Value: x-duration-inc

Constructor Summary

public	LogNotifyCalculateIncremental()
--------	---

Method Summary

void	onLog (org.apache.log4j.Level level, String comment, IMediaStream stream, String category, String event, int status, String context)
------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.logging.ILogNotify](#)

[onLog](#)

Fields

FD_cs_bytes_inc

public static final java.lang.String **FD_cs_bytes_inc**

Constant value: **cs-bytes-inc**

FD_sc_bytes_inc

public static final java.lang.String **FD_sc_bytes_inc**

Constant value: **sc-bytes-inc**

FD_cs_stream_bytes_inc

public static final java.lang.String **FD_cs_stream_bytes_inc**

Constant value: **cs-stream-bytes-inc**

FD_sc_stream_bytes_inc

public static final java.lang.String **FD_sc_stream_bytes_inc**

Constant value: **sc-stream-bytes-inc**

FD_x_duration_inc

public static final java.lang.String **FD_x_duration_inc**

Constant value: **x-duration-inc**

Constructors

(continued from last page)

LogNotifyCalculateIncremental

```
public LogNotifyCalculateIncremental()
```

Methods

onLog

```
public void onLog(org.apache.log4j.Level level,  
                 String comment,  
                 IMediaStream stream,  
                 String category,  
                 String event,  
                 int status,  
                 String context)
```


com.wowza.wms.logging Class UDPAppender

```
java.lang.Object
  |
  +- org.apache.log4j.AppenderSkeleton
    |
    +- com.wowza.wms.logging.UDPAppender
```

All Implemented Interfaces:

PortBased, org.apache.log4j.spi.OptionHandler, org.apache.log4j.Appender

```
public class UDPAppender
  extends org.apache.log4j.AppenderSkeleton
  implements org.apache.log4j.Appender, org.apache.log4j.spi.OptionHandler, PortBased
```

Sends log information as a UDP datagrams.

The UDPAppender is meant to be used as a diagnostic logging tool so that logging can be monitored by a simple UDP client.

Messages are not sent as LoggingEvent objects but as text after applying the designated Layout.

The port and remoteHost properties can be set in configuration properties. By setting the remoteHost to a broadcast address any number of clients can listen for log messages.

This was inspired and really extended/copied from SocketAppender. Please see the docs for the proper credit to the authors of that class.

Field Summary

public static final	DEFAULT_PORT The default port number for the UDP packets, 9991. Value: 9991
---------------------	--

Fields inherited from class org.apache.log4j.AppenderSkeleton

closed, errorHandler, headFilter, layout, name, tailFilter, threshold

Constructor Summary

public	UDPAppender ()
public	UDPAppender (java.net.InetAddress address, int port) Sends UDP packets to the address and port.
public	UDPAppender (String host, int port) Sends UDP packets to the address and port.

Method Summary

void	activateOptions () Open the UDP sender for the RemoteHost and Port .
void	append (org.apache.log4j.spi.LoggingEvent event)

void	cleanUp() Close the UDP Socket and release the underlying connector thread if it has been created
void	close() Close this appender.
String	getApplication() Returns value of the App option.
String	getEncoding() Returns value of the Encoding option.
int	getPort() Returns value of the Port option.
String	getRemoteHost() Returns value of the RemoteHost option.
boolean	isActive()
boolean	requiresLayout() The UDPAppender uses layouts.
void	setApplication(String app) The App option takes a string value which should be the name of the application getting logged.
void	setEncoding(String encoding) The Encoding option specifies how the bytes are encoded.
void	setPort(int port) The Port option takes a positive integer representing the port where UDP packets will be sent.
void	setRemoteHost(String host) The RemoteHost option takes a string value which should be the host name or ipaddress to send the UDP packets.

Methods inherited from class org.apache.log4j.AppenderSkeleton

activateOptions, addFilter, append, clearFilters, doAppend, finalize, getErrorHandler, getFilter, getFirstFilter, getLayout, getName, getThreshold, isAsSevereAsThreshold, setErrorHandler, setLayout, setName, setThreshold

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface org.apache.log4j.Appender

addFilter, clearFilters, close, doAppend, getErrorHandler, getFilter, getLayout, getName, requiresLayout, setErrorHandler, setLayout, setName

Methods inherited from interface org.apache.log4j.spi.OptionHandler

activateOptions

Methods inherited from interface com.wowza.wms.logging.PortBased

```
getPort
```

Methods inherited from interface `com.wowza.wms.logging.NetworkBased`

```
getName, isActive
```

Fields

DEFAULT_PORT

```
public static final int DEFAULT_PORT
```

The default port number for the UDP packets, 9991.
Constant value: **9991**

Constructors

UDPAppender

```
public UDPAppender()
```

UDPAppender

```
public UDPAppender(java.net.InetAddress address,  
                    int port)
```

Sends UDP packets to the address and port.

UDPAppender

```
public UDPAppender(String host,  
                    int port)
```

Sends UDP packets to the address and port.

Methods

activateOptions

```
public void activateOptions()
```

Open the UDP sender for the **RemoteHost** and **Port**.

close

```
public void close()
```

Close this appender.

This will mark the appender as closed and call then [cleanUp\(\)](#) method.

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cleanUp

```
public void cleanUp()
```

Close the UDP Socket and release the underlying connector thread if it has been created

append

```
public void append(org.apache.log4j.spi.LoggingEvent event)
```

isActive

```
public boolean isActive()
```

requiresLayout

```
public boolean requiresLayout()
```

The **UDPAppender** uses layouts. Hence, this method returns true.

setRemoteHost

```
public void setRemoteHost(String host)
```

The **RemoteHost** option takes a string value which should be the host name or ipaddress to send the UDP packets.

getRemoteHost

```
public String getRemoteHost()
```

Returns value of the **RemoteHost** option.

setApplication

```
public void setApplication(String app)
```

The **App** option takes a string value which should be the name of the application getting logged. If property was already set (via system property), don't set here.

getApplication

```
public String getApplication()
```

Returns value of the **App** option.

setEncoding

```
public void setEncoding(String encoding)
```

The **Encoding** option specifies how the bytes are encoded. If this option is not specified, the System encoding is used.

getEncoding

```
public String getEncoding()
```

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Returns value of the **Encoding** option.

setPort

```
public void setPort(int port)
```

The **Port** option takes a positive integer representing the port where UDP packets will be sent.

getPort

```
public int getPort()
```

Returns value of the **Port** option.

com.wowza.wms.logging Class WMSLogger

```

java.lang.Object
  |
  +- org.apache.log4j.Category
    |
    +- org.apache.log4j.Logger
      |
      +- com.wowza.wms.logging.WMSLogger
  
```

All Implemented Interfaces:

org.apache.log4j.spi.AppenderAttachable

```

public class WMSLogger
extends org.apache.log4j.Logger
  
```

Fields inherited from class org.apache.log4j.Category

additive, level, name, parent, repository, resourceBundle

Constructor Summary

public	WMSLogger (String name, org.apache.log4j.Logger tmpLogger)
public	WMSLogger (String name)

Method Summary

void	debug (Object o)
void	debug (Object o, Throwable e)
void	debug (String comment)
void	debug (String comment, IMediaStream stream)
void	debug (String comment, IMediaStream stream, String category, String event, int status, String context)
void	debug (String comment, String category, String event)
void	debug (String comment, String category, String event, int status, String context)
void	debug (String comment, Throwable e)
void	error (Object o)
void	error (Object o, Throwable e)

void	error (String comment)
void	error (String comment, IMediaStream stream)
void	error (String comment, IMediaStream stream, String category, String event, int status, String context)
void	error (String comment, String category, String event)
void	error (String comment, String category, String event, int status, String context)
void	error (String comment, Throwable e)
void	error (String comment, Throwable e, int stackDepth)
void	fatal (Object o)
void	fatal (Object o, Throwable e)
void	fatal (String comment)
void	fatal (String comment, IMediaStream stream)
void	fatal (String comment, IMediaStream stream, String category, String event, int status, String context)
void	fatal (String comment, String category, String event)
void	fatal (String comment, String category, String event, int status, String context)
void	fatal (String comment, Throwable e)
static WMSLogger	getLogger (String name)
void	info (Object o)
void	info (Object o, Throwable e)
void	info (String comment)
void	info (String comment, IMediaStream stream)
void	info (String comment, IMediaStream stream, String category, String event, int status, String context)
void	info (String comment, String category, String event)

void	info (String comment, String category, String event, int status, String context)
void	info (String comment, Throwable e)
boolean	isDebugEnabled ()
boolean	isEnabledFor (org.apache.log4j.Priority level)
boolean	isErrorEnabled ()
boolean	isInfoEnabled ()
boolean	isTraceEnabled ()
boolean	isWarnEnabled ()
void	log (org.apache.log4j.Level level, String comment)
void	log (org.apache.log4j.Level level, String comment, IMediaStream stream)
void	log (org.apache.log4j.Level level, String comment, IMediaStream stream, String category, String event)
void	log (org.apache.log4j.Level level, String comment, IMediaStream stream, String category, String event, int status, String context)
void	log (org.apache.log4j.Level level, String comment, IMediaStream stream, String category, String event, int status, String context, Throwable e)
void	log (org.apache.log4j.Level level, String comment, IMediaStream stream, String category, String event, int status, String context, Throwable e, int stackDepth)
void	log (org.apache.log4j.Level level, String comment, String category, String event)
void	warn (Object o)
void	warn (Object o, Throwable e)
void	warn (String comment)
void	warn (String comment, IMediaStream stream)
void	warn (String comment, IMediaStream stream, String category, String event, int status, String context)
void	warn (String comment, String category, String event)

void	warn (String comment, String category, String event, int status, String context)
void	warn (String comment, Throwable e)

Methods inherited from class org.apache.log4j.Logger

getLogger, getLogger, getLogger, getLogger, isTraceEnabled, trace, trace

Methods inherited from class org.apache.log4j.Category

addAppender, assertLog, callAppenders, debug, debug, error, error, exists, fatal, fatal, forcedLog, getAdditivity, getAllAppenders, getAppender, getChainedPriority, getCurrentCategories, getDefaultHierarchy, getEffectiveLevel, getHierarchy, getInstance, getInstance, getLevel, getLoggerRepository, getName, getParent, getPriority, getResourceBundle, getResourceBundleString, getRoot, info, info, isAttached, isDebugEnabled, isEnabledFor, isInfoEnabled, l7dlog, l7dlog, log, log, log, removeAllAppenders, removeAppender, removeAppender, setAdditivity, setLevel, setPriority, setResourceBundle, shutdown, warn, warn

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface org.apache.log4j.spi.AppenderAttachable

addAppender, getAllAppenders, getAppender, isAttached, removeAllAppenders, removeAppender, removeAppender

Constructors

WMSLogger

```
public WMSLogger(String name,
    org.apache.log4j.Logger tmpLogger)
```

WMSLogger

```
public WMSLogger(String name)
```

Methods

getLogger

```
public static WMSLogger getLogger(String name)
```

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isWarnEnabled

```
public boolean isWarnEnabled()
```

isErrorEnabled

```
public boolean isErrorEnabled()
```

isTraceEnabled

```
public boolean isTraceEnabled()
```

isDebugEnabled

```
public boolean isDebugEnabled()
```

isInfoEnabled

```
public boolean isInfoEnabled()
```

isEnabledFor

```
public boolean isEnabledFor(org.apache.log4j.Priority level)
```

log

```
public void log(org.apache.log4j.Level level,  
               String comment,  
               IMediaStream stream,  
               String category,  
               String event,  
               int status,  
               String context,  
               Throwable e)
```

log

```
public void log(org.apache.log4j.Level level,  
               String comment,  
               IMediaStream stream,  
               String category,  
               String event,  
               int status,  
               String context,  
               Throwable e,  
               int stackDepth)
```

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log

```
public void log(org.apache.log4j.Level level,
    String comment,
    IMediaStream stream,
    String category,
    String event,
    int status,
    String context)
```

log

```
public void log(org.apache.log4j.Level level,
    String comment,
    IMediaStream stream,
    String category,
    String event)
```

log

```
public void log(org.apache.log4j.Level level,
    String comment,
    String category,
    String event)
```

log

```
public void log(org.apache.log4j.Level level,
    String comment)
```

log

```
public void log(org.apache.log4j.Level level,
    String comment,
    IMediaStream stream)
```

info

```
public void info(Object o)
```

info

```
public void info(Object o,
    Throwable e)
```

info

```
public void info(String comment)
```

info

```
public void info(String comment,  
                Throwable e)
```

info

```
public void info(String comment,  
                IMediaStream stream)
```

info

```
public void info(String comment,  
                String category,  
                String event)
```

info

```
public void info(String comment,  
                String category,  
                String event,  
                int status,  
                String context)
```

info

```
public void info(String comment,  
                IMediaStream stream,  
                String category,  
                String event,  
                int status,  
                String context)
```

error

```
public void error(Object o)
```

error

```
public void error(Object o,  
                Throwable e)
```

(continued from last page)

error

```
public void error(String comment)
```

error

```
public void error(String comment,  
    Throwable e)
```

error

```
public void error(String comment,  
    Throwable e,  
    int stackDepth)
```

error

```
public void error(String comment,  
    IMediaStream stream)
```

error

```
public void error(String comment,  
    String category,  
    String event)
```

error

```
public void error(String comment,  
    String category,  
    String event,  
    int status,  
    String context)
```

error

```
public void error(String comment,  
    IMediaStream stream,  
    String category,  
    String event,  
    int status,  
    String context)
```

(continued from last page)

fatal

```
public void fatal(Object o)
```

fatal

```
public void fatal(Object o,  
                 Throwable e)
```

fatal

```
public void fatal(String comment)
```

fatal

```
public void fatal(String comment,  
                 Throwable e)
```

fatal

```
public void fatal(String comment,  
                 IMediaStream stream)
```

fatal

```
public void fatal(String comment,  
                 String category,  
                 String event)
```

fatal

```
public void fatal(String comment,  
                 String category,  
                 String event,  
                 int status,  
                 String context)
```

fatal

```
public void fatal(String comment,  
                 IMediaStream stream,  
                 String category,  
                 String event,  
                 int status,  
                 String context)
```

debug

```
public void debug(Object o)
```

debug

```
public void debug(Object o,  
    Throwable e)
```

debug

```
public void debug(String comment)
```

debug

```
public void debug(String comment,  
    Throwable e)
```

debug

```
public void debug(String comment,  
    IMediaStream stream)
```

debug

```
public void debug(String comment,  
    String category,  
    String event)
```

debug

```
public void debug(String comment,  
    String category,  
    String event,  
    int status,  
    String context)
```

debug

```
public void debug(String comment,  
    IMediaStream stream,  
    String category,  
    String event,  
    int status,  
    String context)
```

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warn

```
public void warn(Object o)
```

warn

```
public void warn(Object o,  
                Throwable e)
```

warn

```
public void warn(String comment)
```

warn

```
public void warn(String comment,  
                Throwable e)
```

warn

```
public void warn(String comment,  
                IMediaStream stream)
```

warn

```
public void warn(String comment,  
                String category,  
                String event)
```

warn

```
public void warn(String comment,  
                String category,  
                String event,  
                int status,  
                String context)
```

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warn

```
public void warn(String comment,  
                IMediaStream stream,  
                String category,  
                String event,  
                int status,  
                String context)
```

com.wowza.wms.logging Class WMSLoggerFactory

java.lang.Object

↳ **com.wowza.wms.logging.WMSLoggerFactory**

All Implemented Interfaces:

org.apache.log4j.spi.LoggerFactory

```
public class WMSLoggerFactory
extends Object
implements org.apache.log4j.spi.LoggerFactory
```

Field Summary

public static final	LOGGERNAME_SERVER Value: _Server_
---------------------	---

Constructor Summary

public	WMSLoggerFactory()
--------	------------------------------------

Method Summary

WMSLogger	forceNewLoggerInstance (String name, org.apache.log4j.Logger tmpLogger)
static Object	getGlobalLogValue (String key)
static WMSLoggerFactory	getInstance ()
static WMSLogger	getLogger (Class classObj)
static WMSLogger	getLoggerObj (IApplication application)
static WMSLogger	getLoggerObj (IApplicationInstance appInstance)
static WMSLogger	getLoggerObj (IVHost vhost)
WMSLogger	getLoggerObj (String name)
static void	initContextLogging (IApplication application)
static void	initContextLogging (IApplicationInstance appInstance)
static void	initContextLogging (IVHost vhost)

static WMSLogger	initializeLogging (String loggingConfigURL)
static WMSLogger	initializeLogging (String loggingConfigURL, IVHost vhost)
static boolean	isGlobalLogValueSet (String key)
org.apache.log4j.Logger	makeNewLoggerInstance (String name)
static void	putGlobalLogValue (String key, Object obj)
static void	removeGlobalLogValue (String key)
static void	removeGlobalLogValues ()
static void	resetMDC ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface org.apache.log4j.spi.LoggerFactory

makeNewLoggerInstance

Fields

LOGGERNAME_SERVER

```
public static final java.lang.String LOGGERNAME_SERVER
```

Constant value: **_Server_**

Constructors

WMSLoggerFactory

```
public WMSLoggerFactory()
```

Methods

getLoggerObj

```
public WMSLogger getLoggerObj(String name)
```

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forceNewLoggerInstance

```
public WMSLogger forceNewLoggerInstance(String name,  
    org.apache.log4j.Logger tmpLogger)
```

getInstance

```
public static WMSLoggerFactory getInstance()
```

initContextLogging

```
public static void initContextLogging(IVHost vhost)
```

initContextLogging

```
public static void initContextLogging(IApplication application)
```

initContextLogging

```
public static void initContextLogging(IApplicationInstance appInstance)
```

initializeLogging

```
public static WMSLogger initializeLogging(String loggingConfigURL)
```

initializeLogging

```
public static WMSLogger initializeLogging(String loggingConfigURL,  
    IVHost vhost)
```

makeNewLoggerInstance

```
public org.apache.log4j.Logger makeNewLoggerInstance(String name)
```

resetMDC

```
public static void resetMDC()
```

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removeGlobalLogValues

```
public static void removeGlobalLogValues()
```

removeGlobalLogValue

```
public static void removeGlobalLogValue(String key)
```

isGlobalLogValueSet

```
public static boolean isGlobalLogValueSet(String key)
```

putGlobalLogValue

```
public static void putGlobalLogValue(String key,  
    Object obj)
```

getGlobalLogValue

```
public static Object getGlobalLogValue(String key)
```

getLoggerObj

```
public static WMSLogger getLoggerObj(IVHost vhost)
```

getLoggerObj

```
public static WMSLogger getLoggerObj(IApplication application)
```

getLoggerObj

```
public static WMSLogger getLoggerObj(IApplicationInstance appInstance)
```

getLogger

```
public static WMSLogger getLogger(Class classObj)
```

com.wowza.wms.logging Class WMSLoggerIDs

java.lang.Object

└-com.wowza.wms.logging.WMSLoggerIDs

public class **WMSLoggerIDs**
extends Object

Field Summary

public static final	CAT_ALL
public static final	CAT_application Value: application
public static final	CAT_cupertino Value: cupertino
public static final	CAT_dvrchunk Value: dvrchunk
public static final	CAT_mpegdash Value: mpegdash
public static final	CAT_rtsp Value: rtsp
public static final	CAT_sanjose Value: sanjose
public static final	CAT_server Value: server
public static final	CAT_session Value: session
public static final	CAT_smoothstreaming Value: smoothstreaming
public static final	CAT_stream Value: stream
public static final	CAT_transcoder Value: transcoder

public static final	CAT_ts Value: ts
public static final	CAT_vhost Value: vhost
public static final	CAT_webm Value: webm
public static final	CAT_webrtc Value: webrtc
public static final	CTRL_playlist_node Value: CTRL-playlist-node
public static final	EVT_ALL
public static final	EVT_announce Value: announce
public static final	EVT_app_start Value: app-start
public static final	EVT_app_stop Value: app-stop
public static final	EVT_comment Value: comment
public static final	EVT_connect Value: connect
public static final	EVT_connect_burst Value: connect-burst
public static final	EVT_connect_pending Value: connect-pending
public static final	EVT_create Value: create
public static final	EVT_decoderaudiostart Value: decoder-audio-start
public static final	EVT_decoderaudiostop Value: decoder-audio-stop

public static final	EVT_decodervideostart Value: decoder-video-start
public static final	EVT_decodervideostop Value: decoder-video-stop
public static final	EVT_describe Value: describe
public static final	EVT_destroy Value: destroy
public static final	EVT_disconnect Value: disconnect
public static final	EVT_encoderaudiostart Value: encoder-audio-start
public static final	EVT_encoderaudiostop Value: encoder-audio-stop
public static final	EVT_encodervideostart Value: encoder-video-start
public static final	EVT_encodervideostop Value: encoder-video-stop
public static final	EVT_pause Value: pause
public static final	EVT_play Value: play
public static final	EVT_publish Value: publish
public static final	EVT_push Value: push
public static final	EVT_record Value: record
public static final	EVT_recordstop Value: recordstop
public static final	EVT_seek Value: seek

public static final	EVT_server_start Value: server-start
public static final	EVT_server_stop Value: server-stop
public static final	EVT_setbuffertime Value: setbuffertime
public static final	EVT_setstreamtype Value: setstreamtype
public static final	EVT_stop Value: stop
public static final	EVT_transcoderstart Value: transcoder-start
public static final	EVT_transcoderstop Value: transcoder-stop
public static final	EVT_unpause Value: unpause
public static final	EVT_unpublish Value: unpublish
public static final	EVT_unpush Value: unpush
public static final	EVT_vhost_start Value: vhost-start
public static final	EVT_vhost_stop Value: vhost-stop
public static final	FD_ALL
public static final	FD_c_client_id Value: c-client-id
public static final	FD_c_ip Value: c-ip
public static final	FD_c_proto Value: c-proto

public static final	FD_c_referrer Value: c-referrer
public static final	FD_c_user_agent Value: c-user-agent
public static final	FD_cs_bytes Value: cs-bytes
public static final	FD_cs_stream_bytes Value: cs-stream-bytes
public static final	FD_cs_uri_query Value: cs-uri-query
public static final	FD_cs_uri_stem Value: cs-uri-stem
public static final	FD_date Value: date
public static final	FD_s_ip Value: s-ip
public static final	FD_s_port Value: s-port
public static final	FD_s_uri Value: s-uri
public static final	FD_sc_bytes Value: sc-bytes
public static final	FD_sc_stream_bytes Value: sc-stream-bytes
public static final	FD_time Value: time
public static final	FD_tz Value: tz
public static final	FD_x_app Value: x-app
public static final	FD_x_appinst Value: x-appinst

public static final	FD_x_category Value: x-category
public static final	FD_x_comment Value: x-comment
public static final	FD_x_ctx Value: x-ctx
public static final	FD_x_ctx_override Value: x-ctx-override
public static final	FD_x_duration Value: x-duration
public static final	FD_x_event Value: x-event
public static final	FD_x_file_ext Value: x-file-ext
public static final	FD_x_file_length Value: x-file-length
public static final	FD_x_file_name Value: x-file-name
public static final	FD_x_file_size Value: x-file-size
public static final	FD_x_severity Value: x-severity
public static final	FD_x_sname Value: x-sname
public static final	FD_x_sname_query Value: x-sname-query
public static final	FD_x_spos Value: x-spos
public static final	FD_x_status Value: x-status
public static final	FD_x_stream_id Value: x-stream-id

public static final	FD_x_suri Value: x-suri
public static final	FD_x_suri_query Value: x-suri-query
public static final	FD_x_suri_stem Value: x-suri-stem
public static final	FD_x_vhost Value: x-vhost
public static final	PROTO_HTTP Value: http
public static final	PROTO_HTTPCUPERTINO Value: http (cupertino)
public static final	PROTO_HTTPDVRCHUNK Value: http (dvr)
public static final	PROTO_HTTPMPEGDASH Value: http (mpegdash)
public static final	PROTO_HTTPS Value: https
public static final	PROTO_HTTPSANJOSE Value: http (sanjose)
public static final	PROTO_HTTPSCUPERTINO Value: https (cupertino)
public static final	PROTO_HTTPSDVRCHUNK Value: https (dvr)
public static final	PROTO_HTTPSMOOTH Value: http (smooth)
public static final	PROTO_HTTPSSANJOSE Value: https (sanjose)
public static final	PROTO_HTTPSSMOOTH Value: https (smooth)
public static final	PROTO_HTTPSSTREAMER Value: https (streamer)

public static final	PROTO_HTTPSTREAMER Value: http (streamer)
public static final	PROTO_RTMP Value: rtmp
public static final	PROTO_RTMPE Value: rtmpe
public static final	PROTO_RTMP_S Value: rtmps
public static final	PROTO_RTMPT Value: rtmpt (HTTP-1.1)
public static final	PROTO_RTMPT_E Value: rtmpte (HTTP-1.1)
public static final	PROTO_RTMPT_S Value: rtmpts (HTTP-1.1)
public static final	PROTO_RTSP Value: rtsp
public static final	PROTO_WEBRTC Value: webrtc
public static final	PROTO_WOWZ Value: wowz
public static final	PROTO_WOWZE Value: wowze
public static final	PROTO_WOWZ_S Value: wowzs
public static final	STAT_connect_application_not_available Value: 302
public static final	STAT_connect_application_not_found Value: 404
public static final	STAT_connect_bad_gateway Value: 502
public static final	STAT_connect_internal_error Value: 500

public static final	STAT_connect_license_limit Value: 413
public static final	STAT_connect_pending_wating Value: 100
public static final	STAT_connect_redirect Value: 302
public static final	STAT_connect_rejected_by_application Value: 401
public static final	STAT_connect_rejected_by_module Value: 403
public static final	STAT_connect_resource_limit Value: 409
public static final	STAT_connect_service_unavailable Value: 503
public static final	STAT_connect_successful Value: 200
public static final	STAT_connect_unknown_protocol Value: 400
public static final	STAT_general_internal_error Value: 500
public static final	STAT_general_successful Value: 200
public static final	STAT_play_bad_request Value: 400
public static final	STAT_play_internal_error Value: 500
public static final	STAT_play_rejected_by_application Value: 401
public static final	STAT_play_rejected_by_module Value: 403
public static final	STAT_play_stream_not_found Value: 404

public static final	STAT_play_successful Value: 200
public static final	STAT_play_unsupported_media_type Value: 415
public static final	STAT_publish_bad_request Value: 400
public static final	STAT_publish_in_use Value: 409
public static final	STAT_publish_internal_error Value: 500
public static final	STAT_publish_rejected_by_application Value: 401
public static final	STAT_publish_successful Value: 200
public static final	STAT_publish_unsupported_media_type Value: 415
public static final	STAT_push_sucesseful Value: 200
public static final	STAT_stop_client_disconnect Value: 408
public static final	STAT_stop_successful Value: 200

Constructor Summary

public	WMSLoggerIDs()
--------	--------------------------------

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

FD_x_event

public static final java.lang.String **FD_x_event**

(continued from last page)

Constant value: **x-event**

FD_x_category

```
public static final java.lang.String FD_x_category
```

Constant value: **x-category**

FD_date

```
public static final java.lang.String FD_date
```

Constant value: **date**

FD_time

```
public static final java.lang.String FD_time
```

Constant value: **time**

FD_tz

```
public static final java.lang.String FD_tz
```

Constant value: **tz**

FD_x_ctx

```
public static final java.lang.String FD_x_ctx
```

Constant value: **x-ctx**

FD_x_ctx_override

```
public static final java.lang.String FD_x_ctx_override
```

Constant value: **x-ctx-override**

FD_x_vhost

```
public static final java.lang.String FD_x_vhost
```

Constant value: **x-vhost**

FD_x_app

```
public static final java.lang.String FD_x_app
```

Constant value: **x-app**

(continued from last page)

FD_x_appinst

```
public static final java.lang.String FD_x_appinst
```

Constant value: **x-appinst**

FD_c_ip

```
public static final java.lang.String FD_c_ip
```

Constant value: **c-ip**

FD_c_proto

```
public static final java.lang.String FD_c_proto
```

Constant value: **c-proto**

FD_s_uri

```
public static final java.lang.String FD_s_uri
```

Constant value: **s-uri**

FD_c_referrer

```
public static final java.lang.String FD_c_referrer
```

Constant value: **c-referrer**

FD_c_user_agent

```
public static final java.lang.String FD_c_user_agent
```

Constant value: **c-user-agent**

FD_c_client_id

```
public static final java.lang.String FD_c_client_id
```

Constant value: **c-client-id**

FD_cs_bytes

```
public static final java.lang.String FD_cs_bytes
```

Constant value: **cs-bytes**

FD_sc_bytes

```
public static final java.lang.String FD_sc_bytes
```

(continued from last page)

Constant value: **sc-bytes**

FD_x_sname

```
public static final java.lang.String FD_x_sname
```

Constant value: **x-sname**

FD_x_file_size

```
public static final java.lang.String FD_x_file_size
```

Constant value: **x-file-size**

FD_x_file_length

```
public static final java.lang.String FD_x_file_length
```

Constant value: **x-file-length**

FD_x_spos

```
public static final java.lang.String FD_x_spos
```

Constant value: **x-spos**

FD_cs_stream_bytes

```
public static final java.lang.String FD_cs_stream_bytes
```

Constant value: **cs-stream-bytes**

FD_sc_stream_bytes

```
public static final java.lang.String FD_sc_stream_bytes
```

Constant value: **sc-stream-bytes**

FD_s_ip

```
public static final java.lang.String FD_s_ip
```

Constant value: **s-ip**

FD_x_duration

```
public static final java.lang.String FD_x_duration
```

Constant value: **x-duration**

FD_x_status

```
public static final java.lang.String FD_x_status
```

Constant value: **x-status**

FD_cs_uri_stem

```
public static final java.lang.String FD_cs_uri_stem
```

Constant value: **cs-uri-stem**

FD_cs_uri_query

```
public static final java.lang.String FD_cs_uri_query
```

Constant value: **cs-uri-query**

FD_x_sname_query

```
public static final java.lang.String FD_x_sname_query
```

Constant value: **x-sname-query**

FD_x_file_name

```
public static final java.lang.String FD_x_file_name
```

Constant value: **x-file-name**

FD_x_file_ext

```
public static final java.lang.String FD_x_file_ext
```

Constant value: **x-file-ext**

FD_x_suri_query

```
public static final java.lang.String FD_x_suri_query
```

Constant value: **x-suri-query**

FD_x_suri_stem

```
public static final java.lang.String FD_x_suri_stem
```

Constant value: **x-suri-stem**

(continued from last page)

FD_x_suri

```
public static final java.lang.String FD_x_suri
```

Constant value: **x-suri**

FD_x_severity

```
public static final java.lang.String FD_x_severity
```

Constant value: **x-severity**

FD_x_comment

```
public static final java.lang.String FD_x_comment
```

Constant value: **x-comment**

FD_s_port

```
public static final java.lang.String FD_s_port
```

Constant value: **s-port**

FD_x_stream_id

```
public static final java.lang.String FD_x_stream_id
```

Constant value: **x-stream-id**

CAT_server

```
public static final java.lang.String CAT_server
```

Constant value: **server**

CAT_vhost

```
public static final java.lang.String CAT_vhost
```

Constant value: **vhost**

CAT_application

```
public static final java.lang.String CAT_application
```

Constant value: **application**

CAT_session

```
public static final java.lang.String CAT_session
```

(continued from last page)

Constant value: **session**

CAT_stream

```
public static final java.lang.String CAT_stream
```

Constant value: **stream**

CAT_rtsp

```
public static final java.lang.String CAT_rtsp
```

Constant value: **rtsp**

CAT_cupertino

```
public static final java.lang.String CAT_cupertino
```

Constant value: **cupertino**

CAT_sanjose

```
public static final java.lang.String CAT_sanjose
```

Constant value: **sanjose**

CAT_smoothstreaming

```
public static final java.lang.String CAT_smoothstreaming
```

Constant value: **smoothstreaming**

CAT_dvrchunk

```
public static final java.lang.String CAT_dvrchunk
```

Constant value: **dvrchunk**

CAT_webm

```
public static final java.lang.String CAT_webm
```

Constant value: **webm**

CAT_transcoder

```
public static final java.lang.String CAT_transcoder
```

Constant value: **transcoder**

CAT_mpegdash

```
public static final java.lang.String CAT_mpegdash
```

Constant value: **mpegdash**

CAT_ts

```
public static final java.lang.String CAT_ts
```

Constant value: **ts**

CAT_webrtc

```
public static final java.lang.String CAT_webrtc
```

Constant value: **webrtc**

EVT_connect_pending

```
public static final java.lang.String EVT_connect_pending
```

Constant value: **connect-pending**

EVT_connect

```
public static final java.lang.String EVT_connect
```

Constant value: **connect**

EVT_connect_burst

```
public static final java.lang.String EVT_connect_burst
```

Constant value: **connect-burst**

EVT_disconnect

```
public static final java.lang.String EVT_disconnect
```

Constant value: **disconnect**

EVT_publish

```
public static final java.lang.String EVT_publish
```

Constant value: **publish**

(continued from last page)

EVT_unpublish

```
public static final java.lang.String EVT_unpublish
```

Constant value: **unpublish**

EVT_play

```
public static final java.lang.String EVT_play
```

Constant value: **play**

EVT_pause

```
public static final java.lang.String EVT_pause
```

Constant value: **pause**

EVT_setbuffertime

```
public static final java.lang.String EVT_setbuffertime
```

Constant value: **setbuffertime**

EVT_create

```
public static final java.lang.String EVT_create
```

Constant value: **create**

EVT_destroy

```
public static final java.lang.String EVT_destroy
```

Constant value: **destroy**

EVT_setstreamtype

```
public static final java.lang.String EVT_setstreamtype
```

Constant value: **setstreamtype**

EVT_unpause

```
public static final java.lang.String EVT_unpause
```

Constant value: **unpause**

EVT_seek

```
public static final java.lang.String EVT_seek
```

(continued from last page)

Constant value: **seek**

EVT_stop

```
public static final java.lang.String EVT_stop
```

Constant value: **stop**

EVT_record

```
public static final java.lang.String EVT_record
```

Constant value: **record**

EVT_recordstop

```
public static final java.lang.String EVT_recordstop
```

Constant value: **recordstop**

EVT_server_start

```
public static final java.lang.String EVT_server_start
```

Constant value: **server-start**

EVT_server_stop

```
public static final java.lang.String EVT_server_stop
```

Constant value: **server-stop**

EVT_vhost_start

```
public static final java.lang.String EVT_vhost_start
```

Constant value: **vhost-start**

EVT_vhost_stop

```
public static final java.lang.String EVT_vhost_stop
```

Constant value: **vhost-stop**

EVT_app_start

```
public static final java.lang.String EVT_app_start
```

Constant value: **app-start**

EVT_app_stop

```
public static final java.lang.String EVT_app_stop
```

Constant value: **app-stop**

EVT_comment

```
public static final java.lang.String EVT_comment
```

Constant value: **comment**

EVT_announce

```
public static final java.lang.String EVT_announce
```

Constant value: **announce**

EVT_describe

```
public static final java.lang.String EVT_describe
```

Constant value: **describe**

EVT_transcoderstart

```
public static final java.lang.String EVT_transcoderstart
```

Constant value: **transcoder-start**

EVT_transcoderstop

```
public static final java.lang.String EVT_transcoderstop
```

Constant value: **transcoder-stop**

EVT_decoderaudiostart

```
public static final java.lang.String EVT_decoderaudiostart
```

Constant value: **decoder-audio-start**

EVT_decoderaudiostop

```
public static final java.lang.String EVT_decoderaudiostop
```

Constant value: **decoder-audio-stop**

(continued from last page)

EVT_decodervideostart

```
public static final java.lang.String EVT_decodervideostart
```

Constant value: **decoder-video-start**

EVT_decodervideostop

```
public static final java.lang.String EVT_decodervideostop
```

Constant value: **decoder-video-stop**

EVT_encoderaudiostart

```
public static final java.lang.String EVT_encoderaudiostart
```

Constant value: **encoder-audio-start**

EVT_encoderaudiostop

```
public static final java.lang.String EVT_encoderaudiostop
```

Constant value: **encoder-audio-stop**

EVT_encodervideostart

```
public static final java.lang.String EVT_encodervideostart
```

Constant value: **encoder-video-start**

EVT_encodervideostop

```
public static final java.lang.String EVT_encodervideostop
```

Constant value: **encoder-video-stop**

EVT_push

```
public static final java.lang.String EVT_push
```

Constant value: **push**

EVT_unpush

```
public static final java.lang.String EVT_unpush
```

Constant value: **unpush**

CTRL_playlist_node

```
public static final java.lang.String CTRL_playlist_node
```

(continued from last page)

Constant value: **CTRL-playlist-node**

STAT_connect_pending_wating

public static final int **STAT_connect_pending_wating**

Constant value: **100**

STAT_connect_successful

public static final int **STAT_connect_successful**

Constant value: **200**

STAT_connect_application_not_available

public static final int **STAT_connect_application_not_available**

Constant value: **302**

STAT_connect_unknown_protocol

public static final int **STAT_connect_unknown_protocol**

Constant value: **400**

STAT_connect_rejected_by_application

public static final int **STAT_connect_rejected_by_application**

Constant value: **401**

STAT_connect_rejected_by_module

public static final int **STAT_connect_rejected_by_module**

Constant value: **403**

STAT_connect_application_not_found

public static final int **STAT_connect_application_not_found**

Constant value: **404**

STAT_connect_resource_limit

public static final int **STAT_connect_resource_limit**

Constant value: **409**

STAT_connect_license_limit

```
public static final int STAT_connect_license_limit
```

Constant value: **413**

STAT_connect_redirect

```
public static final int STAT_connect_redirect
```

Constant value: **302**

STAT_connect_internal_error

```
public static final int STAT_connect_internal_error
```

Constant value: **500**

STAT_connect_bad_gateway

```
public static final int STAT_connect_bad_gateway
```

Constant value: **502**

STAT_connect_service_unavailable

```
public static final int STAT_connect_service_unavailable
```

Constant value: **503**

STAT_play_successful

```
public static final int STAT_play_successful
```

Constant value: **200**

STAT_play_bad_request

```
public static final int STAT_play_bad_request
```

Constant value: **400**

STAT_play_rejected_by_application

```
public static final int STAT_play_rejected_by_application
```

Constant value: **401**

(continued from last page)

STAT_play_rejected_by_module

```
public static final int STAT_play_rejected_by_module
```

Constant value: **403**

STAT_play_stream_not_found

```
public static final int STAT_play_stream_not_found
```

Constant value: **404**

STAT_play_unsupported_media_type

```
public static final int STAT_play_unsupported_media_type
```

Constant value: **415**

STAT_play_internal_error

```
public static final int STAT_play_internal_error
```

Constant value: **500**

STAT_publish_successful

```
public static final int STAT_publish_successful
```

Constant value: **200**

STAT_publish_bad_request

```
public static final int STAT_publish_bad_request
```

Constant value: **400**

STAT_publish_rejected_by_application

```
public static final int STAT_publish_rejected_by_application
```

Constant value: **401**

STAT_publish_in_use

```
public static final int STAT_publish_in_use
```

Constant value: **409**

STAT_publish_unsupported_media_type

```
public static final int STAT_publish_unsupported_media_type
```

(continued from last page)

Constant value: **415**

STAT_publish_internal_error

public static final int **STAT_publish_internal_error**

Constant value: **500**

STAT_stop_successful

public static final int **STAT_stop_successful**

Constant value: **200**

STAT_stop_client_disconnect

public static final int **STAT_stop_client_disconnect**

Constant value: **408**

STAT_general_successful

public static final int **STAT_general_successful**

Constant value: **200**

STAT_general_internal_error

public static final int **STAT_general_internal_error**

Constant value: **500**

STAT_push_sucesseful

public static final int **STAT_push_sucesseful**

Constant value: **200**

PROTO_RTMP

public static final java.lang.String **PROTO_RTMP**

Constant value: **rtmp**

PROTO_RTMPs

public static final java.lang.String **PROTO_RTMPs**

Constant value: **rtmps**

PROTO_RTMPT

```
public static final java.lang.String PROTO_RTMPT
```

Constant value: **rtmpt** (HTTP-1.1)

PROTO_RTMPTS

```
public static final java.lang.String PROTO_RTMPTS
```

Constant value: **rtmpts** (HTTP-1.1)

PROTO_RTMPE

```
public static final java.lang.String PROTO_RTMPE
```

Constant value: **rtmpe**

PROTO_RTMPTE

```
public static final java.lang.String PROTO_RTMPTE
```

Constant value: **rtmpte** (HTTP-1.1)

PROTO_WOWZ

```
public static final java.lang.String PROTO_WOWZ
```

Constant value: **wowz**

PROTO_WOWZE

```
public static final java.lang.String PROTO_WOWZE
```

Constant value: **wowze**

PROTO_WOWZS

```
public static final java.lang.String PROTO_WOWZS
```

Constant value: **wowzs**

PROTO_RTSP

```
public static final java.lang.String PROTO_RTSP
```

Constant value: **rtsp**

(continued from last page)

PROTO_WEBRTC

```
public static final java.lang.String PROTO_WEBRTC
```

Constant value: **webrtc**

PROTO_HTTP

```
public static final java.lang.String PROTO_HTTP
```

Constant value: **http**

PROTO_HTTPSTREAMER

```
public static final java.lang.String PROTO_HTTPSTREAMER
```

Constant value: **http (streamer)**

PROTO_HTTPCUPERTINO

```
public static final java.lang.String PROTO_HTTPCUPERTINO
```

Constant value: **http (cupertino)**

PROTO_HTTPSMOOTH

```
public static final java.lang.String PROTO_HTTPSMOOTH
```

Constant value: **http (smooth)**

PROTO_HTTPSANJOSE

```
public static final java.lang.String PROTO_HTTPSANJOSE
```

Constant value: **http (sanjose)**

PROTO_HTTPDVRCHUNK

```
public static final java.lang.String PROTO_HTTPDVRCHUNK
```

Constant value: **http (dvr)**

PROTO_HTTPMPEGDASH

```
public static final java.lang.String PROTO_HTTPMPEGDASH
```

Constant value: **http (mpegdash)**

PROTO_HTTPS

```
public static final java.lang.String PROTO_HTTPS
```


(continued from last page)

Constant value: **https**

PROTO_HTTPSSTREAMERpublic static final java.lang.String **PROTO_HTTPSSTREAMER**Constant value: **https (streamer)**

PROTO_HTTPSCUPERTINOpublic static final java.lang.String **PROTO_HTTPSCUPERTINO**Constant value: **https (cupertino)**

PROTO_HTTPSSMOOTHpublic static final java.lang.String **PROTO_HTTPSSMOOTH**Constant value: **https (smooth)**

PROTO_HTTPSSANJOSEpublic static final java.lang.String **PROTO_HTTPSSANJOSE**Constant value: **https (sanjose)**

PROTO_HTTPSDVRCHUNKpublic static final java.lang.String **PROTO_HTTPSDVRCHUNK**Constant value: **https (dvr)**

FD_ALLpublic static final java.lang.String **FD_ALL**

CAT_ALLpublic static final java.lang.String **CAT_ALL**

EVT_ALLpublic static final java.lang.String **EVT_ALL**

Constructors

(continued from last page)

WMSLoggerIDs

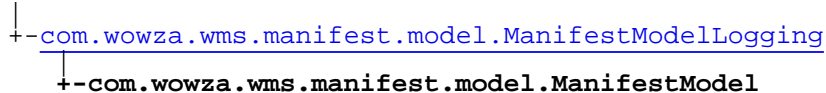
```
public WMSLoggerIDs()
```

Package

com.wowza.wms.manifest.model

com.wowza.wms.manifest.model Class ManifestModel

java.lang.Object



All Implemented Interfaces:

Cloneable

Direct Known Subclasses:

[PlaylistModel](#), [MediaSegmentModel](#), [SanJoseManifestModel](#), [MPEGDashManifestModel](#)

public abstract class **ManifestModel**

extends [ManifestModelLogging](#)

implements Cloneable

Abstract Manifest Model base class Provides implementations that are common to all Manifest / Playlist models

Constructor Summary

public	ManifestModel()
--------	---------------------------------

Method Summary

Object	clone()
boolean	equals (Object obj)
String	getManifest()
int	hashCode()
void	setManifest (String manifest)
String	toString()

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

(continued from last page)

Constructors

ManifestModel

```
public ManifestModel()
```

Methods

getManifest

```
public String getManifest()
```

Returns:

the manifest

setManifest

```
public void setManifest(String manifest)
```

Parameters:

manifest - the manifest to set

equals

```
public boolean equals(Object obj)
```

hashCode

```
public int hashCode()
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

toString

```
public String toString()
```

com.wowza.wms.manifest.model Class ManifestModelLogging

java.lang.Object

└-com.wowza.wms.manifest.model.ManifestModelLogging

Direct Known Subclasses:

[ManifestWriter](#), [ManifestValidator](#), [TagModel](#), [ManifestModel](#)

public abstract class **ManifestModelLogging**
extends Object

This class is the base of all the manifest models providing a standardized mechanism of logging

Constructor Summary

public	ManifestModelLogging() Constructs an empty Manifest Model
--------	--

Method Summary

Object	clone()
abstract String	getContextStr() Get the context string associated with the Model to include with the log statements
boolean	getDebugLog() Get the current debug log setting
void	logDebug (String methodName, String log) log information conditionally based on debug setting using the info level of the logger
void	logError (String methodName, String log) log a string at the error setting
void	logError (String methodName, String log, Throwable e) log a string and a throwable information at the error setting
void	logError (String methodName, Throwable e) log a throwables information at the error setting
void	logInfo (String methodName, String log) Log a string at the info setting
void	logWarn (String methodName, String log) log a string at the warn setting
boolean	setDebugLog (boolean debugLog) Enable/disable debug logging.
void	setUseSystemOut (boolean useSystemOut) specify whether to log using System.out rather than the default (log4j)

boolean

[usingSystemOut\(\)](#)

Get the current setting of using the system out for debug (vs log4j)

Methods inherited from class `java.lang.Object``clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Constructors

ManifestModelLogging

```
public ManifestModelLogging()
```

Constructs an empty Manifest Model

Methods

setDebugLog

```
public boolean setDebugLog(boolean debugLog)
```

Enable/disable debug logging.

Parameters:

debugLog

Returns:

boolean value of the debug log setting before applying the new setting

getDebugLog

```
public boolean getDebugLog()
```

Get the current debug log setting

Returns:

true if debug logging is enabled

setUseSystemOut

```
public void setUseSystemOut(boolean useSystemOut)
```

specify whether to log using System.out rather than the default (log4j)

Parameters:

useSystemOut

usingSystemOut

```
public boolean usingSystemOut()
```

Get the current setting of using the system out for debug (vs log4j)

Returns:

(continued from last page)

true if logging is using System.out

logDebug

```
public void logDebug(String methodName,  
                    String log)
```

log information conditionally based on debug setting using the info level of the logger

Parameters:

methodName -- method name to include in the log statement

log -- the string to log

logInfo

```
public void logInfo(String methodName,  
                   String log)
```

Log a string at the info setting

Parameters:

methodName -- method name to include in the log statement

log -- the string to log

logWarn

```
public void logWarn(String methodName,  
                   String log)
```

log a string at the warn setting

Parameters:

methodName -- method name to include in the log statement

log -- the string to log

logError

```
public void logError(String methodName,  
                    String log)
```

log a string at the error setting

Parameters:

methodName -- method name to include in the log statement

log -- the string to log

logError

```
public void logError(String methodName,  
                   String log,  
                   Throwable e)
```

log a string and a throwable information at the error setting

Parameters:

methodName -- method name to include in the log statement

log -- the string to log

e -- the throwable exception to log the information about

logError

```
public void logError(String methodName,  
                    Throwable e)
```

log a throwables information at the error setting

Parameters:

methodName -- method name to include in the log statement
e -- the throwable exception to log the information about

getContextStr

```
protected abstract String getContextStr()
```

Get the context string associated with the Model to include with the log statements

Returns:

String

clone

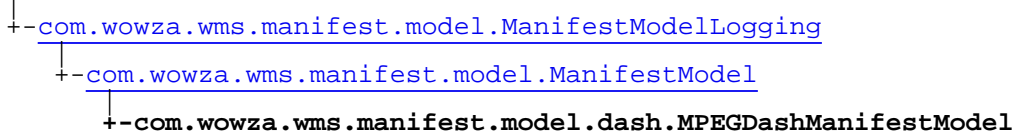
```
public Object clone()  
    throws CloneNotSupportedException
```

Package

com.wowza.wms.manifest.model.dash

com.wowza.wms.manifest.model.dash Class MPEGDashManifestModel

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class MPEGDashManifestModel
extends ManifestModel
```

Constructor Summary

public	MPEGDashManifestModel()
--------	---

Method Summary

Object	clone()
String	getContextStr()

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModel](#)

[clone](#), [equals](#), [getManifest](#), [hashCode](#), [setManifest](#), [toString](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

MPEGDashManifestModel

```
public MPEGDashManifestModel()
```

Methods

(continued from last page)

getContextStr

```
protected String getContextStr()
```

Get the context string associated with the Model to include with the log statements

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

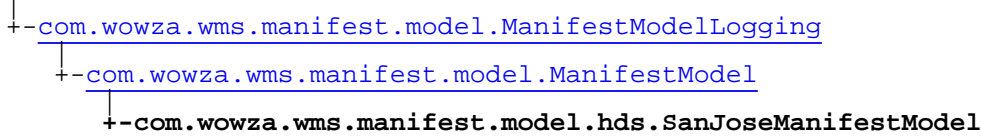
Package

com.wowza.wms.manifest.model.hds

com.wowza.wms.manifest.model.hds

Class SanJoseManifestModel

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class SanJoseManifestModel
extends ManifestModel
```

Constructor Summary

public	SanJoseManifestModel()
--------	--

Method Summary

Object	clone()
String	getContextStr()

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModel](#)

[clone](#), [equals](#), [getManifest](#), [hashCode](#), [setManifest](#), [toString](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

SanJoseManifestModel

```
public SanJoseManifestModel()
```

Methods

(continued from last page)

getContextStr

protected String **getContextStr**()

Get the context string associated with the Model to include with the log statements

clone

public Object **clone**()
throws CloneNotSupportedException

Package

com.wowza.wms.manifest.model.m3u8

com.wowza.wms.manifest.model.m3u8 Class Constants

java.lang.Object

└-com.wowza.wms.manifest.model.m3u8.Constants

public final class **Constants**
extends Object

Field Summary

public static final	ASSOCIATED_LANGUAGE Value: ASSOC-LANGUAGE
public static final	AT_CHAR Value: 64
public static final	ATTRIBUTE_LIST_SEPARATOR
public static final	ATTRIBUTE_SEPARATOR Value: =
public static final	AUDIO Value: AUDIO
public static final	AUTO_SELECT Value: AUTOSELECT
public static final	AVERAGE_BANDWIDTH Value: AVERAGE-BANDWIDTH
public static final	BANDWIDTH Value: BANDWIDTH
public static final	CHARACTERISTICS Value: CHARACTERISTICS
public static final	CLOSED_CAPTIONS Value: CLOSED-CAPTIONS
public static final	CODECS Value: CODECS
public static final	COMMA

public static final	COMMA_CHAR Value: 44
public static final	COMMENT_PREFIX Value: #
public static final	DATA_ID Value: DATA-ID
public static final	DEFAULT Value: DEFAULT
public static final	DEFAULT_COMPATIBILITY_VERSION Value: 1
public static final	DEFAULT_KEY_FORMAT Value: identity
public static final	DEFAULT_KEY_FORMAT_VERSIONS
public static final	EXT_TAG_END Value: :
public static final	EXT_TAG_PREFIX Value: #EXT
public static final	EXT_X_ALLOW_CACHE_TAG Value: EXT-X-ALLOW-CACHE
public static final	EXT_X_BYTERANGE_PATTERN
public static final	EXT_X_BYTERANGE_TAG Value: EXT-X-BYTERANGE
public static final	EXT_X_DISCONTINUITY_PATTERN
public static final	EXT_X_DISCONTINUITY_SEQUENCE_PATTERN
public static final	EXT_X_DISCONTINUITY_SEQUENCE_TAG Value: EXT-X-DISCONTINUITY-SEQUENCE
public static final	EXT_X_DISCONTINUITY_TAG Value: EXT-X-DISCONTINUITY
public static final	EXT_X_ENDLIST_PATTERN
public static final	EXT_X_ENDLIST_TAG Value: EXT-X-ENDLIST

public static final	EXT_X_I_FRAME_STREAM_INF_TAG Value: EXT-X-I-FRAME-STREAM-INF
public static final	EXT_X_I_FRAMES_ONLY_PATTERN
public static final	EXT_X_I_FRAMES_ONLY_TAG Value: EXT-X-I-FRAMES-ONLY
public static final	EXT_X_INDEPENDENT_SEGMENTS_TAG Value: EXT-X-INDEPENDENT-SEGMENTS
public static final	EXT_X_KEY_TAG Value: EXT-X-KEY
public static final	EXT_X_MAP_TAG Value: EXT-X-MAP
public static final	EXT_X_MEDIA_IN_STREAM_ID_PATTERN
public static final	EXT_X_MEDIA_SEQUENCE_PATTERN
public static final	EXT_X_MEDIA_SEQUENCE_TAG Value: EXT-X-MEDIA-SEQUENCE
public static final	EXT_X_MEDIA_TAG Value: EXT-X-MEDIA
public static final	EXT_X_PLAYLIST_TYPE_PATTERN
public static final	EXT_X_PLAYLIST_TYPE_TAG Value: EXT-X-PLAYLIST-TYPE
public static final	EXT_X_PROGRAM_DATE_TIME_TAG Value: EXT-X-PROGRAM-DATE-TIME
public static final	EXT_X_SESSION_DATA_TAG Value: EXT-X-SESSION-DATA
public static final	EXT_X_SESSION_KEY_TAG Value: EXT-X-SESSION-KEY
public static final	EXT_X_START_TAG Value: EXT-X-START
public static final	EXT_X_STREAM_INF_TAG Value: EXT-X-STREAM-INF
public static final	EXT_X_TARGETDURATION_PATTERN

public static final	EXT_X_TARGETDURATION_TAG Value: EXT-X-TARGETDURATION
public static final	EXT_X_VERSION_PATTERN
public static final	EXT_X_VERSION_TAG Value: EXT-X-VERSION
public static final	EXTINF_PATTERN
public static final	EXTINF_TAG Value: EXTINF
public static final	EXTM3U_TAG Value: EXTM3U
public static final	FORCED Value: FORCED
public static final	FRAME_RATE Value: FRAME-RATE
public static final	GROUP_ID Value: GROUP-ID
public static final	HEXADECIMAL_PATTERN
public static final	IN_STREAM_ID Value: INSTREAM-ID
public static final	INSTREAM_ID_SERVICE_PREFIX Value: Service
public static final	IV Value: IV
public static final	IV_SIZE Value: 16
public static final	IV_SIZE_ALTERNATIVE Value: 32
public static final	KEY_FORMAT Value: KEYFORMAT
public static final	KEY_FORMAT_VERSIONS Value: KEYFORMATVERSIONS

public static final	LANGUAGE Value: LANGUAGE
public static final	LIST_SEPARATOR Value: /
public static final	MAP_BYTERANGE Value: BYTERANGE
public static final	MAP_BYTERANGE_PATTERN
public static final	MAX_COMPATIBILITY_VERSION Value: 7
public static final	METHOD Value: METHOD
public static final	MIME_TYPE Value: application/vnd.apple.mpegurl
public static final	MIME_TYPE_COMPATIBILITY Value: audio/mpegurl
public static final	MIN_COMPATIBILITY_VERSION Value: 1
public static final	NAME Value: NAME
public static final	NO Value: NO
public static final	NO_CLOSED_CAPTIONS Value: NONE
public static final	NULL_ATTRIBUTE_NAME Value: NULL-ATTRIBUTE-NAME
public static final	NULL_TAG_NAME Value: NULL-TAG-NAME
public static final	NULL_VALUE Value: NULL-VALUE
public static final	PARSE_NEW_LINE Value: \r?\n

public static final	PRECISE Value: PRECISE
public static final	PROGRAM_ID Value: PROGRAM-ID
public static final	RESOLUTION Value: RESOLUTION
public static final	RESOLUTION_PATTERN
public static final	SUBTITLES Value: SUBTITLES
public static final	TIME_OFFSET Value: TIME-OFFSET
public static final	TYPE Value: TYPE
public static final	UNICODE_BOM Value: 65279
public static final	URI Value: URI
public static final	UTF_8_BOM_BYTES
public static final	VALUE Value: VALUE
public static final	VERSION_1 Value: 1
public static final	VERSION_2 Value: 2
public static final	VERSION_3 Value: 3
public static final	VERSION_4 Value: 4
public static final	VERSION_5 Value: 5
public static final	VERSION_6 Value: 6

public static final	VERSION_7 Value: 7
public static final	VIDEO Value: VIDEO
public static final	WRITE_NEW_LINE Value:
public static final	YES Value: YES

Constructor Summary

public	Constants()
--------	-----------------------------

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

MIME_TYPE

public static final java.lang.String **MIME_TYPE**

Constant value: **application/vnd.apple.mpegurl**

MIME_TYPE_COMPATIBILITY

public static final java.lang.String **MIME_TYPE_COMPATIBILITY**

Constant value: **audio/mpegurl**

ATTRIBUTE_SEPARATOR

public static final java.lang.String **ATTRIBUTE_SEPARATOR**

Constant value: **=**

COMMA_CHAR

public static final char **COMMA_CHAR**

Constant value: **44**

(continued from last page)

AT_CHAR

```
public static final char AT_CHAR
```

Constant value: **64**

COMMA

```
public static final java.lang.String COMMA
```

ATTRIBUTE_LIST_SEPARATOR

```
public static final java.lang.String ATTRIBUTE_LIST_SEPARATOR
```

LIST_SEPARATOR

```
public static final java.lang.String LIST_SEPARATOR
```

Constant value: **/**

COMMENT_PREFIX

```
public static final java.lang.String COMMENT_PREFIX
```

Constant value: **#**

EXT_TAG_PREFIX

```
public static final java.lang.String EXT_TAG_PREFIX
```

Constant value: **#EXT**

EXT_TAG_END

```
public static final java.lang.String EXT_TAG_END
```

Constant value: **:**

WRITE_NEW_LINE

```
public static final java.lang.String WRITE_NEW_LINE
```

Constant value:

PARSE_NEW_LINE

```
public static final java.lang.String PARSE_NEW_LINE
```

(continued from last page)

Constant value: `\r?\n`

NULL_TAG_NAME

```
public static final java.lang.String NULL_TAG_NAME
```

Constant value: `NULL-TAG-NAME`

NULL_VALUE

```
public static final java.lang.String NULL_VALUE
```

Constant value: `NULL-VALUE`

NULL_ATTRIBUTE_NAME

```
public static final java.lang.String NULL_ATTRIBUTE_NAME
```

Constant value: `NULL-ATTRIBUTE-NAME`

EXTM3U_TAG

```
public static final java.lang.String EXTM3U_TAG
```

Constant value: `EXTM3U`

EXT_X_VERSION_TAG

```
public static final java.lang.String EXT_X_VERSION_TAG
```

Constant value: `EXT-X-VERSION`

URI

```
public static final java.lang.String URI
```

Constant value: `URI`

EXT_X_MEDIA_TAG

```
public static final java.lang.String EXT_X_MEDIA_TAG
```

Constant value: `EXT-X-MEDIA`

TYPE

```
public static final java.lang.String TYPE
```

Constant value: `TYPE`

(continued from last page)

GROUP_ID

```
public static final java.lang.String GROUP_ID
```

Constant value: **GROUP-ID**

LANGUAGE

```
public static final java.lang.String LANGUAGE
```

Constant value: **LANGUAGE**

ASSOCIATED_LANGUAGE

```
public static final java.lang.String ASSOCIATED_LANGUAGE
```

Constant value: **ASSOC-LANGUAGE**

NAME

```
public static final java.lang.String NAME
```

Constant value: **NAME**

DEFAULT

```
public static final java.lang.String DEFAULT
```

Constant value: **DEFAULT**

AUTO_SELECT

```
public static final java.lang.String AUTO_SELECT
```

Constant value: **AUTOSELECT**

FORCED

```
public static final java.lang.String FORCED
```

Constant value: **FORCED**

IN_STREAM_ID

```
public static final java.lang.String IN_STREAM_ID
```

Constant value: **INSTREAM-ID**

CHARACTERISTICS

```
public static final java.lang.String CHARACTERISTICS
```

(continued from last page)

Constant value: **CHARACTERISTICS**

EXT_X_I_FRAME_STREAM_INF_TAG

```
public static final java.lang.String EXT_X_I_FRAME_STREAM_INF_TAG
```

Constant value: **EXT-X-I-FRAME-STREAM-INF**

EXT_X_STREAM_INF_TAG

```
public static final java.lang.String EXT_X_STREAM_INF_TAG
```

Constant value: **EXT-X-STREAM-INF**

BANDWIDTH

```
public static final java.lang.String BANDWIDTH
```

Constant value: **BANDWIDTH**

AVERAGE_BANDWIDTH

```
public static final java.lang.String AVERAGE_BANDWIDTH
```

Constant value: **AVERAGE-BANDWIDTH**

CODECS

```
public static final java.lang.String CODECS
```

Constant value: **CODECS**

RESOLUTION

```
public static final java.lang.String RESOLUTION
```

Constant value: **RESOLUTION**

FRAME_RATE

```
public static final java.lang.String FRAME_RATE
```

Constant value: **FRAME-RATE**

VIDEO

```
public static final java.lang.String VIDEO
```

Constant value: **VIDEO**

PROGRAM_ID

```
public static final java.lang.String PROGRAM_ID
```

Constant value: **PROGRAM-ID**

AUDIO

```
public static final java.lang.String AUDIO
```

Constant value: **AUDIO**

SUBTITLES

```
public static final java.lang.String SUBTITLES
```

Constant value: **SUBTITLES**

CLOSED_CAPTIONS

```
public static final java.lang.String CLOSED_CAPTIONS
```

Constant value: **CLOSED-CAPTIONS**

EXT_X_SESSION_DATA_TAG

```
public static final java.lang.String EXT_X_SESSION_DATA_TAG
```

Constant value: **EXT-X-SESSION-DATA**

DATA_ID

```
public static final java.lang.String DATA_ID
```

Constant value: **DATA-ID**

VALUE

```
public static final java.lang.String VALUE
```

Constant value: **VALUE**

EXT_X_SESSION_KEY_TAG

```
public static final java.lang.String EXT_X_SESSION_KEY_TAG
```

Constant value: **EXT-X-SESSION-KEY**

(continued from last page)

EXT_X_TARGETDURATION_TAG

```
public static final java.lang.String EXT_X_TARGETDURATION_TAG
```

Constant value: **EXT-X-TARGETDURATION**

EXT_X_MEDIA_SEQUENCE_TAG

```
public static final java.lang.String EXT_X_MEDIA_SEQUENCE_TAG
```

Constant value: **EXT-X-MEDIA-SEQUENCE**

EXT_X_DISCONTINUITY_SEQUENCE_TAG

```
public static final java.lang.String EXT_X_DISCONTINUITY_SEQUENCE_TAG
```

Constant value: **EXT-X-DISCONTINUITY-SEQUENCE**

EXT_X_ENDLIST_TAG

```
public static final java.lang.String EXT_X_ENDLIST_TAG
```

Constant value: **EXT-X-ENDLIST**

EXT_X_PLAYLIST_TYPE_TAG

```
public static final java.lang.String EXT_X_PLAYLIST_TYPE_TAG
```

Constant value: **EXT-X-PLAYLIST-TYPE**

EXT_X_I_FRAMES_ONLY_TAG

```
public static final java.lang.String EXT_X_I_FRAMES_ONLY_TAG
```

Constant value: **EXT-X-I-FRAMES-ONLY**

EXT_X_ALLOW_CACHE_TAG

```
public static final java.lang.String EXT_X_ALLOW_CACHE_TAG
```

Constant value: **EXT-X-ALLOW-CACHE**

EXT_X_START_TAG

```
public static final java.lang.String EXT_X_START_TAG
```

Constant value: **EXT-X-START**

TIME_OFFSET

```
public static final java.lang.String TIME_OFFSET
```

(continued from last page)

Constant value: **TIME-OFFSET**

PRECISE

```
public static final java.lang.String PRECISE
```

Constant value: **PRECISE**

EXT_X_INDEPENDENT_SEGMENTS_TAG

```
public static final java.lang.String EXT_X_INDEPENDENT_SEGMENTS_TAG
```

Constant value: **EXT-X-INDEPENDENT-SEGMENTS**

EXTINF_TAG

```
public static final java.lang.String EXTINF_TAG
```

Constant value: **EXTINF**

EXT_X_BYTERANGE_TAG

```
public static final java.lang.String EXT_X_BYTERANGE_TAG
```

Constant value: **EXT-X-BYTERANGE**

EXT_X_DISCONTINUITY_TAG

```
public static final java.lang.String EXT_X_DISCONTINUITY_TAG
```

Constant value: **EXT-X-DISCONTINUITY**

EXT_X_KEY_TAG

```
public static final java.lang.String EXT_X_KEY_TAG
```

Constant value: **EXT-X-KEY**

METHOD

```
public static final java.lang.String METHOD
```

Constant value: **METHOD**

IV

```
public static final java.lang.String IV
```

Constant value: **IV**

KEY_FORMAT

```
public static final java.lang.String KEY_FORMAT
```

Constant value: **KEYFORMAT**

KEY_FORMAT_VERSIONS

```
public static final java.lang.String KEY_FORMAT_VERSIONS
```

Constant value: **KEYFORMATVERSIONS**

EXT_X_MAP_TAG

```
public static final java.lang.String EXT_X_MAP_TAG
```

Constant value: **EXT-X-MAP**

MAP_BYTERANGE

```
public static final java.lang.String MAP_BYTERANGE
```

Constant value: **BYTERANGE**

EXT_X_PROGRAM_DATE_TIME_TAG

```
public static final java.lang.String EXT_X_PROGRAM_DATE_TIME_TAG
```

Constant value: **EXT-X-PROGRAM-DATE-TIME**

YES

```
public static final java.lang.String YES
```

Constant value: **YES**

NO

```
public static final java.lang.String NO
```

Constant value: **NO**

HEXADECIMAL_PATTERN

```
public static final java.util.regex.Pattern HEXADECIMAL_PATTERN
```

RESOLUTION_PATTERN

```
public static final java.util.regex.Pattern RESOLUTION_PATTERN
```

(continued from last page)

EXT_X_VERSION_PATTERN

```
public static final java.util.regex.Pattern EXT_X_VERSION_PATTERN
```

EXT_X_TARGETDURATION_PATTERN

```
public static final java.util.regex.Pattern EXT_X_TARGETDURATION_PATTERN
```

EXT_X_MEDIA_SEQUENCE_PATTERN

```
public static final java.util.regex.Pattern EXT_X_MEDIA_SEQUENCE_PATTERN
```

EXT_X_PLAYLIST_TYPE_PATTERN

```
public static final java.util.regex.Pattern EXT_X_PLAYLIST_TYPE_PATTERN
```

EXT_X_MEDIA_IN_STREAM_ID_PATTERN

```
public static final java.util.regex.Pattern EXT_X_MEDIA_IN_STREAM_ID_PATTERN
```

EXTINF_PATTERN

```
public static final java.util.regex.Pattern EXTINF_PATTERN
```

EXT_X_ENDLIST_PATTERN

```
public static final java.util.regex.Pattern EXT_X_ENDLIST_PATTERN
```

EXT_X_I_FRAMES_ONLY_PATTERN

```
public static final java.util.regex.Pattern EXT_X_I_FRAMES_ONLY_PATTERN
```

EXT_X_DISCONTINUITY_PATTERN

```
public static final java.util.regex.Pattern EXT_X_DISCONTINUITY_PATTERN
```

(continued from last page)

EXT_X_BYTERANGE_PATTERN

```
public static final java.util.regex.Pattern EXT_X_BYTERANGE_PATTERN
```

EXT_X_DISCONTINUITY_SEQUENCE_PATTERN

```
public static final java.util.regex.Pattern EXT_X_DISCONTINUITY_SEQUENCE_PATTERN
```

MAP_BYTERANGE_PATTERN

```
public static final java.util.regex.Pattern MAP_BYTERANGE_PATTERN
```

UTF_8_BOM_BYTES

```
public static final int UTF_8_BOM_BYTES
```

UNICODE_BOM

```
public static final char UNICODE_BOM
```

Constant value: **65279**

VERSION_1

```
public static final int VERSION_1
```

Constant value: **1**

VERSION_2

```
public static final int VERSION_2
```

Constant value: **2**

VERSION_3

```
public static final int VERSION_3
```

Constant value: **3**

VERSION_4

```
public static final int VERSION_4
```

Constant value: **4**

VERSION_5

```
public static final int VERSION_5
```

Constant value: **5**

VERSION_6

```
public static final int VERSION_6
```

Constant value: **6**

VERSION_7

```
public static final int VERSION_7
```

Constant value: **7**

MIN_COMPATIBILITY_VERSION

```
public static final int MIN_COMPATIBILITY_VERSION
```

Constant value: **1**

MAX_COMPATIBILITY_VERSION

```
public static final int MAX_COMPATIBILITY_VERSION
```

Constant value: **7**

DEFAULT_COMPATIBILITY_VERSION

```
public static final int DEFAULT_COMPATIBILITY_VERSION
```

Constant value: **1**

IV_SIZE

```
public static final int IV_SIZE
```

Constant value: **16**

IV_SIZE_ALTERNATIVE

```
public static final int IV_SIZE_ALTERNATIVE
```

Constant value: **32**

(continued from last page)

DEFAULT_KEY_FORMAT

```
public static final java.lang.String DEFAULT_KEY_FORMAT
```

Constant value: **identity**

NO_CLOSED_CAPTIONS

```
public static final java.lang.String NO_CLOSED_CAPTIONS
```

Constant value: **NONE**

DEFAULT_KEY_FORMAT_VERSIONS

```
public static final java.util.List DEFAULT_KEY_FORMAT_VERSIONS
```

INSTREAM_ID_SERVICE_PREFIX

```
public static final java.lang.String INSTREAM_ID_SERVICE_PREFIX
```

Constant value: **Service**

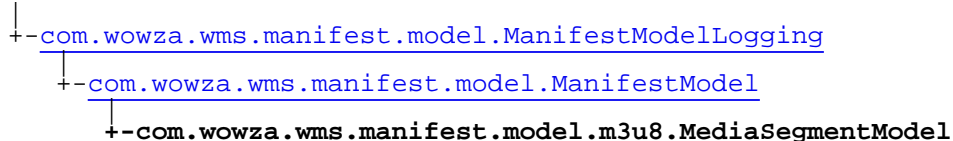
Constructors

Constants

```
public Constants()
```

com.wowza.wms.manifest.model.m3u8 Class MediaSegmentModel

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class MediaSegmentModel
extends ManifestModel
```

Field Summary

public	chunkInfoCupertino
public	properties

Constructor Summary

public	MediaSegmentModel()
--------	-------------------------------------

Method Summary

Object	clone()
boolean	equals(Object obj)
Object	getChunkInfoCupertino() Get generic reference to LiveStreamPacketizerCupertinoChunk with chunk details
String	getContextStr()
PacketFragmentList	getFragmentList() Get the fragment list that represents the byte data that makes up the fragment
WMSProperties	getProperties()
java.net.URI	getUri()
int	hashCode()
void	setChunkInfoCupertino(Object chunkInfoCupertino) Set generic reference to LiveStreamPacketizerCupertinoChunk with chunk details

void	setFragmentList (PacketFragmentList fragmentList) Set the fragment list that represents the byte data that makes up the fragment
void	setUri (java.net.URI uri)
String	toString ()

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModel](#)

[clone](#), [equals](#), [getManifest](#), [hashCode](#), [setManifest](#), [toString](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Fields

properties

```
public com.wowza.wms.application.WMSProperties properties
```

chunkInfoCupertino

```
public java.lang.Object chunkInfoCupertino
```

Constructors

MediaSegmentModel

```
public MediaSegmentModel()
```

Methods

getContextStr

```
protected String getContextStr()
```

Get the context string associated with the Model to include with the log statements

getUri

```
public java.net.URI getUri()
```

(continued from last page)

Returns:
the uri

setUri

```
public void setUri(java.net.URI uri)
```

Parameters:
uri - the uri to set

getFragmentList

```
public PacketFragmentList getFragmentList()
```

Get the fragment list that represents the byte data that makes up the fragment

Returns:
fragment list

setFragmentList

```
public void setFragmentList(PacketFragmentList fragmentList)
```

Set the fragment list that represents the byte data that makes up the fragment

Parameters:
fragmentList - fragment list

toString

```
public String toString()
```

hashCode

```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

(continued from last page)

getChunkInfoCupertino

```
public Object getChunkInfoCupertino()
```

Get generic reference to LiveStreamPacketizerCupertinoChunk with chunk details

Returns:

generic reference to LiveStreamPacketizerCupertinoChunk with chunk details

setChunkInfoCupertino

```
public void setChunkInfoCupertino(Object chunkInfoCupertino)
```

Set generic reference to LiveStreamPacketizerCupertinoChunk with chunk details

Parameters:

chunkInfoCupertino - generic reference to LiveStreamPacketizerCupertinoChunk with chunk details

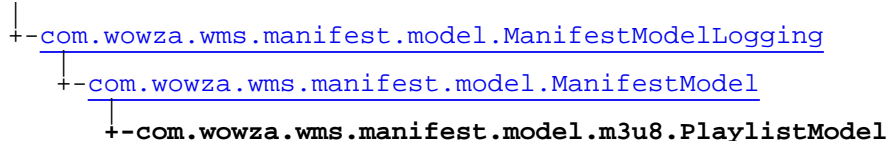
getProperties

```
public WMSProperties getProperties()
```

com.wowza.wms.manifest.model.m3u8

Class PlaylistModel

java.lang.Object



All Implemented Interfaces:

Cloneable

public class **PlaylistModel**

extends [ManifestModel](#)

Provides implementations that are common to all Playlist models

Field Summary

public	mediaSegments
public	playlists
public	properties
public	tags

Constructor Summary

public	PlaylistModel()
--------	---------------------------------

Method Summary

boolean	addAllTags (java.util.Collection tags) Add a list of tags to the playlistmodel and propagate context and debug settings
boolean	addTag (TagModel tag) Add a tag to the playlist model and propagate context and debug settings
Object	clone ()
boolean	equals (Object obj)
String	getContextStr ()
WMSProperties	getProperties ()
java.net.URI	getUri () Get the uri of the playlist

int	getVersion() Get the playlist version
int	hashCode()
boolean	isExtended() Is this an extended M3U8 playlist
boolean	isMasterPlaylist() Is the playlist represented by this class a Master playlist?
boolean	isMediaPlaylist() Is the playlist represent by this class a Media Playlist
void	setContextStr(String context) Specific to Playlist reader to set the context in which the playlist is reading.
void	setMasterPlaylist() Mark the playlist this instance represents as a master playlist.
void	setMediaPlaylist() Mark the playlist this instance represents as a media playlist.
void	setUri(java.net.URI uri) Set the uri of the playlist
String	toString()

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModel](#)

[clone](#), [equals](#), [getManifest](#), [hashCode](#), [setManifest](#), [toString](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Fields

tags

```
public java.util.List tags
```

playlists

```
public java.util.List playlists
```

mediaSegments

```
public java.util.List mediaSegments
```

properties

```
public com.wowza.wms.application.WMSProperties properties
```

Constructors

PlaylistModel

```
public PlaylistModel()
```

Methods

setMasterPlaylist

```
public void setMasterPlaylist()
```

Mark the playlist this instance represents as a master playlist.

setMediaPlaylist

```
public void setMediaPlaylist()
```

Mark the playlist this instance represents as a media playlist.

isMasterPlaylist

```
public boolean isMasterPlaylist()
```

Is the playlist represented by this class a Master playlist?

Returns:

true if the playlist represented by this model is a master playlist

isMediaPlaylist

```
public boolean isMediaPlaylist()
```

Is the playlist represent by this class a Media Playlist

Returns:

true if the playlist is a media playlist

getUri

```
public java.net.URI getUri()
```

Get the uri of the playlist

(continued from last page)

Returns:

URI the playlist uri

setUri

```
public void setUri(java.net.URI uri)
```

Set the uri of the playlist

Parameters:

uri - of the playlist

getVersion

```
public int getVersion()
```

Get the playlist version

Returns:

integer version number

isExtended

```
public boolean isExtended()
```

Is this an extended M3U8 playlist

Returns:

true if the playlist represented by this model is extended

getContextStr

```
public String getContextStr()
```

Get the context string associated with the Model to include with the log statements

setContextStr

```
public void setContextStr(String context)
```

Specific to Playlist reader to set the context in which the playlist is reading. Intent would be this would be the Source stream name to associate the log entries with

Parameters:

context - context of the reader

addTag

```
public boolean addTag(TagModel tag)
```

Add a tag to the playlist model and propagate context and debug settings

Parameters:

tag - to be added to the playlist model

Returns:

true if the tag was added

addAllTags

```
public boolean addAllTags(java.util.Collection tags)
```

Add a list of tags to the playlistmodel and propagate context and debug settings

Parameters:

tags - - list of tags to be added to the playlist model

Returns:

true if all the tags were added to the playlist model

equals

```
public boolean equals(Object obj)
```

hashCode

```
public int hashCode()
```

toString

```
public String toString()
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

getProperties

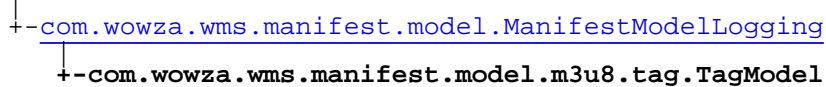
```
public WMSProperties getProperties()
```

Package

com.wowza.wms.manifest.model.m3u8.tag

com.wowza.wms.manifest.model.m3u8.tag Class TagModel

java.lang.Object



All Implemented Interfaces:

[Cloneable](#)

Direct Known Subclasses:

[TagModelVersion](#), [TagModelUnknown](#), [TagModelURI](#), [TagModelTargetDuration](#), [TagModelStreamInfCommon](#), [TagModelStart](#), [TagModelSessionKey](#), [TagModelSessionData](#), [TagModelProgramDateTime](#), [TagModelPlaylistType](#), [TagModelMediaSequence](#), [TagModelMedia](#), [TagModelMap](#), [TagModelM3U](#), [TagModelKey](#), [TagModelIndependentSegments](#), [TagModelINF](#), [TagModelIFramesOnly](#), [TagModelEndlist](#), [TagModelDiscontinuitySequence](#), [TagModelDiscontinuity](#), [TagModelByteRange](#), [TagModelAllowCache](#)

public abstract class **TagModel**
 extends [ManifestModelLogging](#)
 implements [Cloneable](#)

Field Summary

protected	attributes
protected	tagName

Constructor Summary

protected	TagModel (String tagName)
-----------	---

Method Summary

boolean	addAllAttributes (java.util.Collection c)
boolean	addAttribute (Attribute attribute)
Object	clone ()
boolean	equals (Object obj)
String	formatBoolean (Boolean value) Format a Boolean tag value.
String	formatBooleanAttribute (String name, Boolean value) Format a Boolean tag attribute.
String	formatEnumAttribute (String name, Enum value) Format an Enumerated tag attribute.

String	formatFloat (Float value) Format a Float tag value.
String	formatFloatAttribute (String name, Float value) Format an Float tag attribute.
String	formatInteger (Integer value) Format a Integer tag value.
String	formatIntegerAttribute (String name, Integer value) Format an Integer tag attribute.
String	formatQuotedStringAttribute (String name, String value) Format a quoted-string tag attribute.
String	formatString (String value) Format a String tag value.
String	formatUnquotedStringAttribute (String name, String value) Format an unquoted-string tag attribute.
String	formatValue (Object value) Format a Float, Integer, or String tag value.
String	getContextStr ()
String	getTag ()
java.util.List	getUnknownAttributes ()
int	hashCode ()
abstract boolean	isMediaSegmentTag ()
abstract boolean	isValid (Integer version)
void	setContextStr (String contextStr)
abstract String	toString ()
abstract boolean	validForMasterPlaylist ()
abstract boolean	validForMediaPlaylist ()
abstract void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Fields

attributes

```
protected java.util.List attributes
```

tagName

```
protected java.lang.String tagName
```

Constructors

TagModel

```
protected TagModel(String tagName)
```

Methods

getTag

```
public String getTag()
```

validForMasterPlaylist

```
public abstract boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public abstract boolean validForMediaPlaylist()
```

toString

```
public abstract String toString()
```


(continued from last page)

write

```
public abstract void write(TagWriter writer)
    throws java.io.IOException
```

Parameters:

writer

Throws:IOException

isMediaSegmentTag

```
public abstract boolean isMediaSegmentTag()
```

isValid

```
public abstract boolean isValid(Integer version)
```

addAttribute

```
public boolean addAttribute(Attribute attribute)
```

addAllAttributes

```
public boolean addAllAttributes(java.util.Collection c)
```

getUnknownAttributes

```
public java.util.List getUnknownAttributes()
```

formatUnquotedStringAttribute

```
public String formatUnquotedStringAttribute(String name,
    String value)
```

Format an unquoted-string tag attribute. Bad values and bad attribute names are reported in the output string.

Parameters:

name - is the attribute name

value - is the String attribute's value

Returns:the formatted attribute as '='

(continued from last page)

formatQuotedStringAttribute

```
public String formatQuotedStringAttribute(String name,  
                                           String value)
```

Format a quoted-string tag attribute. Bad values and bad attribute names are reported in the output string.

Parameters:

name - is the attribute name
value - is the String attribute's value

Returns:

the formatted attribute as '='

formatBooleanAttribute

```
public String formatBooleanAttribute(String name,  
                                       Boolean value)
```

Format a Boolean tag attribute. Bad values and bad attribute names are reported in the output string.

Parameters:

name - is the attribute name
value - is the Boolean attribute's value

Returns:

the formatted Boolean attribute

formatIntegerAttribute

```
public String formatIntegerAttribute(String name,  
                                       Integer value)
```

Format an Integer tag attribute. Bad values and bad attribute names are reported in the output string.

Parameters:

name - is the attribute name
value - is the Integer attribute's value

Returns:

the formatted Integer attribute

formatFloatAttribute

```
public String formatFloatAttribute(String name,  
                                    Float value)
```

Format an Float tag attribute. Bad values and bad attribute names are reported in the output string.

Parameters:

name - is the attribute name
value - is the Float attribute's value

Returns:

the formatted Float attribute

(continued from last page)

formatEnumAttribute

```
public String formatEnumAttribute(String name,  
    Enum value)
```

Format an Enumerated tag attribute. Bad values and bad attribute names are reported in the output string.

Parameters:

name - is the attribute name
value - is the Enumerated attribute's value

Returns:

the formatted Enumerated attribute

formatBoolean

```
public String formatBoolean(Boolean value)
```

Format a Boolean tag value. Bad values are reported in the output string.

Parameters:

value - is the Boolean value

Returns:

the formatted Boolean

formatInteger

```
public String formatInteger(Integer value)
```

Format a Integer tag value. Bad values are reported in the output string.

Parameters:

value - is the Integer value

Returns:

the formatted Integer

formatFloat

```
public String formatFloat(Float value)
```

Format a Float tag value. Bad values are reported in the output string.

Parameters:

value - is the Float value

Returns:

the formatted Float

formatString

```
public String formatString(String value)
```

Format a String tag value. Bad values are reported in the output string.

Parameters:

value - is the String value

(continued from last page)

Returns:

the formatted String

formatValue

```
public String formatValue(Object value)
```

Format a Float, Integer, or String tag value. Bad values are reported in the output string.

Parameters:

value - is the Float, Integer, or String value

Returns:

the formatted value

getContextStr

```
public String getContextStr()
```

Get the context string associated with the Model to include with the log statements

setContextStr

```
public void setContextStr(String contextStr)
```

Parameters:

contextStr - the contextStr to set

hashCode

```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelAllowCache

```

java.lang.Object
  |
  +- com.wowza.wms.manifest.model.ManifestModelLogging
     |
     +- com.wowza.wms.manifest.model.m3u8.tag.TagModel
        |
        +- com.wowza.wms.manifest.model.m3u8.tag.TagModelAllowCache
  
```

All Implemented Interfaces:
Cloneable

```

public class TagModelAllowCache
extends TagModel
  
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelAllowCache()
--------	--------------------------------------

Method Summary

Object	clone()
boolean	equals (Object obj)
Boolean	getAllow ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setAllow (Boolean allow)
String	toString ()
boolean	validForMasterPlaylist ()
boolean	validForMediaPlaylist ()
void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelAllowCache

```
public TagModelAllowCache()
```

Methods

getAllow

```
public Boolean getAllow()
```

Returns:

the allow

setAllow

```
public void setAllow(Boolean allow)
```

Parameters:

allow - the allow to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

(continued from last page)

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

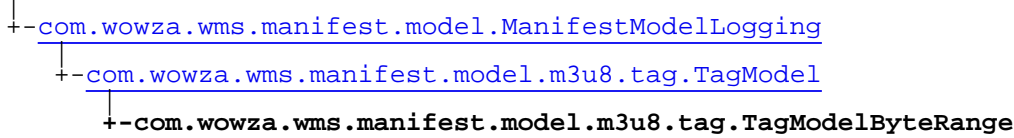
```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelByteRange

java.lang.Object



All Implemented Interfaces:

Cloneable

public class **TagModelByteRange**
extends [TagModel](#)

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelByteRange()
--------	-------------------------------------

Method Summary

Object	clone()
boolean	equals (Object obj)
Integer	getLength ()
Integer	getOffset ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setLength (Integer length)
void	setOffset (Integer offset)
String	toString ()
boolean	validForMasterPlaylist ()

boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelByteRange

```
public TagModelByteRange()
```

Methods

getLength

```
public Integer getLength()
```

Returns:

the length

setLength

```
public void setLength(Integer length)
```

Parameters:

length - the length to set

getOffset

```
public Integer getOffset()
```

(continued from last page)

Returns:the offset

setOffset

```
public void setOffset(Integer offset)
```

Parameters:offset - the offset to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

(continued from last page)

equals

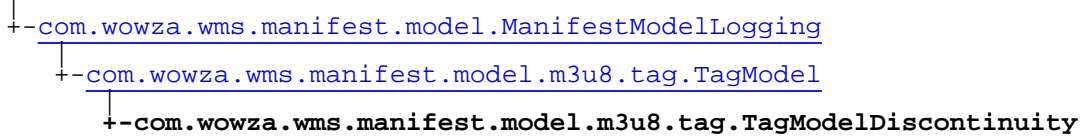
```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelDiscontinuity

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class TagModelDiscontinuity
extends TagModel
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelDiscontinuity()
--------	---

Method Summary

boolean	isMediaSegmentTag()
boolean	isValid(Integer version)
String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

TagModelDiscontinuity

```
public TagModelDiscontinuity()
```

Methods

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)
    throws java.io.IOException
```

isMediaSegmentTag

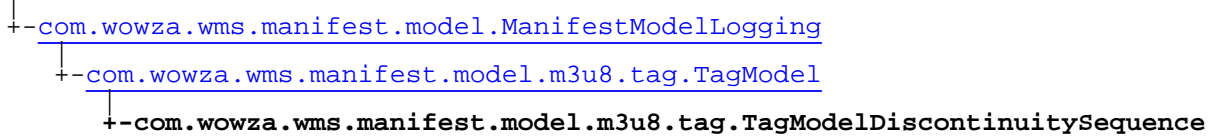
```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelDiscontinuitySequence

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class TagModelDiscontinuitySequence
extends TagModel
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelDiscontinuitySequence()
--------	---

Method Summary

Object	clone()
boolean	equals (Object obj)
Integer	getNumber ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setNumber (Integer number)
String	toString ()
boolean	validForMasterPlaylist ()
boolean	validForMediaPlaylist ()
void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelDiscontinuitySequence

```
public TagModelDiscontinuitySequence()
```

Methods

getNumber

```
public Integer getNumber()
```

Returns:

the number

setNumber

```
public void setNumber(Integer number)
```

Parameters:

number - the number to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

(continued from last page)

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

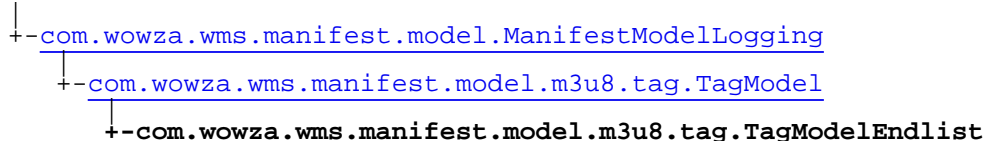
```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelEndlist

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class TagModelEndlist
extends TagModel
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelEndlist()
--------	-----------------------------------

Method Summary

boolean	isMediaSegmentTag()
boolean	isValid(Integer version)
String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

TagModelEndlist

```
public TagModelEndlist()
```

Methods

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)
    throws java.io.IOException
```

isMediaSegmentTag

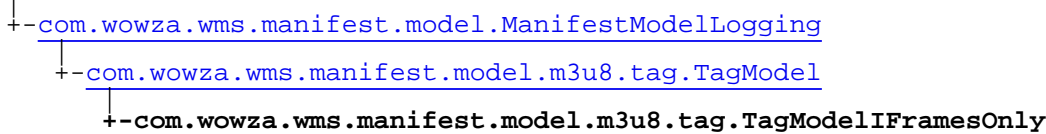
```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelIFramesOnly

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class TagModelIFramesOnly
extends TagModel
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelIFramesOnly()
--------	---------------------------------------

Method Summary

boolean	isMediaSegmentTag()
boolean	isValid(Integer version)
String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

TagModelIFramesOnly

```
public TagModelIFramesOnly()
```

Methods

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)
    throws java.io.IOException
```

isMediaSegmentTag

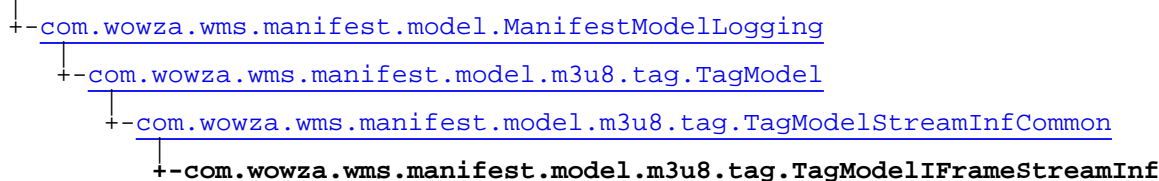
```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelIFrameStreamInf

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class TagModelIFrameStreamInf
extends TagModelStreamInfCommon
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelIFrameStreamInf()
--------	---

Method Summary

boolean	isMediaSegmentTag()
---------	-------------------------------------

boolean	isValid(Integer version)
---------	--

String	toString()
--------	----------------------------

void	write(TagWriter writer)
------	---

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModelStreamInfCommon](#)

[clone](#), [equals](#), [getAvgBandwidth](#), [getBandwidth](#), [getCodecs](#), [getFrameRate](#), [getProgramId](#), [getResolution](#), [getUri](#), [getVideo](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setAvgBandwidth](#), [setBandwidth](#), [setCodecs](#), [setFrameRate](#), [setProgramId](#), [setResolution](#), [setUri](#), [setVideo](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

TagModelIFrameStreamInf

```
public TagModelIFrameStreamInf()
```

Methods

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)
    throws java.io.IOException
```

isMediaSegmentTag

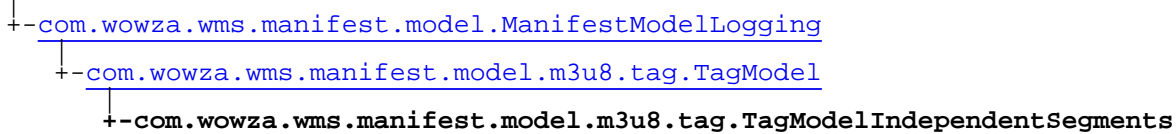
```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelIndependentSegments

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class TagModelIndependentSegments
extends TagModel
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelIndependentSegments()
--------	---

Method Summary

boolean	isMediaSegmentTag()
boolean	isValid(Integer version)
String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

TagModelIndependentSegments

```
public TagModelIndependentSegments()
```

Methods

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)
    throws java.io.IOException
```

isMediaSegmentTag

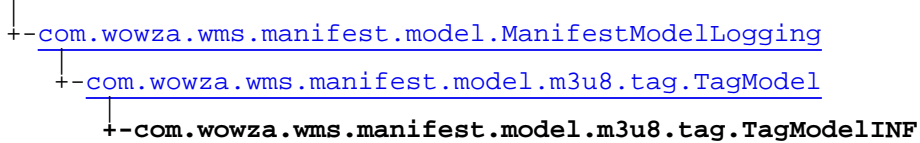
```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```


com.wowza.wms.manifest.model.m3u8.tag Class TagModelINF

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class TagModelINF
extends TagModel
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelINF()
--------	-------------------------------

Method Summary

Object	clone()
boolean	equals(Object obj)
Object	getDuration()
String	getTitle()
int	hashCode()
boolean	isMediaSegmentTag()
boolean	isValid(Integer version)
void	setDuration(Object duration)
void	setTitle(String title)
String	toString()
boolean	validForMasterPlaylist()

boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelINF

```
public TagModelINF()
```

Methods

getDuration

```
public Object getDuration()
```

Returns:

the duration

setDuration

```
public void setDuration(Object duration)
```

Parameters:

duration - the duration to set as either a Float or Integer object

getTitle

```
public String getTitle()
```

(continued from last page)

Returns:

the title

setTitle

```
public void setTitle(String title)
```

Parameters:

title - the title to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

(continued from last page)

equals

```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelKey

```

java.lang.Object
  |
  +- com.wowza.wms.manifest.model.ManifestModelLogging
     |
     +- com.wowza.wms.manifest.model.m3u8.tag.TagModel
        |
        +- com.wowza.wms.manifest.model.m3u8.tag.TagModelKey
  
```

All Implemented Interfaces:
Cloneable

```

public class TagModelKey
extends TagModel
  
```

Nested Class Summary

class	TagModelKey.Method TagModelKey.Method
-------	--

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelKey()
--------	-------------------------------

Method Summary

Object	clone()
boolean	equals (Object obj)
String	getIv ()
String	getKeyFormat ()
String	getKeyFormatVersions ()
TagModelKey.Method	getMethod ()
String	getUri ()
int	hashCode ()
boolean	isMediaSegmentTag ()

boolean	isValid (Integer version)
void	setIv (String iv)
void	setKeyFormat (String keyFormat)
void	setKeyFormatVersions (String keyFormatVersions)
void	setMethod (TagModelKey.Method method)
void	setUri (String uri)
String	toString ()
boolean	validForMasterPlaylist ()
boolean	validForMediaPlaylist ()
void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelKey

```
public TagModelKey()
```

Methods

(continued from last page)

getMethod

```
public TagModelKey.Method getMethod()
```

Returns:

the method

setMethod

```
public void setMethod(TagModelKey.Method method)
```

Parameters:

method - the method to set

getUri

```
public String getUri()
```

Returns:

the uri

setUri

```
public void setUri(String uri)
```

Parameters:

uri - the uri to set

getIv

```
public String getIv()
```

Returns:

the iv

setIv

```
public void setIv(String iv)
```

Parameters:

iv - the iv to set

getKeyFormat

```
public String getKeyFormat()
```

(continued from last page)

Returns:

the keyFormat

setKeyFormat

```
public void setKeyFormat(String keyFormat)
```

Parameters:

keyFormat - the keyFormat to set

getKeyFormatVersions

```
public String getKeyFormatVersions()
```

Returns:

the keyFormatVersions

setKeyFormatVersions

```
public void setKeyFormatVersions(String keyFormatVersions)
```

Parameters:

keyFormatVersions - the keyFormatVersions to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

(continued from last page)

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelKey.Method

java.lang.Object

└- java.lang.Enum

└- com.wowza.wms.manifest.model.m3u8.tag.TagModelKey.Method

All Implemented Interfaces:

java.io.Serializable, Comparable

public static final class **TagModelKey.Method**
extends Enum

name: method format: enumerated-string status: REQUIRED

Field Summary

public static final	AES_128
public static final	NONE
public static final	SAMPLE_AES

Method Summary

static TagModelKey.Method	fromString (String text)
String	toString ()
static TagModelKey.Method	valueOf (String name)
static TagModelKey.Method[]	values ()

Methods inherited from class java.lang.Enum

clone, compareTo, equals, finalize, getDeclaringClass, hashCode, name, ordinal, toString, valueOf

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.lang.Comparable

compareTo

(continued from last page)

Fields

NONE

```
public static final com.wowza.wms.manifest.model.m3u8.tag.TagModelKey.Method NONE
```

AES_128

```
public static final com.wowza.wms.manifest.model.m3u8.tag.TagModelKey.Method AES_128
```

SAMPLE_AES

```
public static final com.wowza.wms.manifest.model.m3u8.tag.TagModelKey.Method  
SAMPLE_AES
```

Methods

values

```
public static TagModelKey.Method[] values()
```

valueOf

```
public static TagModelKey.Method valueOf(String name)
```

toString

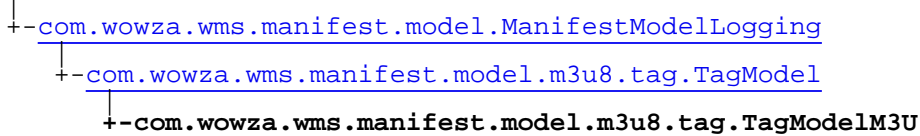
```
public String toString()
```

fromString

```
public static TagModelKey.Method fromString(String text)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelM3U

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class TagModelM3U
extends TagModel
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelM3U()
--------	-------------------------------

Method Summary

boolean	isMediaSegmentTag()
boolean	isValid(Integer version)
String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

TagModelM3U

```
public TagModelM3U()
```

Methods

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)
    throws java.io.IOException
```

isMediaSegmentTag

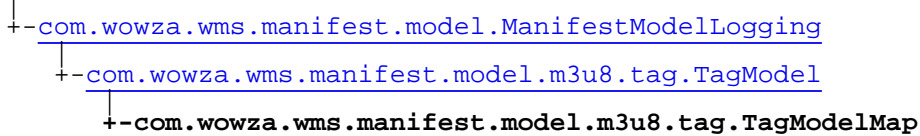
```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelMap

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class TagModelMap
extends TagModel
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelMap()
--------	-------------------------------

Method Summary

Object	clone()
boolean	equals (Object obj)
Integer	getByteRangeLength ()
Integer	getByteRangeOffset ()
String	getUri ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setByteRangeLength (Integer byteRangeLength)
void	setByteRangeOffset (Integer byteRangeOffset)
void	setUri (String uri)

String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelMap

```
public TagModelMap()
```

Methods

getUri

```
public String getUri()
```

Returns:

the uri

setUri

```
public void setUri(String uri)
```

Parameters:

uri - the uri to set

getBytesRangeLength

```
public Integer getBytesRangeLength()
```

Returns:

the bytesRangeLength

setBytesRangeLength

```
public void setBytesRangeLength(Integer bytesRangeLength)
```

Parameters:

bytesRangeLength - the bytesRangeLength to set

getBytesRangeOffset

```
public Integer getBytesRangeOffset()
```

Returns:

the bytesRangeOffset

setBytesRangeOffset

```
public void setBytesRangeOffset(Integer bytesRangeOffset)
```

Parameters:

bytesRangeOffset - the bytesRangeOffset to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

(continued from last page)

write

```
public void write(TagWriter writer)
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

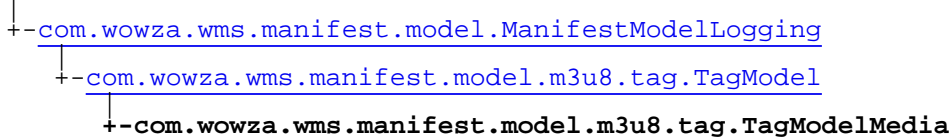
```
public boolean equals(Object obj)
```

clone

```
public Object clone()
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelMedia

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class TagModelMedia
extends TagModel
```

Nested Class Summary

class	TagModelMedia.Type TagModelMedia.Type
-------	--

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelMedia()
--------	---------------------------------

Method Summary

Object	clone()
boolean	equals(Object obj)
String	getAssociatedLanguage()
Boolean	getAutoselect()
String	getCharacteristics()
Boolean	getDefaultRendition()
Boolean	getForced()
String	getGroupId()
String	getInstreamId()

String	getLanguage()
String	getName()
TagModelMedia.Type	getType()
java.net.URI	getUri()
int	hashCode()
boolean	isMediaSegmentTag()
boolean	isValid(Integer version)
void	setAssociatedLanguage(String associatedLanguage)
void	setAutoselect(Boolean autoselect)
void	setCharacteristics(String characteristics)
void	setDefaultRendition(Boolean defaultRendition)
void	setForced(Boolean forced)
void	setGroupId(String groupId)
void	setInstreamId(String instreamId)
void	setLanguage(String language)
void	setName(String name)
void	setType(TagModelMedia.Type type)
void	setUri(java.net.URI uri)
String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelMedia

```
public TagModelMedia()
```

Methods

getType

```
public TagModelMedia.Type getType()
```

Returns:

the type

setType

```
public void setType(TagModelMedia.Type type)
```

Parameters:

type - the type to set

getGroupId

```
public String getGroupId()
```

Returns:

the groupId

(continued from last page)

setGroupId

```
public void setGroupId(String groupId)
```

Parameters:

groupId - the groupId to set

getName

```
public String getName()
```

Returns:

the name

setName

```
public void setName(String name)
```

Parameters:

name - the name to set

getInstreamId

```
public String getInstreamId()
```

Returns:

the instreamId

setInstreamId

```
public void setInstreamId(String instreamId)
```

Parameters:

instreamId - the instreamId to set

getUri

```
public java.net.URI getUri()
```

Returns:

the uri

setUri

```
public void setUri(java.net.URI uri)
```

(continued from last page)

Parameters:

uri - the uri to set

getLanguage

```
public String getLanguage()
```

Returns:

the language

setLanguage

```
public void setLanguage(String language)
```

Parameters:

language - the language to set

getAssociatedLanguage

```
public String getAssociatedLanguage()
```

Returns:

the associatedLanguage

setAssociatedLanguage

```
public void setAssociatedLanguage(String associatedLanguage)
```

Parameters:

associatedLanguage - the associatedLanguage to set

getDefaultRendition

```
public Boolean getDefaultRendition()
```

Returns:

the defaultRendition

setDefaultRendition

```
public void setDefaultRendition(Boolean defaultRendition)
```

Parameters:

defaultRendition - the defaultRendition to set

getAutoselect

```
public Boolean getAutoselect()
```

Returns:

the autoselect

setAutoselect

```
public void setAutoselect(Boolean autoselect)
```

Parameters:

autoselect - the autoselect to set

getForced

```
public Boolean getForced()
```

Returns:

the forced

setForced

```
public void setForced(Boolean forced)
```

Parameters:

forced - the forced to set

getCharacteristics

```
public String getCharacteristics()
```

Returns:

the characteristics

setCharacteristics

```
public void setCharacteristics(String characteristics)
```

Parameters:

characteristics - the characteristics to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

(continued from last page)

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelMedia.Type

java.lang.Object

└- java.lang.Enum

└- com.wowza.wms.manifest.model.m3u8.tag.TagModelMedia.Type

All Implemented Interfaces:

java.io.Serializable, Comparable

public static final class **TagModelMedia.Type**
extends Enum

name: type format: enumerated-string status: REQUIRED

Field Summary

public static final	AUDIO
public static final	CLOSED_CAPTIONS
public static final	SUBTITLES
public static final	VIDEO

Method Summary

static TagModelMedia.Type	fromString (String text)
String	toString ()
static TagModelMedia.Type	valueOf (String name)
static TagModelMedia.Type[]	values ()

Methods inherited from class java.lang.Enum

clone, compareTo, equals, finalize, getDeclaringClass, hashCode, name, ordinal, toString, valueOf

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.lang.Comparable

compareTo

Fields

AUDIO

```
public static final com.wowza.wms.manifest.model.m3u8.tag.TagModelMedia.Type AUDIO
```

VIDEO

```
public static final com.wowza.wms.manifest.model.m3u8.tag.TagModelMedia.Type VIDEO
```

SUBTITLES

```
public static final com.wowza.wms.manifest.model.m3u8.tag.TagModelMedia.Type SUBTITLES
```

CLOSED_CAPTIONS

```
public static final com.wowza.wms.manifest.model.m3u8.tag.TagModelMedia.Type  
CLOSED_CAPTIONS
```

Methods

values

```
public static TagModelMedia.Type[] values()
```

valueOf

```
public static TagModelMedia.Type valueOf(String name)
```

toString

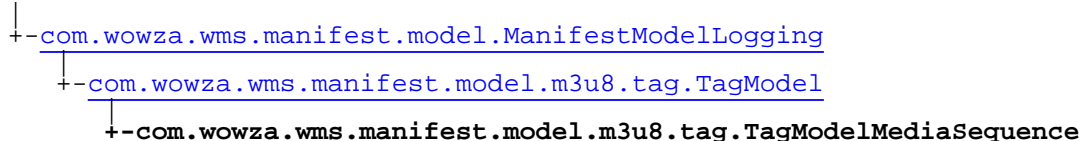
```
public String toString()
```

fromString

```
public static TagModelMedia.Type fromString(String text)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelMediaSequence

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class TagModelMediaSequence
extends TagModel
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelMediaSequence()
--------	---

Method Summary

Object	clone()
boolean	equals(Object obj)
Integer	getNumber()
int	hashCode()
boolean	isMediaSegmentTag()
boolean	isValid(Integer version)
void	setNumber(Integer number)
String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelMediaSequence

```
public TagModelMediaSequence()
```

Methods

getNumber

```
public Integer getNumber()
```

Returns:

the number

setNumber

```
public void setNumber(Integer number)
```

Parameters:

number - the number to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

(continued from last page)

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelPlaylistType

```

java.lang.Object
  |
  +- com.wowza.wms.manifest.model.ManifestModelLogging
     |
     +- com.wowza.wms.manifest.model.m3u8.tag.TagModel
        |
        +- com.wowza.wms.manifest.model.m3u8.tag.TagModelPlaylistType
  
```

All Implemented Interfaces:
Cloneable

```

public class TagModelPlaylistType
extends TagModel
  
```

Nested Class Summary

class	TagModelPlaylistType.PlaylistType TagModelPlaylistType.PlaylistType
-------	--

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelPlaylistType()
--------	--

Method Summary

Object	clone()
boolean	equals (Object obj)
TagModelPlaylistType.PlaylistType	getPlaylistType()
int	hashCode()
boolean	isMediaSegmentTag()
boolean	isValid (Integer version)
void	setPlaylistType (TagModelPlaylistType.PlaylistType playlistType)
String	toString()
boolean	validForMasterPlaylist()

boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelPlaylistType

```
public TagModelPlaylistType()
```

Methods

getPlaylistType

```
public TagModelPlaylistType.PlaylistType getPlaylistType()
```

Returns:

the playlistType

setPlaylistType

```
public void setPlaylistType(TagModelPlaylistType.PlaylistType playlistType)
```

Parameters:

playlistType - the playlistType to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

(continued from last page)

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelPlaylistType.PlaylistType

java.lang.Object

└- java.lang.Enum

└- com.wowza.wms.manifest.model.m3u8.tag.TagModelPlaylistType.PlaylistType

All Implemented Interfaces:

java.io.Serializable, Comparable

public static final class **TagModelPlaylistType.PlaylistType**
extends Enum

Field Summary

public static final	EVENT
public static final	VOD

Method Summary

static TagModelPlaylistType. PlaylistType	fromString (String text)
String	toString ()
static TagModelPlaylistType. PlaylistType	valueOf (String name)
static TagModelPlaylistType. PlaylistType[]	values ()

Methods inherited from class java.lang.Enum

clone, compareTo, equals, finalize, getDeclaringClass, hashCode, name, ordinal, toString, valueOf

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.lang.Comparable

compareTo

Fields

(continued from last page)

VOD

```
public static final
com.wowza.wms.manifest.model.m3u8.tag.TagModelPlaylistType.PlaylistType VOD
```

EVENT

```
public static final
com.wowza.wms.manifest.model.m3u8.tag.TagModelPlaylistType.PlaylistType EVENT
```

Methods

values

```
public static TagModelPlaylistType.PlaylistType\[\] values()
```

valueOf

```
public static TagModelPlaylistType.PlaylistType valueOf(String name)
```

toString

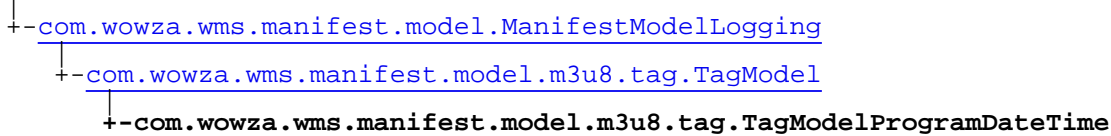
```
public String toString()
```

fromString

```
public static TagModelPlaylistType.PlaylistType fromString(String text)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelProgramDateTime

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class TagModelProgramDateTime
extends TagModel
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelProgramDateTime()
--------	---

Method Summary

Object	clone()
boolean	equals(Object obj)
String	getDateTIme()
int	hashCode()
boolean	isMediaSegmentTag()
boolean	isValid(Integer version)
void	setDateTIme(String dateTime)
String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelProgramDateTime

```
public TagModelProgramDateTime()
```

Methods

getDateTime

```
public String getDateTime()
```

Returns:

the dateTime

setDateTime

```
public void setDateTime(String dateTime)
```

Parameters:

dateTime - the dateTime to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

(continued from last page)

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

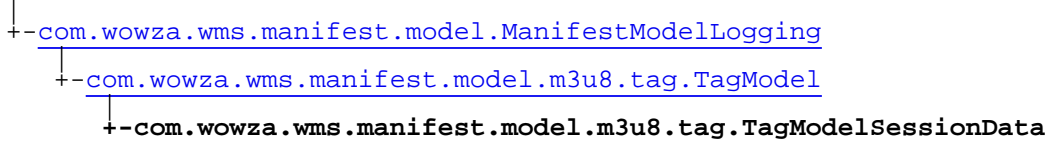
```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelSessionData

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class TagModelSessionData
extends TagModel
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelSessionData()
--------	---------------------------------------

Method Summary

Object	clone()
boolean	equals (Object obj)
String	getDataId()
String	getLanguage()
String	getUri()
String	getValue()
int	hashCode()
boolean	isMediaSegmentTag()
boolean	isValid (Integer version)
void	setDataId (String dataId)
void	setLanguage (String language)

void	setUri (String uri)
void	setValue (String value)
String	toString ()
boolean	validForMasterPlaylist ()
boolean	validForMediaPlaylist ()
void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelSessionData

```
public TagModelSessionData()
```

Methods

getDataId

```
public String getDataId()
```

Returns:

the dataId

(continued from last page)

setDataId

```
public void setDataId(String dataId)
```

Parameters:

dataId - the dataId to set

getValue

```
public String getValue()
```

Returns:

the value

setValue

```
public void setValue(String value)
```

Parameters:

value - the value to set

getUri

```
public String getUri()
```

Returns:

the uri

setUri

```
public void setUri(String uri)
```

Parameters:

uri - the uri to set

getLanguage

```
public String getLanguage()
```

Returns:

the language

setLanguage

```
public void setLanguage(String language)
```

(continued from last page)

Parameters:

language - the language to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

(continued from last page)

com.wowza.wms.manifest.model.m3u8.tag Class TagModelSessionKey

```

java.lang.Object
├── com.wowza.wms.manifest.model.ManifestModelLogging
│   ├── com.wowza.wms.manifest.model.m3u8.tag.TagModel
│       └── com.wowza.wms.manifest.model.m3u8.tag.TagModelSessionKey

```

All Implemented Interfaces:
Cloneable

```

public class TagModelSessionKey
extends TagModel

```

Nested Class Summary

class	TagModelSessionKey.Method TagModelSessionKey.Method
-------	--

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelSessionKey()
--------	--------------------------------------

Method Summary

Object	clone()
boolean	equals (Object obj)
String	getIv ()
String	getKeyFormat ()
String	getKeyFormatVersions ()
TagModelSessionKey.Me thod	getMethod ()
String	getUri ()
int	hashCode ()
boolean	isMediaSegmentTag ()

boolean	isValid (Integer version)
void	setIv (String iv)
void	setKeyFormat (String keyFormat)
void	setKeyFormatVersions (String keyFormatVersions)
void	setMethod (TagModelSessionKey.Method method)
void	setUri (String uri)
String	toString ()
boolean	validForMasterPlaylist ()
boolean	validForMediaPlaylist ()
void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelSessionKey

```
public TagModelSessionKey()
```

Methods

(continued from last page)

getMethod

```
public TagModelSessionKey.Method getMethod()
```

Returns:

the method

setMethod

```
public void setMethod(TagModelSessionKey.Method method)
```

Parameters:

method - the method to set

getUri

```
public String getUri()
```

Returns:

the uri

setUri

```
public void setUri(String uri)
```

Parameters:

uri - the uri to set

getIv

```
public String getIv()
```

Returns:

the iv

setIv

```
public void setIv(String iv)
```

Parameters:

iv - the iv to set

getKeyFormat

```
public String getKeyFormat()
```

(continued from last page)

Returns:

the keyFormat

setKeyFormat

```
public void setKeyFormat(String keyFormat)
```

Parameters:

keyFormat - the keyFormat to set

getKeyFormatVersions

```
public String getKeyFormatVersions()
```

Returns:

the keyFormatVersions

setKeyFormatVersions

```
public void setKeyFormatVersions(String keyFormatVersions)
```

Parameters:

keyFormatVersions - the keyFormatVersions to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

(continued from last page)

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelSessionKey.Method

java.lang.Object

└- java.lang.Enum

└- com.wowza.wms.manifest.model.m3u8.tag.TagModelSessionKey.Method

All Implemented Interfaces:

java.io.Serializable, Comparable

public static final class **TagModelSessionKey.Method**
extends Enum

name: method format: enumerated-string status: REQUIRED

Field Summary

public static final	AES_128
public static final	SAMPLE_AES

Method Summary

static TagModelSessionKey.Method	fromString (String text)
String	toString ()
static TagModelSessionKey.Method	valueOf (String name)
static TagModelSessionKey.Method	values ()

Methods inherited from class java.lang.Enum

clone, compareTo, equals, finalize, getDeclaringClass, hashCode, name, ordinal, toString, valueOf

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.lang.Comparable

compareTo

(continued from last page)

Fields

AES_128

```
public static final com.wowza.wms.manifest.model.m3u8.tag.TagModelSessionKey.Method  
AES_128
```

SAMPLE_AES

```
public static final com.wowza.wms.manifest.model.m3u8.tag.TagModelSessionKey.Method  
SAMPLE_AES
```

Methods

values

```
public static TagModelSessionKey.Method\[\] values()
```

valueOf

```
public static TagModelSessionKey.Method valueOf(String name)
```

toString

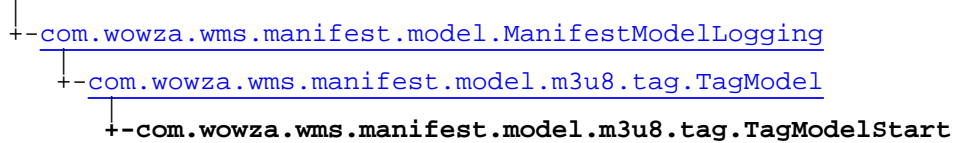
```
public String toString()
```

fromString

```
public static TagModelSessionKey.Method fromString(String text)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelStart

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class TagModelStart
extends TagModel
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelStart()
--------	---------------------------------

Method Summary

Object	clone()
boolean	equals (Object obj)
Boolean	getPrecise ()
Float	getTimeOffset ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setPrecise (Boolean precise)
void	setTimeOffset (Float timeOffset)
String	toString ()
boolean	validForMasterPlaylist ()

boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelStart

```
public TagModelStart()
```

Methods

getTimeOffset

```
public Float getTimeOffset()
```

Returns:

the timeOffset

setTimeOffset

```
public void setTimeOffset(Float timeOffset)
```

Parameters:

timeOffset - the timeOffset to set

getPrecise

```
public Boolean getPrecise()
```

(continued from last page)

Returns:

the precise

setPrecise

```
public void setPrecise(Boolean precise)
```

Parameters:

precise - the precise to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

(continued from last page)

equals

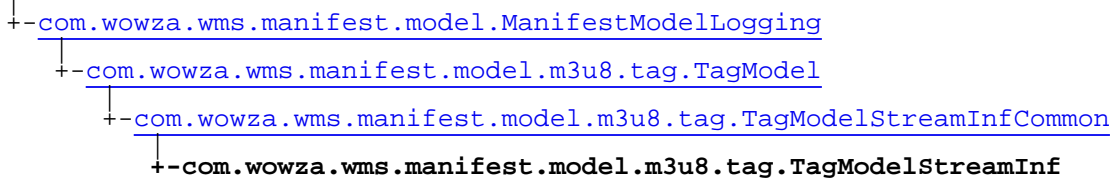
```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelStreamInf

java.lang.Object



All Implemented Interfaces:

Cloneable

```

public class TagModelStreamInf
extends TagModelStreamInfCommon
  
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelStreamInf()
--------	-------------------------------------

Method Summary

Object	clone()
boolean	equals (Object obj)
String	getAudio ()
String	getClosedCaptions ()
String	getSubtitles ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setAudio (String audio)
void	setClosedCaptions (String closedCaptions)
void	setSubtitles (String subtitles)

String	toString()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModelStreamInfCommon](#)

[clone](#), [equals](#), [getAvgBandwidth](#), [getBandwidth](#), [getCodecs](#), [getFrameRate](#), [getProgramId](#), [getResolution](#), [getUri](#), [getVideo](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setAvgBandwidth](#), [setBandwidth](#), [setCodecs](#), [setFrameRate](#), [setProgramId](#), [setResolution](#), [setUri](#), [setVideo](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelStreamInf

```
public TagModelStreamInf()
```

Methods

getAudio

```
public String getAudio()
```

Returns:

the audio

setAudio

```
public void setAudio(String audio)
```

(continued from last page)

Parameters:

audio - the audio to set

getSubtitles

```
public String getSubtitles()
```

Returns:

the subtitles

setSubtitles

```
public void setSubtitles(String subtitles)
```

Parameters:

subtitles - the subtitles to set

getClosedCaptions

```
public String getClosedCaptions()
```

Returns:

the closedCaptions

setClosedCaptions

```
public void setClosedCaptions(String closedCaptions)
```

Parameters:

closedCaptions - the closedCaptions to set

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

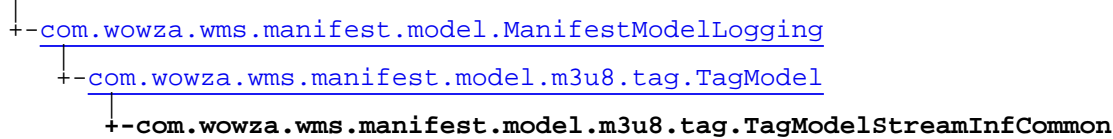
```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelStreamInfCommon

java.lang.Object



All Implemented Interfaces:

Cloneable

Direct Known Subclasses:

[TagModelStreamInf](#), [TagModelIFrameStreamInf](#)

public abstract class **TagModelStreamInfCommon**

extends [TagModel](#)

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

protected	TagModelStreamInfCommon (String tagName)
-----------	--

Method Summary

Object	clone()
boolean	equals (Object obj)
Integer	getAvgBandwidth()
Integer	getBandwidth()
String	getCodecs()
Float	getFrameRate()
Integer	getProgramId()
String	getResolution()
java.net.URI	getUri()
String	getVideo()

int	hashCode()
boolean	isMediaSegmentTag()
boolean	isValid(Integer version)
void	setAvgBandwidth(Integer avgBandwidth)
void	setBandwidth(Integer bandwidth)
void	setCodecs(String codecs)
void	setFrameRate(Float frameRate)
void	setProgramId(Integer programId)
void	setResolution(String resolution)
void	setUri(java.net.URI uri)
void	setVideo(String video)
void	toString(StringBuilder sb)
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write(TagWriter writer, StringBuffer buf)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

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Constructors

TagModelStreamInfCommon

```
protected TagModelStreamInfCommon(String tagName)
```

Methods

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

getBandwidth

```
public Integer getBandwidth()
```

Returns:

the bandwidth

setBandwidth

```
public void setBandwidth(Integer bandwidth)
```

Parameters:

bandwidth - the bandwidth to set

getAvgBandwidth

```
public Integer getAvgBandwidth()
```

Returns:

the avgBandwidth

setAvgBandwidth

```
public void setAvgBandwidth(Integer avgBandwidth)
```

Parameters:

avgBandwidth - the avgBandwidth to set

getCodecs

```
public String getCodecs()
```

Returns:

the codecs

setCodecs

```
public void setCodecs(String codecs)
```

Parameters:

codecs - the codecs to set

getResolution

```
public String getResolution()
```

Returns:

the resolution

setResolution

```
public void setResolution(String resolution)
```

Parameters:

resolution - the resolution to set

getFrameRate

```
public Float getFrameRate()
```

Returns:

the frameRate

setFrameRate

```
public void setFrameRate(Float frameRate)
```

Parameters:

frameRate - the frameRate to set

getVideo

```
public String getVideo()
```

(continued from last page)

Returns:

the video

setVideo

```
public void setVideo(String video)
```

Parameters:

video - the video to set

getProgramId

```
public Integer getProgramId()
```

Returns:

the programId

setProgramId

```
public void setProgramId(Integer programId)
```

Parameters:

programId - the programId to set

getUri

```
public java.net.URI getUri()
```

Returns:

the uri

setUri

```
public void setUri(java.net.URI uri)
```

Parameters:

uri - the uri to set

toString

```
protected void toString(StringBuilder sb)
```

(continued from last page)

write

```
public void write(TagWriter writer,  
                 StringBuffer buf)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

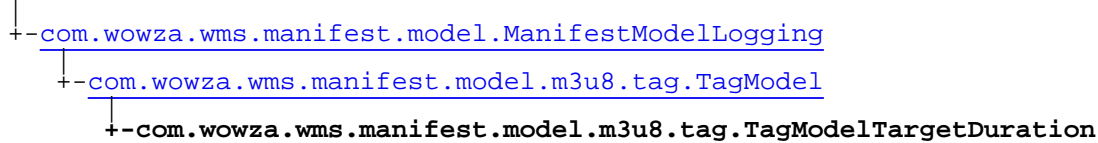
```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelTargetDuration

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class TagModelTargetDuration
extends TagModel
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelTargetDuration()
--------	--

Method Summary

Object	clone()
boolean	equals (Object obj)
Integer	getTargetDuration()
int	hashCode()
boolean	isMediaSegmentTag()
boolean	isValid (Integer version)
void	setTargetDuration (Integer targetDuration)
String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelTargetDuration

```
public TagModelTargetDuration()
```

Methods

getTargetDuration

```
public Integer getTargetDuration()
```

Returns:

the targetDuration

setTargetDuration

```
public void setTargetDuration(Integer targetDuration)
```

Parameters:

targetDuration - the targetDuration to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

(continued from last page)

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

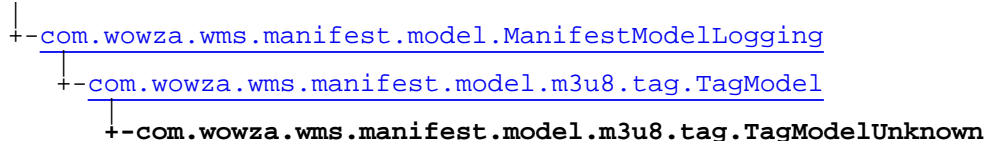
```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelUnknown

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class TagModelUnknown
extends TagModel
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelUnknown()
--------	-----------------------------------

Method Summary

Object	clone()
boolean	equals (Object obj)
String	getValue ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setTag (String tag)
void	setValue (String value)
String	toString ()
boolean	validForMasterPlaylist ()
boolean	validForMediaPlaylist ()

```
void write(TagWriter writer)
```

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelUnknown

```
public TagModelUnknown()
```

Methods

setTag

```
public void setTag(String tag)
```

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)
    throws java.io.IOException
```

setValue

```
public void setValue(String value)
```

getValue

```
public String getValue()
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

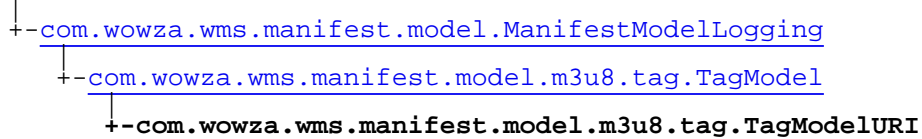
```
public boolean equals(Object obj)
```

clone

```
public Object clone()
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelURI

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class TagModelURI
extends TagModel
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelURI()
--------	-------------------------------

Method Summary

Object	clone()
boolean	equals(Object obj)
java.net.URI	getUri()
int	hashCode()
boolean	isMediaSegmentTag()
boolean	isValid(Integer version)
void	setUri(java.net.URI uri)
String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelURI

```
public TagModelURI()
```

Methods

getUri

```
public java.net.URI getUri()
```

Returns:

the uri

setUri

```
public void setUri(java.net.URI uri)
```

Parameters:

uri - the uri to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

(continued from last page)

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

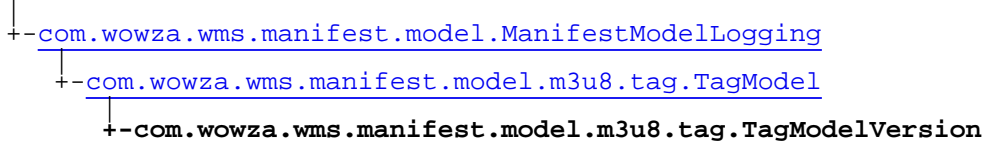
```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelVersion

java.lang.Object



All Implemented Interfaces:

Cloneable

```
public class TagModelVersion
extends TagModel
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelVersion()
--------	-----------------------------------

Method Summary

Object	clone()
boolean	equals (Object obj)
Integer	getVersion()
int	hashCode()
boolean	isMediaSegmentTag()
boolean	isValid (Integer version)
void	setVersion (Integer version)
String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelVersion

```
public TagModelVersion()
```

Methods

getVersion

```
public Integer getVersion()
```

Returns:

the version

setVersion

```
public void setVersion(Integer version)
```

Parameters:

version - the version to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

(continued from last page)

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

clone

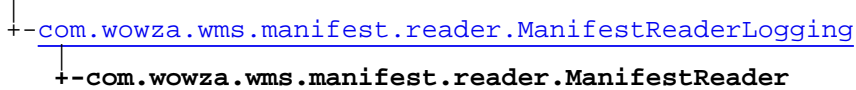
```
public Object clone()  
    throws CloneNotSupportedException
```

Package

com.wowza.wms.manifest.reader

com.wowza.wms.manifest.reader Class ManifestReader

java.lang.Object



Direct Known Subclasses:

[PlaylistReader](#)

public abstract class **ManifestReader**
extends [ManifestReaderLogging](#)

Abstract Manifest Reader base class Provides implementations that are common to all Manifest readers

Constructor Summary

public	ManifestReader()
--------	----------------------------------

Methods inherited from class [com.wowza.wms.manifest.reader.ManifestReaderLogging](#)

[getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ManifestReader

public **ManifestReader**()

com.wowza.wms.manifest.reader Class ManifestReaderLogging

java.lang.Object

└-com.wowza.wms.manifest.reader.ManifestReaderLogging

Direct Known Subclasses:

[ManifestReader](#)

public abstract class **ManifestReaderLogging**
extends Object

This class is the base of all the manifest readers providing a standardized mechanism of logging

Constructor Summary

public	ManifestReaderLogging() Constructs an empty Manifest Reader
--------	--

Method Summary

abstract String	getContextStr() Get the context string associated with the Model to include with the log statements
boolean	getDebugLog() Get the current setting for debug logging
void	logDebug(String methodName, String log) log information conditionally based on debug setting using the info level of the logger
void	logError(String methodName, String log) log a string at the error setting
void	logError(String methodName, String log, Throwable e) log a string and a throwable information at the error setting
void	logError(String methodName, Throwable e) log a throwables information at the error setting
void	logInfo(String methodName, String log) Log a string at the info setting
void	logWarn(String methodName, String log) log a string at the warn setting
boolean	setDebugLog(boolean debugLog) Enable/disable debug logging.
void	setUseSystemOut(boolean useSystemOut) specify whether to log using System.out rather than the default (log4j)
boolean	usingSystemOut() Get the setting controlling the debug output to System.out (vs log4j)

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Constructors

ManifestReaderLogging

```
public ManifestReaderLogging()
```

Constructs an empty Manifest Reader

Methods

setDebugLog

```
public boolean setDebugLog(boolean debugLog)
```

Enable/disable debug logging.

Parameters:

debugLog

Returns:

boolean value of the debug log setting before applying the new setting

getDebugLog

```
public boolean getDebugLog()
```

Get the current setting for debug logging

Returns:

true debug logging is enabled

setUseSystemOut

```
public void setUseSystemOut(boolean useSystemOut)
```

specify whether to log using System.out rather than the default (log4j)

Parameters:

useSystemOut

usingSystemOut

```
public boolean usingSystemOut()
```

Get the setting controlling the debug output to System.out (vs log4j)

Returns:

true if using System.out for logging

(continued from last page)

logDebug

```
public void logDebug(String methodName,  
                    String log)
```

log information conditionally based on debug setting using the info level of the logger

Parameters:

methodName -- method name to include in the log statement
log -- the string to log

logInfo

```
public void logInfo(String methodName,  
                   String log)
```

Log a string at the info setting

Parameters:

methodName -- method name to include in the log statement
log -- the string to log

logWarn

```
public void logWarn(String methodName,  
                   String log)
```

log a string at the warn setting

Parameters:

methodName -- method name to include in the log statement
log -- the string to log

logError

```
public void logError(String methodName,  
                   String log)
```

log a string at the error setting

Parameters:

methodName -- method name to include in the log statement
log -- the string to log

logError

```
public void logError(String methodName,  
                   String log,  
                   Throwable e)
```

log a string and a throwable information at the error setting

Parameters:

methodName -- method name to include in the log statement
log -- the string to log
e -- the throwable exception to log the information about

(continued from last page)

logError

```
public void logError(String methodName,  
                    Throwable e)
```

log a throwables information at the error setting

Parameters:

methodName -- method name to include in the log statement

e -- the throwable exception to log the information about

getContextStr

```
protected abstract String getContextStr()
```

Get the context string associated with the Model to include with the log statements

Returns:

String

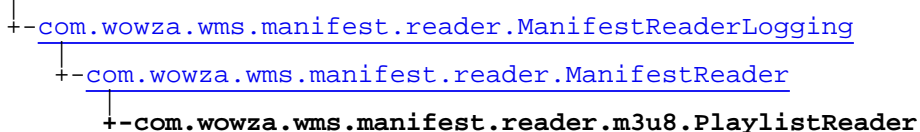
Package

com.wowza.wms.manifest.reader.m3u8

com.wowza.wms.manifest.reader.m3u8

Class PlaylistReader

java.lang.Object



```

public class PlaylistReader
extends ManifestReader
  
```

Provides implementations that are common to all Playlist readers

Constructor Summary

public	PlaylistReader()
--------	----------------------------------

Method Summary

void	addTagReader (ITagReader reader)
String	getContextStr ()
boolean	getDebugTagReaders ()
void	init () Initialize any internals before use
PlaylistModel	parsePlaylist (java.io.BufferedReader reader)
PlaylistModel	parsePlaylist (java.io.InputStream in)
void	setContextStr (String context) Specific to Playlist reader to set the context in which the playlist is reading.
boolean	setDebugTagReaders (boolean enabled)

Methods inherited from class [com.wowza.wms.manifest.reader.ManifestReaderLogging](#)

[getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

(continued from last page)

Constructors

PlaylistReader

```
public PlaylistReader()
```

Methods

init

```
public void init()
```

Initialize any internals before use

getContextStr

```
public String getContextStr()
```

Get the context string associated with the Model to include with the log statements

setContextStr

```
public void setContextStr(String context)
```

Specific to Playlist reader to set the context in which the playlist is reading. Intent would be this would be the Source stream name to associate the log entries with

Parameters:

context - of the reader

parsePlaylist

```
public PlaylistModel parsePlaylist(java.io.InputStream in)
```

parsePlaylist

```
public PlaylistModel parsePlaylist(java.io.BufferedReader reader)  
    throws java.io.IOException
```

addTagReader

```
public void addTagReader(ITagReader reader)
```

setDebugTagReaders

```
public boolean setDebugTagReaders(boolean enabled)
```

(continued from last page)

getDebugTagReaders

```
public boolean getDebugTagReaders()
```

Package

com.wowza.wms.manifest.reader.m3u8.tag

com.wowza.wms.manifest.reader.m3u8.tag Class Attribute

java.lang.Object

└-com.wowza.wms.manifest.reader.m3u8.tag.Attribute

All Implemented Interfaces:

Cloneable

```
public class Attribute
extends Object
implements Cloneable
```

Field Summary

public final	name
public final	value

Constructor Summary

public	Attribute (String name, String value)
--------	---

Method Summary

Object	clone ()
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

name

public final java.lang.String **name**

value

public final java.lang.String **value**

Constructors

Attribute

```
public Attribute(String name,  
                 String value)
```

Methods

toString

```
public String toString()
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```


com.wowza.wms.manifest.reader.m3u8.tag Interface ITagReader

All Known Implementing Classes:

[TagReaderVersion](#), [TagReaderUnknown](#), [TagReaderTargetDuration](#), [TagReaderStreamInf](#), [TagReaderStart](#), [TagReaderSessionKey](#), [TagReaderSessionData](#), [TagReaderProgramDateTime](#), [TagReaderPlaylistType](#), [TagReaderMediaSequence](#), [TagReaderMedia](#), [TagReaderMap](#), [TagReaderM3U](#), [TagReaderKey](#), [TagReaderIndependentSegments](#), [TagReaderINF](#), [TagReaderIFramesOnly](#), [TagReaderIFrameStreamInf](#), [TagReaderEndList](#), [TagReaderDiscontinuitySequence](#), [TagReaderDiscontinuity](#), [TagReaderByteRange](#), [TagReaderAllowCache](#)

```
public interface ITagReader
extends
```

Method Summary

String	getContextStr()
boolean	getDebugLogEnabled()
String	getTag()
boolean	getUseSystemOut()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)
void	setContextStr (String contextStr)
boolean	setDebugLogEnabled (boolean enabled)
void	setUseSystemOut (boolean useSystemOut)

Methods

getTag

```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,
    java.io.BufferedReader reader,
    PlaylistModel playlist)
```

setDebugLogEnabled

public boolean **setDebugLogEnabled**(boolean enabled)

getDebugLogEnabled

public boolean **getDebugLogEnabled**()

setUseSystemOut

public void **setUseSystemOut**(boolean useSystemOut)

getUseSystemOut

public boolean **getUseSystemOut**()

setContextStr

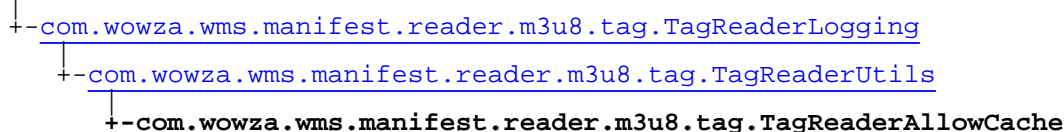
public void **setContextStr**(String contextStr)

getContextStr

public String **getContextStr**()

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderAllowCache

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderAllowCache
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderAllowCache()
--------	---------------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderAllowCache

```
public TagReaderAllowCache()
```

Methods

getTag

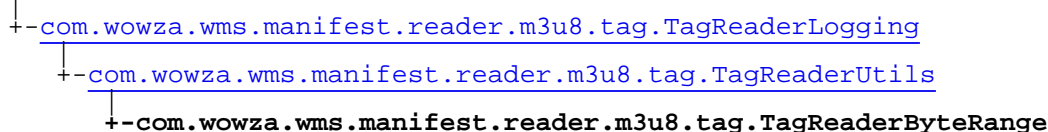
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderByteRange

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderByteRange
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderByteRange()
--------	--------------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderByteRange

```
public TagReaderByteRange()
```

Methods

getTag

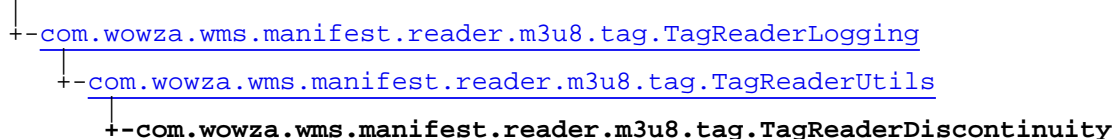
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderDiscontinuity

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderDiscontinuity
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderDiscontinuity()
--------	--

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderDiscontinuity

```
public TagReaderDiscontinuity()
```

Methods

getTag

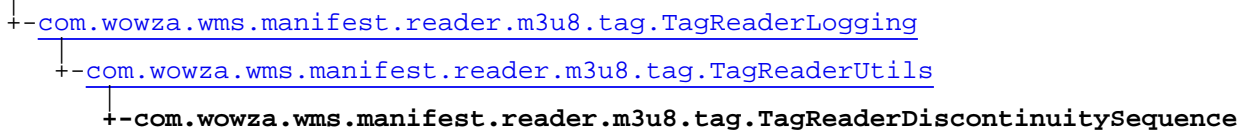
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```


com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderDiscontinuitySequence

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderDiscontinuitySequence
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderDiscontinuitySequence()
--------	--

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderDiscontinuitySequence

```
public TagReaderDiscontinuitySequence()
```

Methods

getTag

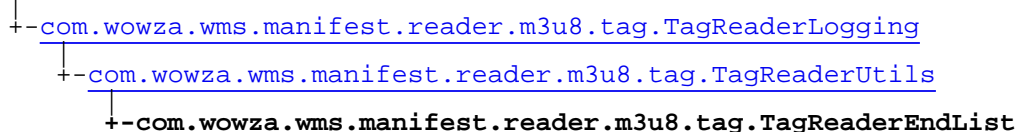
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderEndList

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderEndList
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderEndList()
--------	------------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderEndList

```
public TagReaderEndList()
```

Methods

getTag

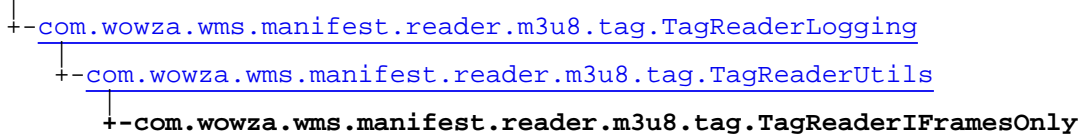
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderIFramesOnly

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderIFramesOnly
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderIFramesOnly()
--------	--

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderIFramesOnly

```
public TagReaderIFramesOnly()
```

Methods

getTag

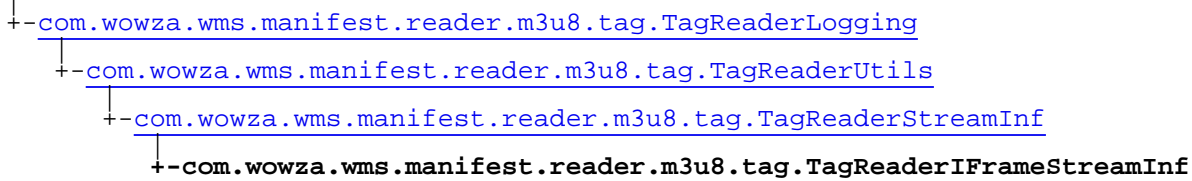
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderIFrameStreamInf

java.lang.Object



All Implemented Interfaces:

[ITagReader](#), [ITagReader](#)

```

public class TagReaderIFrameStreamInf
  extends TagReaderStreamInf
  implements ITagReader, ITagReader
  
```

Fields inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderStreamInf](#)

[skippedAttributes](#)

Constructor Summary

public	TagReaderIFrameStreamInf()
--------	--

Method Summary

String	getTag()
--------	--------------------------

boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)
---------	---

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderStreamInf](#)

[getTag](#), [parseTag](#), [processCommonAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

TagReaderIFrameStreamInf

```
public TagReaderIFrameStreamInf()
```

Methods

getTag

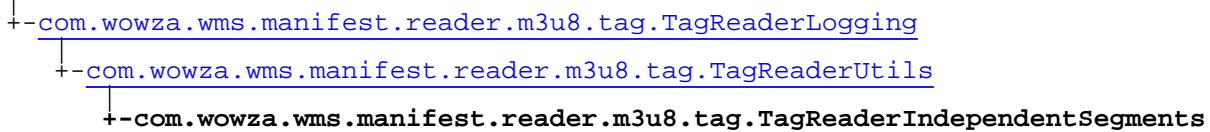
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```


com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderIndependentSegments

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderIndependentSegments
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderIndependentSegments()
--------	--

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderIndependentSegments

```
public TagReaderIndependentSegments()
```

Methods

getTag

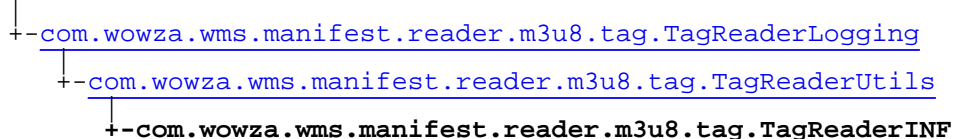
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderINF

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderINF
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderINF()
--------	--------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderINF

```
public TagReaderINF()
```

Methods

getTag

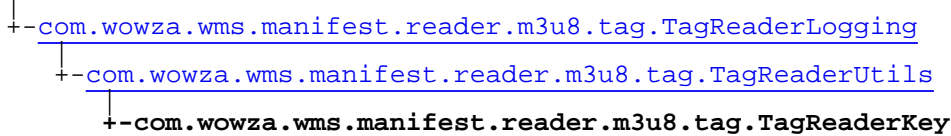
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderKey

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderKey
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderKey()
--------	--------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderKey

```
public TagReaderKey()
```

Methods

getTag

```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderLogging

java.lang.Object

└-com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging

Direct Known Subclasses:

[TagReaderUtils](#)

public abstract class **TagReaderLogging**
extends Object

Constructor Summary

public	TagReaderLogging() Constructs an empty tag parsing logger
--------	--

Method Summary

boolean	getDebugLogEnabled()
boolean	getUseSystemOut() Get the setting controlling the debug output to System.out (vs log4j)
void	logDebug (String context, String tag, String log) log information conditionally based on debug setting using the info level of the logger
void	logError (String context, String tag, String log) log a string at the error setting
void	logError (String context, String tag, String log, Throwable e) log a string and a throwable information at the error setting
void	logError (String context, String tag, Throwable e) log a throwables information at the error setting
void	logInfo (String context, String tag, String log) Log a string at the info setting
void	logWarn (String context, String tag, String log) log a string at the warn setting
boolean	setDebugLogEnabled (boolean debugLog) Enable/disable debug logging.
void	setUseSystemOut (boolean useSystemOut) specify whether to log using System.out rather than the default (log4j)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

TagReaderLogging

```
public TagReaderLogging()
```

Constructs an empty tag parsing logger

Methods

setDebugLogEnabled

```
public boolean setDebugLogEnabled(boolean debugLog)
```

Enable/disable debug logging.

Parameters:

debugLog

Returns:

boolean value of the debug log setting before applying the new setting

getDebugLogEnabled

```
public boolean getDebugLogEnabled()
```

setUseSystemOut

```
public void setUseSystemOut(boolean useSystemOut)
```

specify whether to log using System.out rather than the default (log4j)

Parameters:

useSystemOut

getUseSystemOut

```
public boolean getUseSystemOut()
```

Get the setting controlling the debug output to System.out (vs log4j)

Returns:

true if using System.out for logging

logDebug

```
public void logDebug(String context,  
                    String tag,  
                    String log)
```

log information conditionally based on debug setting using the info level of the logger

Parameters:

log - - the string to log

logInfo

```
public void logInfo(String context,  
                    String tag,  
                    String log)
```

Log a string at the info setting

Parameters:

log -- the string to log

logWarn

```
public void logWarn(String context,  
                    String tag,  
                    String log)
```

log a string at the warn setting

Parameters:

log -- the string to log

logError

```
public void logError(String context,  
                    String tag,  
                    String log)
```

log a string at the error setting

Parameters:

log -- the string to log

logError

```
public void logError(String context,  
                    String tag,  
                    String log,  
                    Throwable e)
```

log a string and a throwable information at the error setting

Parameters:

log -- the string to log

e -- the throwable exception to log the information about

logError

```
public void logError(String context,  
                    String tag,  
                    Throwable e)
```

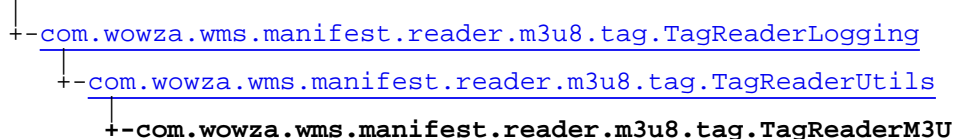
log a throwables information at the error setting

Parameters:

e -- the throwable exception to log the information about

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderM3U

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderM3U
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderM3U()
--------	--------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderM3U

```
public TagReaderM3U()
```

Methods

getTag

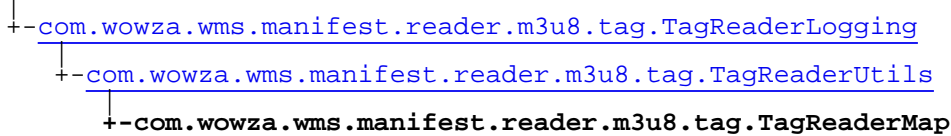
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderMap

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderMap**
 extends [TagReaderUtils](#)
 implements [ITagReader](#)

Constructor Summary

public	TagReaderMap()
--------	--------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderMap

```
public TagReaderMap()
```

Methods

getTag

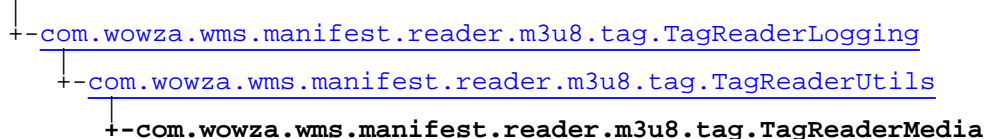
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderMedia

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderMedia**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderMedia()
--------	----------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderMedia

```
public TagReaderMedia()
```

Methods

getTag

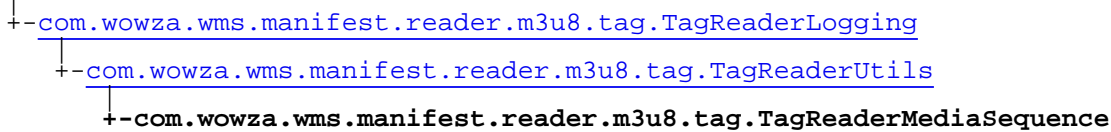
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderMediaSequence

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderMediaSequence
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderMediaSequence()
--------	--

Method Summary

String	getTag()
boolean	parseTag(String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderMediaSequence

```
public TagReaderMediaSequence()
```

Methods

getTag

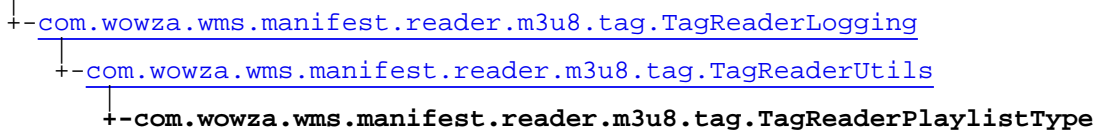
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderPlaylistType

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderPlaylistType
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderPlaylistType()
--------	---

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderPlaylistType

```
public TagReaderPlaylistType()
```

Methods

getTag

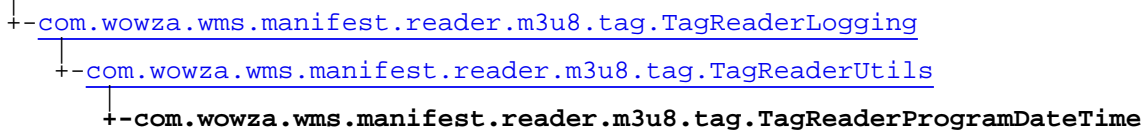
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderProgramDateTime

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderProgramDateTime
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderProgramDateTime()
--------	--

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderProgramDateTime

```
public TagReaderProgramDateTime()
```

Methods

getTag

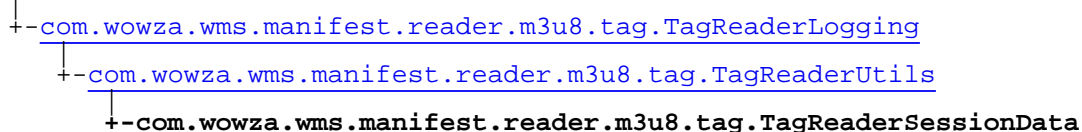
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderSessionData

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderSessionData
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderSessionData()
--------	--

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderSessionData

```
public TagReaderSessionData()
```

Methods

getTag

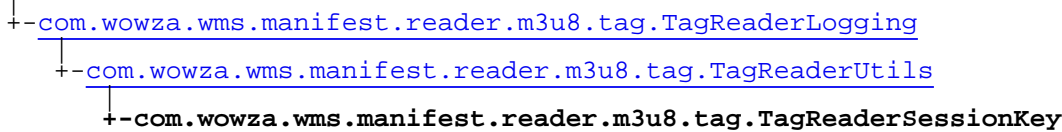
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderSessionKey

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderSessionKey
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderSessionKey()
--------	---------------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderSessionKey

```
public TagReaderSessionKey()
```

Methods

getTag

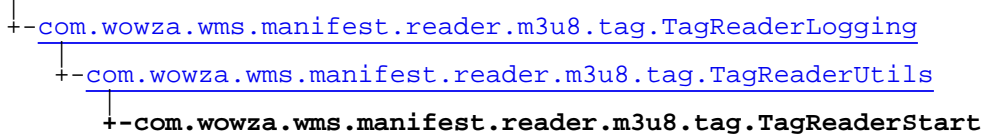
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderStart

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderStart
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderStart()
--------	----------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderStart

```
public TagReaderStart()
```

Methods

getTag

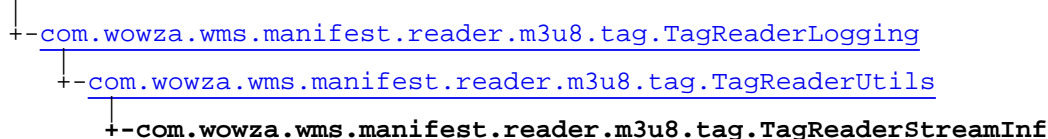
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderStreamInf

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

Direct Known Subclasses:

[TagReaderIFrameStreamInf](#)

```

public class TagReaderStreamInf
extends TagReaderUtils
implements ITagReader
  
```

Field Summary

protected	skippedAttributes
-----------	-----------------------------------

Constructor Summary

public	TagReaderStreamInf()
--------	--------------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)
boolean	processCommonAttributes (java.util.List attributes, TagModelStreamInfCommon model, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

```
Methods inherited from interface com.wowza.wms.manifest.reader.m3u8.tag.ITagReader
```

```
getContextStr, getDebugLogEnabled, getTag, getUseSystemOut, parseTag, setContextStr, setDebugLogEnabled, setUseSystemOut
```

Fields

skippedAttributes

```
protected java.util.List skippedAttributes
```

Constructors

TagReaderStreamInf

```
public TagReaderStreamInf()
```

Methods

getTag

```
public String getTag()
```

parseTag

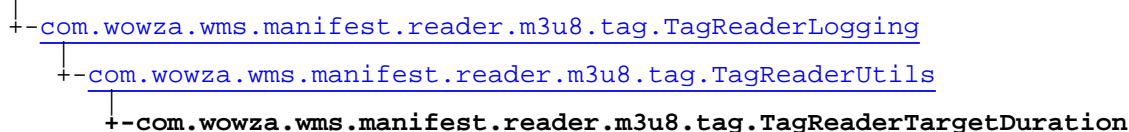
```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

processCommonAttributes

```
protected boolean processCommonAttributes(java.util.List attributes,  
    TagModelStreamInfCommon model,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderTargetDuration

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderTargetDuration
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderTargetDuration()
--------	---

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderTargetDuration

```
public TagReaderTargetDuration()
```

Methods

getTag

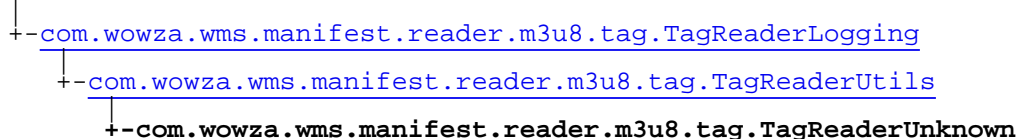
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderUnknown

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderUnknown
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderUnknown()
--------	------------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderUnknown

```
public TagReaderUnknown()
```

Methods

getTag

```
public String getTag()
```

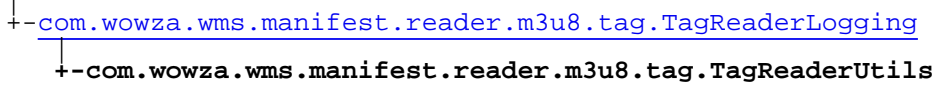
parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderUtils

java.lang.Object



Direct Known Subclasses:

[TagReaderVersion](#), [TagReaderUnknown](#), [TagReaderTargetDuration](#), [TagReaderStreamInf](#), [TagReaderStart](#), [TagReaderSessionKey](#), [TagReaderSessionData](#), [TagReaderProgramDateTime](#), [TagReaderPlaylistType](#), [TagReaderMediaSequence](#), [TagReaderMedia](#), [TagReaderMap](#), [TagReaderM3U](#), [TagReaderKey](#), [TagReaderIndependentSegments](#), [TagReaderINF](#), [TagReaderIFramesOnly](#), [TagReaderEndList](#), [TagReaderDiscontinuitySequence](#), [TagReaderDiscontinuity](#), [TagReaderByteRange](#), [TagReaderAllowCache](#)

public abstract class **TagReaderUtils**
 extends [TagReaderLogging](#)

Constructor Summary

public	TagReaderUtils()
--------	----------------------------------

Method Summary

String	getContextStr()
static String	getTagKey(String line)
static boolean	isComment(String line)
static boolean	isTag(String line)
java.util.List	parseAttributes(String line, String tag, PlaylistModel playlist)
void	propagateDebug(TagModel model, PlaylistModel playlist)
void	setContextStr(String contextStr)
java.util.List	splitAttributes(String line, String tag, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagReaderUtils

```
public TagReaderUtils()
```

Methods

setContextStr

```
public void setContextStr(String contextStr)
```

getContextStr

```
public String getContextStr()
```

parseAttributes

```
public java.util.List parseAttributes(String line,
    String tag,
    PlaylistModel playlist)
```

splitAttributes

```
public java.util.List splitAttributes(String line,
    String tag,
    PlaylistModel playlist)
```

propagateDebug

```
protected void propagateDebug(TagModel model,
    PlaylistModel playlist)
```

isTag

```
public static boolean isTag(String line)
```

isComment

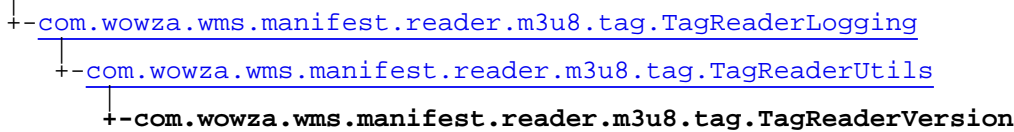
```
public static boolean isComment(String line)
```

getTagKey

```
public static String getTagKey(String line)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderVersion

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

```

public class TagReaderVersion
extends TagReaderUtils
implements ITagReader
  
```

Constructor Summary

public	TagReaderVersion()
--------	------------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderVersion

```
public TagReaderVersion()
```

Methods

getTag

```
public String getTag()
```

parseTag

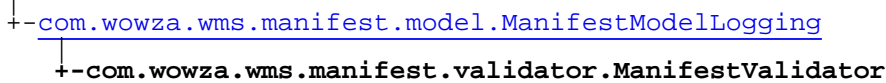
```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

Package

com.wowza.wms.manifest.validator

com.wowza.wms.manifest.validator Class ManifestValidator

java.lang.Object



Direct Known Subclasses:

[PlaylistValidator](#)

public abstract class **ManifestValidator**
extends [ManifestModelLogging](#)

Abstract Manifest Validator Model base class Provides implementations that are common to all Manifest / Playlist validator models

Constructor Summary

public	ManifestValidator()
--------	-------------------------------------

Method Summary

abstract boolean	validate(PlaylistModel playlist)
------------------	--

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

ManifestValidator

public **ManifestValidator()**

Methods

validate

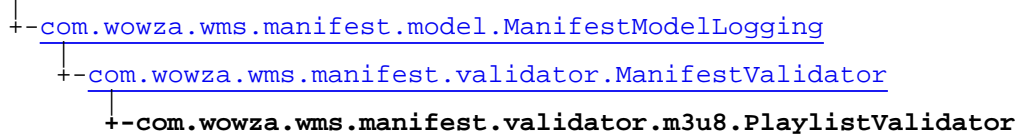
protected abstract boolean **validate**([PlaylistModel](#) playlist)

Package

com.wowza.wms.manifest.validator.m3u8

com.wowza.wms.manifest.validator.m3u8 Class PlaylistValidator

java.lang.Object



```
public class PlaylistValidator
extends ManifestValidator
```

Constructor Summary

public	PlaylistValidator (String contextStr)
--------	---

Method Summary

String	getContextStr ()
boolean	validate (PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.validator.ManifestValidator](#)

[validate](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

PlaylistValidator

```
public PlaylistValidator(String contextStr)
```

Methods

(continued from last page)

validate

```
public boolean validate(PlaylistModel playlist)
```

getContextStr

```
protected String getContextStr()
```

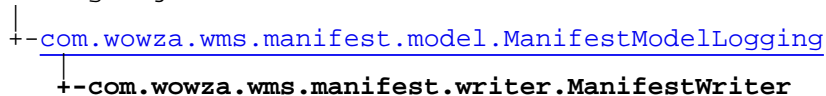
Get the context string associated with the Model to include with the log statements

Package

com.wowza.wms.manifest.writer

com.wowza.wms.manifest.writer Class ManifestWriter

java.lang.Object



Direct Known Subclasses:

[PlaylistWriter](#)

public abstract class **ManifestWriter**
extends [ManifestModelLogging](#)

Abstract Manifest Writer Model base class Provides implementations that are common to all Manifest / Playlist writer models

Constructor Summary

public	ManifestWriter()
--------	----------------------------------

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

ManifestWriter

public **ManifestWriter**()

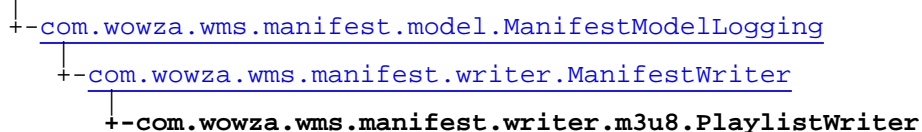
Package

com.wowza.wms.manifest.writer.m3u8

com.wowza.wms.manifest.writer.m3u8

Class PlaylistWriter

java.lang.Object



```

public class PlaylistWriter
extends ManifestWriter
  
```

Constructor Summary

public	PlaylistWriter (java.io.OutputStream outputStream, String contextStr)
--------	---

Method Summary

String	getContextStr ()
boolean	isValidatePlaylists ()
void	setValidatePlaylists (boolean validatePlaylists)
boolean	write (PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

PlaylistWriter

```

public PlaylistWriter(java.io.OutputStream outputStream,
String contextStr)
  
```

Methods

(continued from last page)

isValidatePlaylists

```
public boolean isValidatePlaylists()
```

setValidatePlaylists

```
public void setValidatePlaylists(boolean validatePlaylists)
```

write

```
public final boolean write(PlaylistModel playlist)  
    throws java.io.IOException
```

getContextStr

```
protected String getContextStr()
```

Get the context string associated with the Model to include with the log statements

com.wowza.wms.manifest.writer.m3u8 Class TagWriter

java.lang.Object

└-com.wowza.wms.manifest.writer.m3u8.TagWriter

public class **TagWriter**
extends Object

Constructor Summary

public	TagWriter (java.io.OutputStreamWriter outputStreamWriter)
--------	---

Method Summary

void	flush ()
void	write (String str)
void	writeLine (String line)
void	writeTag (String tag)
void	writeTag (String tag, String value)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

TagWriter

public **TagWriter**(java.io.OutputStreamWriter outputStreamWriter)

Methods

write

public void **write**(String str)
throws java.io.IOException

(continued from last page)

writeLine

```
public void writeLine(String line)
    throws java.io.IOException
```

writeTag

```
public void writeTag(String tag)
    throws java.io.IOException
```

writeTag

```
public void writeTag(String tag,
    String value)
    throws java.io.IOException
```

flush

```
public void flush()
    throws java.io.IOException
```

Package

com.wowza.wms.media.mp3.model.idtags

com.wowza.wms.media.mp3.model.idtags Class ID3DeserializeFrameResult

java.lang.Object

└-com.wowza.wms.media.mp3.model.idtags.ID3DeserializeFrameResult

```
public class ID3DeserializeFrameResult
extends Object
```

Field Summary

protected	frame
protected	len

Constructor Summary

public	ID3DeserializeFrameResult()
--------	---

Method Summary

IID3V2Frame	getFrame()
int	getLen()
void	setFrame(IID3V2Frame frame)
void	setLen(int len)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

frame

protected com.wowza.wms.media.mp3.model.idtags.IID3V2Frame **frame**

len

protected int **len**

Constructors

ID3DeserializeFrameResult

```
public ID3DeserializeFrameResult()
```

Methods

getFrame

```
public IID3V2Frame getFrame()
```

setFrame

```
public void setFrame(IID3V2Frame frame)
```

getLen

```
public int getLen()
```

setLen

```
public void setLen(int len)
```

com.wowza.wms.media.mp3.model.idtags Class ID3DeserializeFramesResult

java.lang.Object

└-com.wowza.wms.media.mp3.model.idtags.ID3DeserializeFramesResult

```
public class ID3DeserializeFramesResult
extends Object
```

Field Summary

protected	frames
protected	len

Constructor Summary

public	ID3DeserializeFramesResult()
--------	--

Method Summary

ID3Frames	getFrames()
int	getLen()
void	setFrames(ID3Frames frames)
void	setLen(int len)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

frames

protected com.wowza.wms.media.mp3.model.idtags.ID3Frames **frames**

len

protected int **len**

Constructors

ID3DeserializeFramesResult

```
public ID3DeserializeFramesResult()
```

Methods

getFrames

```
public ID3Frames getFrames()
```

setFrames

```
public void setFrames(ID3Frames frames)
```

getLen

```
public int getLen()
```

setLen

```
public void setLen(int len)
```

com.wowza.wms.media.mp3.model.idtags Class ID3Frames

java.lang.Object

└-com.wowza.wms.media.mp3.model.idtags.ID3Frames

```
public class ID3Frames
extends Object
```

Field Summary

public static final	ID3FOOTER_SIZE Value: 10
public static final	ID3HEADER_SIZE Value: 10
public static final	ID3HEADER_VERSION Value: 1024
public static final	ID3HEADERFLAGS_DEFAULT Value: 0
public static final	ID3HEADERFLAGS_EXPERIMENTAL Value: 32
public static final	ID3HEADERFLAGS_EXTENDED Value: 64
public static final	ID3HEADERFLAGS_FOOTERPRESENT Value: 16
public static final	ID3HEADERFLAGS_UNSYNC Value: 128
public static final	STARTCODE_3DI
public static final	STARTCODE_ID3

Constructor Summary

public	ID3Frames()
--------	-----------------------------

Method Summary

void	clear()
static ID3DeserializeFramesResult	deserialize (byte[] buffer, int offset, int len)
static int	deserializeGetSize (byte[] buffer, int offset, int len)
java.util.List	getFrameMapIds ()
java.util.List	getFrames ()
java.util.List	getFramesById (String idStr)
Object	getLock ()
int	getSize ()
boolean	isEmpty ()
static boolean	isID3Footer (byte[] buffer, int offset, int len)
static boolean	isID3Header (byte[] buffer, int offset, int len)
void	putFrame (IID3V2Frame frame)
IID3V2Frame	removeFrame (IID3V2Frame frame)
byte[]	serialize ()
byte[]	serialize (boolean includeHeader, boolean includeFooter, int flags)
static int	serializeFooter (byte[] buffer, int offset, int flags, int size)
static int	serializeHeader (byte[] buffer, int offset, int flags, int size)
int	serializeTags (byte[] buffer, int offset)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

STARTCODE_ID3

public static final byte **STARTCODE_ID3**

(continued from last page)

STARTCODE_3DI

```
public static final byte STARTCODE_3DI
```

ID3HEADER_VERSION

```
public static final int ID3HEADER_VERSION
```

Constant value: **1024**

ID3HEADER_SIZE

```
public static final int ID3HEADER_SIZE
```

Constant value: **10**

ID3FOOTER_SIZE

```
public static final int ID3FOOTER_SIZE
```

Constant value: **10**

ID3HEADERFLAGS_DEFAULT

```
public static final int ID3HEADERFLAGS_DEFAULT
```

Constant value: **0**

ID3HEADERFLAGS_UNSYNC

```
public static final int ID3HEADERFLAGS_UNSYNC
```

Constant value: **128**

ID3HEADERFLAGS_EXTENDED

```
public static final int ID3HEADERFLAGS_EXTENDED
```

Constant value: **64**

ID3HEADERFLAGS_EXPERIMENTAL

```
public static final int ID3HEADERFLAGS_EXPERIMENTAL
```

Constant value: **32**

(continued from last page)

ID3HEADERFLAGS_FOOTERPRESENT

```
public static final int ID3HEADERFLAGS_FOOTERPRESENT
```

Constant value: **16**

Constructors

ID3Frames

```
public ID3Frames()
```

Methods

getLock

```
public Object getLock()
```

clear

```
public void clear()
```

isEmpty

```
public boolean isEmpty()
```

putFrame

```
public void putFrame(IID3V2Frame frame)
```

removeFrame

```
public IID3V2Frame removeFrame(IID3V2Frame frame)
```

getFrames

```
public java.util.List getFrames()
```

getFrameMapIds

```
public java.util.List getFrameMapIds()
```

getFramesById

```
public java.util.List getFramesById(String idStr)
```

getSize

```
public int getSize()
```

serializeTags

```
public int serializeTags(byte[] buffer,  
    int offset)
```

serializeHeader

```
public static int serializeHeader(byte[] buffer,  
    int offset,  
    int flags,  
    int size)
```

serializeFooter

```
public static int serializeFooter(byte[] buffer,  
    int offset,  
    int flags,  
    int size)
```

serialize

```
public byte[] serialize()
```

serialize

```
public byte[] serialize(boolean includeHeader,  
    boolean includeFooter,  
    int flags)
```

isID3Header

```
public static boolean isID3Header(byte[] buffer,  
    int offset,  
    int len)
```

isID3Footer

```
public static boolean isID3Footer(byte[] buffer,  
    int offset,  
    int len)
```

deserializeGetSize

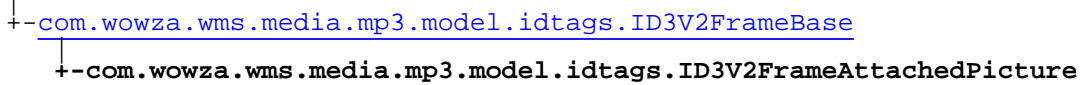
```
public static int deserializeGetSize(byte[] buffer,  
    int offset,  
    int len)
```

deserialize

```
public static ID3DeserializeFramesResult deserialize(byte[] buffer,  
    int offset,  
    int len)
```

com.wowza.wms.media.mp3.model.idtags Class ID3V2FrameAttachedPicture

java.lang.Object



All Implemented Interfaces:

[ID3V2Frame](#)

```

public class ID3V2FrameAttachedPicture
extends ID3V2FrameBase
  
```

Field Summary

public static final	MIMETYPES_JPEG Value: image/jpeg
public static final	MIMETYPES_PNG Value: image/png
public static final	MIMETYPES_URL Value: -->
public static	PICTUREMAXFILESIZE
public static final	PICTURETYPE_ARTISTLOGO Value: 19
public static final	PICTURETYPE_COVERBACK Value: 4
public static final	PICTURETYPE_COVERFRONT Value: 3
public static final	PICTURETYPE_FILEICON Value: 1
public static final	PICTURETYPE_ILLUSTRATION Value: 18
public static final	PICTURETYPE_MOVIESCREENCAPTURE Value: 16
public static final	PICTURETYPE_OTHER Value: 0

public static final	PICTURETYPE_OTHERFILEICON Value: 2
public static final	PICTURETYPE_PUBLISHERLOGO Value: 20

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_TCOPI](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameAttachedPicture (String idStr, int flags)
public	ID3V2FrameAttachedPicture ()

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
String	getDescription ()
String	getMapIdStr ()
String	getMimeType ()
byte[]	getPictureData ()
int	getPictureType ()
int	getTextEncoding ()
boolean	loadFile (java.io.File file)
int	serializeBody (byte[] buffer, int offset)
void	setDescription (String description)
void	setMimeType (String mimeType)

void	setPictureData (byte[] pictureData)
void	setPictureDataAsURL (String urlStr)
void	setPictureType (int pictureType)
void	setTextEncoding (int textEncoding)

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Fields

PICTURETYPE_OTHER

```
public static final int PICTURETYPE_OTHER
```

Constant value: **0**

PICTURETYPE_FILEICON

```
public static final int PICTURETYPE_FILEICON
```

Constant value: **1**

PICTURETYPE_OTHERFILEICON

```
public static final int PICTURETYPE_OTHERFILEICON
```

Constant value: **2**

PICTURETYPE_COVERFRONT

```
public static final int PICTURETYPE_COVERFRONT
```

Constant value: **3**

PICTURETYPE_COVERBACK

```
public static final int PICTURETYPE_COVERBACK
```

Constant value: **4**

PICTURETYPE_MOVIESCREENCAPTURE

```
public static final int PICTURETYPE_MOVIESCREENCAPTURE
```

Constant value: **16**

PICTURETYPE_ILLUSTRATION

```
public static final int PICTURETYPE_ILLUSTRATION
```

Constant value: **18**

PICTURETYPE_ARTISTLOGO

```
public static final int PICTURETYPE_ARTISTLOGO
```

Constant value: **19**

PICTURETYPE_PUBLISHERLOGO

```
public static final int PICTURETYPE_PUBLISHERLOGO
```

Constant value: **20**

MIMETYPES_JPEG

```
public static final java.lang.String MIMETYPES_JPEG
```

Constant value: **image/jpeg**

MIMETYPES_PNG

```
public static final java.lang.String MIMETYPES_PNG
```

Constant value: **image/png**

MIMETYPES_URL

```
public static final java.lang.String MIMETYPES_URL
```

Constant value: **-->**

(continued from last page)

PICTUREMAXFILESIZE

```
public static long PICTUREMAXFILESIZE
```

Constructors

ID3V2FrameAttachedPicture

```
public ID3V2FrameAttachedPicture(String idStr,  
                                int flags)
```

ID3V2FrameAttachedPicture

```
public ID3V2FrameAttachedPicture()
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,  
                          int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,  
                              int offset,  
                              int len)
```

getMapIdStr

```
public String getMapIdStr()
```

getBodySize

```
public int getBodySize()
```

getTextEncoding

```
public int getTextEncoding()
```

(continued from last page)

setTextEncoding

```
public void setTextEncoding(int textEncoding)
```

getMimeType

```
public String getMimeType()
```

setMimeType

```
public void setMimeType(String mimeType)
```

getPictureType

```
public int getPictureType()
```

setPictureType

```
public void setPictureType(int pictureType)
```

getDescription

```
public String getDescription()
```

setDescription

```
public void setDescription(String description)
```

getPictureData

```
public byte[] getPictureData()
```

setPictureData

```
public void setPictureData(byte[] pictureData)
```

setPictureDataAsURL

```
public void setPictureDataAsURL(String urlStr)
```

(continued from last page)

loadFile

```
public boolean loadFile(java.io.File file)
```

com.wowza.wms.media.mp3.model.idtags Class ID3V2FrameBase

java.lang.Object

└-com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase

All Implemented Interfaces:

[IID3V2Frame](#)

Direct Known Subclasses:

[ID3V2FrameURLLinkUserDefined](#), [ID3V2FrameURLLink](#), [ID3V2FrameTextInformationUserDefined](#),
[ID3V2FrameTextInformation](#), [ID3V2FrameSynchronizedText](#), [ID3V2FrameRecommendedBufferSize](#),
[ID3V2FrameRawBytes](#), [ID3V2FramePrivate](#), [ID3V2FrameLinkedInformation](#), [ID3V2FrameComment](#),
[ID3V2FrameAttachedPicture](#)

public abstract class **ID3V2FrameBase**

extends Object

implements [IID3V2Frame](#)

Nested Class Summary

class	ID3V2FrameBase.DeserializeResult ID3V2FrameBase.DeserializeResult
-------	--

Field Summary

public static final	DEFAULT_LANGUAGE Value: eng
public static final	FLAGS_DEFAULT Value: 0
public static final	HEADERSIZE Value: 10
public static final	TAG_APIC Value: APIC
public static final	TAG_COMM Value: COMM
public static final	TAG_LINK Value: LINK
public static final	TAG_PRIV Value: PRIV

public static final	TAG_RBUF Value: RBUF
public static final	TAG_SYLT Value: SYLT
public static final	TAG_TALB Value: TALB
public static final	TAG_TBPM Value: TBPM
public static final	TAG_TCOM Value: TCOM
public static final	TAG_TCON Value: TCON
public static final	TAG_TCOP Value: TCOP
public static final	TAG_TDEN Value: TDEN
public static final	TAG_TDLY Value: TDLY
public static final	TAG_TDOR Value: TDOR
public static final	TAG_TDRC Value: TDRC
public static final	TAG_TDRL Value: TDRL
public static final	TAG_TDTG Value: TDTG
public static final	TAG_TENC Value: TENC
public static final	TAG_TEXT Value: TEXT
public static final	TAG_TFLT Value: TFLT

public static final	TAG_TIPL Value: TIPL
public static final	TAG_TIT1 Value: TIT1
public static final	TAG_TIT2 Value: TIT2
public static final	TAG_TIT3 Value: TIT3
public static final	TAG_TKEY Value: TKEY
public static final	TAG_TLAN Value: TLAN
public static final	TAG_TLEN Value: TLEN
public static final	TAG_TMCL Value: TMCL
public static final	TAG_TMED Value: TMED
public static final	TAG_TMOO Value: TMOO
public static final	TAG_TOAL Value: TOAL
public static final	TAG_TOFN Value: TOFN
public static final	TAG_TOLY Value: TOLY
public static final	TAG_TOPE Value: TOPE
public static final	TAG_TOWN Value: TOWN
public static final	TAG_TPE1 Value: TPE1

public static final	TAG_TPE2 Value: TPE2
public static final	TAG_TPE3 Value: TPE3
public static final	TAG_TPE4 Value: TPE4
public static final	TAG_TPOS Value: TPOS
public static final	TAG_TPRO Value: TPRO
public static final	TAG_TPUB Value: TPUB
public static final	TAG_TRCK Value: TRCK
public static final	TAG_TRSN Value: TRSN
public static final	TAG_TRSO Value: TRSO
public static final	TAG_TSOA Value: TSOA
public static final	TAG_TSOP Value: TSOP
public static final	TAG_TSOT Value: TSOT
public static final	TAG_TSRC Value: TSRC
public static final	TAG_TSSE Value: TSSE
public static final	TAG_TSST Value: TSST
public static final	TAG_TXXX Value: TXXX

public static final	TAG_UNKN Value: UNKN
public static final	TAG_WCOM Value: WCOM
public static final	TAG_WCOP Value: WCOP
public static final	TAG_WOAF Value: WOAF
public static final	TAG_WOAR Value: WOAR
public static final	TAG_WOAS Value: WOAS
public static final	TAG_WORS Value: WORS
public static final	TAG_WPAY Value: WPAY
public static final	TAG_WPUB Value: WPUB
public static final	TAG_WXXX Value: WXXX
public static final	TAGS_TEXTINFORMATION
public static final	TEXTENCODING_DEFAULT Value: UTF-8
public static final	TEXTENCODING_ISO_8859_1 Value: 0
public static final	TEXTENCODING_URL Value: ISO-8859-1
public static final	TEXTENCODING_UTF16 Value: 1
public static final	TEXTENCODING_UTF16BE Value: 2

public static final	TEXTENCODING_UTF8 Value: 3
---------------------	--

Constructor Summary

public	ID3V2FrameBase (String idStr, int flags)
--------	--

Method Summary

static int	byteStringLen (String value, int textEncoding)
static int	byteStringLen (String value, String encodingStr)
static ID3DeserializeFrameResult	deserializeFrame (byte[] buffer, int offset, int len)
static ID3V2FrameBase.DeserializeResult	deserializeString (byte[] buffer, int offset, int len, int textEncoding)
static ID3V2FrameBase.DeserializeResult	deserializeString (byte[] buffer, int offset, int len, String charsetName)
int	getFlags ()
String	getIdStr ()
String	getMapIdStr ()
int	getSize ()
int	serialize (byte[] buffer, int offset)
static int	serializeString (String value, byte[] buffer, int offset, int textEncoding, boolean addZero)
static int	serializeString (String value, byte[] buffer, int offset, String charsetName, boolean addZero)
static int	serializeStringLen (String value, int textEncoding, boolean addZero)
static int	serializeStringLen (String value, String encodingStr, boolean addZero)
void	setFlags (int flags)
void	setIdStr (String idStr)
static String	textEncodingToCharsetName (int textEncoding)
static String	trimTrailingZero (String value)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.ID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Fields

HEADERSIZE

```
public static final int HEADERSIZE
```

Constant value: **10**

TEXTENCODING_ISO_8859_1

```
public static final int TEXTENCODING_ISO_8859_1
```

Constant value: **0**

TEXTENCODING_UTF16

```
public static final int TEXTENCODING_UTF16
```

Constant value: **1**

TEXTENCODING_UTF16BE

```
public static final int TEXTENCODING_UTF16BE
```

Constant value: **2**

TEXTENCODING_UTF8

```
public static final int TEXTENCODING_UTF8
```

Constant value: **3**

TEXTENCODING_URL

```
public static final java.lang.String TEXTENCODING_URL
```

Constant value: **ISO-8859-1**

(continued from last page)

TEXTENCODING_DEFAULT

```
public static final java.lang.String TEXTENCODING_DEFAULT
```

Constant value: **UTF-8**

DEFAULT_LANGUAGE

```
public static final java.lang.String DEFAULT_LANGUAGE
```

Constant value: **eng**

TAG_UNKN

```
public static final java.lang.String TAG_UNKN
```

Constant value: **UNKN**

TAG_PRIV

```
public static final java.lang.String TAG_PRIV
```

Constant value: **PRIV**

TAG_APIC

```
public static final java.lang.String TAG_APIC
```

Constant value: **APIC**

TAG_LINK

```
public static final java.lang.String TAG_LINK
```

Constant value: **LINK**

TAG_SYLT

```
public static final java.lang.String TAG_SYLT
```

Constant value: **SYLT**

TAG_RBUF

```
public static final java.lang.String TAG_RBUF
```

Constant value: **RBUF**

TAG_TALB

```
public static final java.lang.String TAG_TALB
```

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Constant value: **TALB**

TAG_TBPM

```
public static final java.lang.String TAG_TBPM
```

Constant value: **TBPM**

TAG_TCOM

```
public static final java.lang.String TAG_TCOM
```

Constant value: **TCOM**

TAG_TCON

```
public static final java.lang.String TAG_TCON
```

Constant value: **TCON**

TAG_TCOP

```
public static final java.lang.String TAG_TCOP
```

Constant value: **TCOP**

TAG_TDEN

```
public static final java.lang.String TAG_TDEN
```

Constant value: **TDEN**

TAG_TDLY

```
public static final java.lang.String TAG_TDLY
```

Constant value: **TDLY**

TAG_TDOR

```
public static final java.lang.String TAG_TDOR
```

Constant value: **TDOR**

TAG_TDRC

```
public static final java.lang.String TAG_TDRC
```

Constant value: **TDRC**

TAG_TDRL

```
public static final java.lang.String TAG_TDRL
```

Constant value: **TDRL**

TAG_TDTG

```
public static final java.lang.String TAG_TDTG
```

Constant value: **TDTG**

TAG_TENC

```
public static final java.lang.String TAG_TENC
```

Constant value: **TENC**

TAG_TEXT

```
public static final java.lang.String TAG_TEXT
```

Constant value: **TEXT**

TAG_TFLT

```
public static final java.lang.String TAG_TFLT
```

Constant value: **TFLT**

TAG_TIPL

```
public static final java.lang.String TAG_TIPL
```

Constant value: **TIPL**

TAG_TIT1

```
public static final java.lang.String TAG_TIT1
```

Constant value: **TIT1**

TAG_TIT2

```
public static final java.lang.String TAG_TIT2
```

Constant value: **TIT2**

(continued from last page)

TAG_TIT3

```
public static final java.lang.String TAG_TIT3
```

Constant value: **TIT3**

TAG_TKEY

```
public static final java.lang.String TAG_TKEY
```

Constant value: **TKEY**

TAG_TLAN

```
public static final java.lang.String TAG_TLAN
```

Constant value: **TLAN**

TAG_TLEN

```
public static final java.lang.String TAG_TLEN
```

Constant value: **TLEN**

TAG_TMCL

```
public static final java.lang.String TAG_TMCL
```

Constant value: **TMCL**

TAG_TMED

```
public static final java.lang.String TAG_TMED
```

Constant value: **TMED**

TAG_TMOO

```
public static final java.lang.String TAG_TMOO
```

Constant value: **TMOO**

TAG_TOAL

```
public static final java.lang.String TAG_TOAL
```

Constant value: **TOAL**

TAG_TOFN

```
public static final java.lang.String TAG_TOFN
```

(continued from last page)

Constant value: **TOFN**

TAG_TOLY

```
public static final java.lang.String TAG_TOLY
```

Constant value: **TOLY**

TAG_TOPE

```
public static final java.lang.String TAG_TOPE
```

Constant value: **TOPE**

TAG_TOWN

```
public static final java.lang.String TAG_TOWN
```

Constant value: **TOWN**

TAG_TPE1

```
public static final java.lang.String TAG_TPE1
```

Constant value: **TPE1**

TAG_TPE2

```
public static final java.lang.String TAG_TPE2
```

Constant value: **TPE2**

TAG_TPE3

```
public static final java.lang.String TAG_TPE3
```

Constant value: **TPE3**

TAG_TPE4

```
public static final java.lang.String TAG_TPE4
```

Constant value: **TPE4**

TAG_TPOS

```
public static final java.lang.String TAG_TPOS
```

Constant value: **TPOS**

TAG_TPRO

```
public static final java.lang.String TAG_TPRO
```

Constant value: **TPRO**

TAG_TPUB

```
public static final java.lang.String TAG_TPUB
```

Constant value: **TPUB**

TAG_TRCK

```
public static final java.lang.String TAG_TRCK
```

Constant value: **TRCK**

TAG_TRSN

```
public static final java.lang.String TAG_TRSN
```

Constant value: **TRSN**

TAG_TRSO

```
public static final java.lang.String TAG_TRSO
```

Constant value: **TRSO**

TAG_TSOA

```
public static final java.lang.String TAG_TSOA
```

Constant value: **TSOA**

TAG_TSOP

```
public static final java.lang.String TAG_TSOP
```

Constant value: **TSOP**

TAG_TSOT

```
public static final java.lang.String TAG_TSOT
```

Constant value: **TSOT**

(continued from last page)

TAG_TSRC

```
public static final java.lang.String TAG_TSRC
```

Constant value: **TSRC**

TAG_TSSE

```
public static final java.lang.String TAG_TSSE
```

Constant value: **TSSE**

TAG_TSST

```
public static final java.lang.String TAG_TSST
```

Constant value: **TSST**

TAGS_TEXTINFORMATION

```
public static final java.lang.String TAGS_TEXTINFORMATION
```

TAG_WCOM

```
public static final java.lang.String TAG_WCOM
```

Constant value: **WCOM**

TAG_WCOP

```
public static final java.lang.String TAG_WCOP
```

Constant value: **WCOP**

TAG_WOAF

```
public static final java.lang.String TAG_WOAF
```

Constant value: **WOAF**

TAG_WOAR

```
public static final java.lang.String TAG_WOAR
```

Constant value: **WOAR**

TAG_WOAS

```
public static final java.lang.String TAG_WOAS
```

(continued from last page)

Constant value: **WOAS**

TAG_WORS

```
public static final java.lang.String TAG_WORS
```

Constant value: **WORS**

TAG_WPAY

```
public static final java.lang.String TAG_WPAY
```

Constant value: **WPAY**

TAG_WPUB

```
public static final java.lang.String TAG_WPUB
```

Constant value: **WPUB**

TAG_TXXX

```
public static final java.lang.String TAG_TXXX
```

Constant value: **TXXX**

TAG_COMM

```
public static final java.lang.String TAG_COMM
```

Constant value: **COMM**

TAG_WXXX

```
public static final java.lang.String TAG_WXXX
```

Constant value: **WXXX**

FLAGS_DEFAULT

```
public static final int FLAGS_DEFAULT
```

Constant value: **0**

Constructors**ID3V2FrameBase**

```
public ID3V2FrameBase(String idStr,  
                       int flags)
```

Methods

textEncodingToCharsetName

```
public static String textEncodingToCharsetName(int textEncoding)
```

byteStringLen

```
public static int byteStringLen(String value,  
    int textEncoding)
```

byteStringLen

```
public static int byteStringLen(String value,  
    String encodingStr)
```

serializeStringLen

```
public static int serializeStringLen(String value,  
    int textEncoding,  
    boolean addZero)
```

serializeStringLen

```
public static int serializeStringLen(String value,  
    String encodingStr,  
    boolean addZero)
```

trimTrailingZero

```
public static String trimTrailingZero(String value)
```

serializeString

```
public static int serializeString(String value,  
    byte[] buffer,  
    int offset,  
    int textEncoding,  
    boolean addZero)
```

(continued from last page)

serializeString

```
public static int serializeString(String value,  
    byte[] buffer,  
    int offset,  
    String charsetName,  
    boolean addZero)
```

deserializeString

```
public static ID3V2FrameBase.DeserializeResult deserializeString(byte[] buffer,  
    int offset,  
    int len,  
    int textEncoding)
```

deserializeString

```
public static ID3V2FrameBase.DeserializeResult deserializeString(byte[] buffer,  
    int offset,  
    int len,  
    String charsetName)
```

serialize

```
public int serialize(byte[] buffer,  
    int offset)
```

getIdStr

```
public String getIdStr()
```

setIdStr

```
public void setIdStr(String idStr)
```

getFlags

```
public int getFlags()
```

setFlags

```
public void setFlags(int flags)
```

(continued from last page)

getSize

```
public int getSize()
```

getMapIdStr

```
public String getMapIdStr()
```

deserializeFrame

```
public static ID3DeserializeFrameResult deserializeFrame(byte[] buffer,  
    int offset,  
    int len)
```

com.wowza.wms.media.mp3.model.idtags Class ID3V2FrameBase.DeserializeResult

java.lang.Object

└-com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase.DeserializeResult

public static class **ID3V2FrameBase.DeserializeResult**
extends Object

Constructor Summary

public	ID3V2FrameBase.DeserializeResult()
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

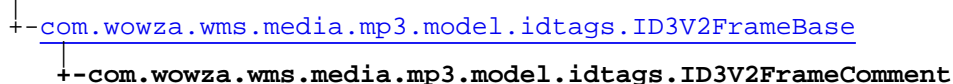
Constructors

ID3V2FrameBase.DeserializeResult

public **ID3V2FrameBase.DeserializeResult()**

com.wowza.wms.media.mp3.model.idtags Class ID3V2FrameComment

java.lang.Object



All Implemented Interfaces:

[IID3V2Frame](#)

```

public class ID3V2FrameComment
extends ID3V2FrameBase
  
```

Field Summary

protected	language
protected	shortDescription
protected	text
protected	textEncoding

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_TCOPI](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameComment (String idStr, int flags)
public	ID3V2FrameComment (String idStr)
public	ID3V2FrameComment ()

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
------	--

int	getBodySize()
String	getLanguage()
String	getShortDescription()
String	getText()
int	getTextEncoding()
int	serializeBody (byte[] buffer, int offset)
void	setLanguage (String language)
void	setShortDescription (String shortDescription)
void	setText (String text)
void	setTextEncoding (int textEncoding)

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Fields

textEncoding

protected int **textEncoding**

language

protected java.lang.String **language**

shortDescription

protected java.lang.String **shortDescription**

text

protected java.lang.String **text**

Constructors

ID3V2FrameComment

```
public ID3V2FrameComment(String idStr,  
                           int flags)
```

ID3V2FrameComment

```
public ID3V2FrameComment(String idStr)
```

ID3V2FrameComment

```
public ID3V2FrameComment()
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,  
                           int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,  
                              int offset,  
                              int len)
```

getBodySize

```
public int getBodySize()
```

(continued from last page)

getTextEncoding

```
public int getTextEncoding()
```

setTextEncoding

```
public void setTextEncoding(int textEncoding)
```

getLanguage

```
public String getLanguage()
```

setLanguage

```
public void setLanguage(String language)
```

getShortDescription

```
public String getShortDescription()
```

setShortDescription

```
public void setShortDescription(String shortDescription)
```

getText

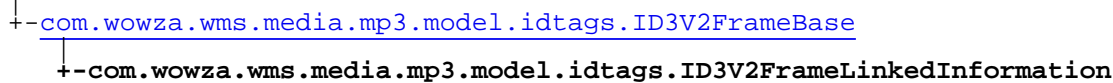
```
public String getText()
```

setText

```
public void setText(String text)
```

com.wowza.wms.media.mp3.model.idtags Class ID3V2FrameLinkedInformation

java.lang.Object



All Implemented Interfaces:

[ID3V2Frame](#)

```

public class ID3V2FrameLinkedInformation
extends ID3V2FrameBase
  
```

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_T COP](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameLinkedInformation (String idStr, int flags)
public	ID3V2FrameLinkedInformation ()

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
byte[]	getData ()
String	getDescription ()
long	getFrameIdentifier ()
String	getURL ()
int	serializeBody (byte[] buffer, int offset)

void	setData (byte[] data)
void	setDescription (String description)
void	setFrameIdentifier (long frameIdentifier)
void	setURL (String url)

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Constructors

ID3V2FrameLinkedInformation

```
public ID3V2FrameLinkedInformation(String idStr,
                                   int flags)
```

ID3V2FrameLinkedInformation

```
public ID3V2FrameLinkedInformation()
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,
                        int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,
                          int offset,
                          int len)
```

(continued from last page)

getBodySize

```
public int getBodySize()
```

getDescription

```
public String getDescription()
```

setDescription

```
public void setDescription(String description)
```

getFrameIdentifier

```
public long getFrameIdentifier()
```

setFrameIdentifier

```
public void setFrameIdentifier(long frameIdentifier)
```

getURL

```
public String getURL()
```

setURL

```
public void setURL(String url)
```

getData

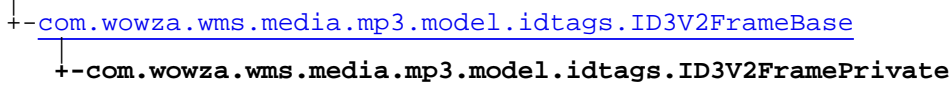
```
public byte[] getData()
```

setData

```
public void setData(byte[] data)
```

com.wowza.wms.media.mp3.model.idtags Class ID3V2FramePrivate

java.lang.Object



All Implemented Interfaces:

[IID3V2Frame](#)

```

public class ID3V2FramePrivate
extends ID3V2FrameBase
  
```

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_TCOP](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FramePrivate (String idStr, int flags)
public	ID3V2FramePrivate ()

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
byte[]	getData ()
String	getOwnerIdentifier ()
int	serializeBody (byte[] buffer, int offset)
void	setData (byte[] data)
void	setOwnerIdentifier (String ownerIdentifier)

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Constructors

ID3V2FramePrivate

```
public ID3V2FramePrivate(String idStr,  
                          int flags)
```

ID3V2FramePrivate

```
public ID3V2FramePrivate()
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,  
                        int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,  
                          int offset,  
                          int len)
```

getBodySize

```
public int getBodySize()
```


(continued from last page)

getOwnerIdentifier

```
public String getOwnerIdentifier()
```

setOwnerIdentifier

```
public void setOwnerIdentifier(String ownerIdentifier)
```

getData

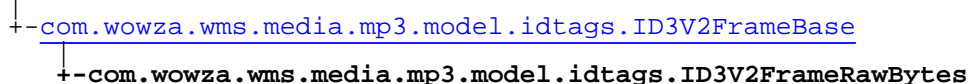
```
public byte[] getData()
```

setData

```
public void setData(byte[] data)
```

com.wowza.wms.media.mp3.model.idtags Class ID3V2FrameRawBytes

java.lang.Object



All Implemented Interfaces:

[ID3V2Frame](#)

```

public class ID3V2FrameRawBytes
extends ID3V2FrameBase
  
```

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_TCOPI](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameRawBytes (String idStr, int flags)
public	ID3V2FrameRawBytes (String idStr)

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
int	serializeBody (byte[] buffer, int offset)

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

```
deserializeBody, getBodySize, getFlags, getIdStr, getMapIdStr, getSize, serialize,  
serializeBody, setFlags, setIdStr
```

Constructors

ID3V2FrameRawBytes

```
public ID3V2FrameRawBytes(String idStr,  
                           int flags)
```

ID3V2FrameRawBytes

```
public ID3V2FrameRawBytes(String idStr)
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,  
                          int offset)
```

deserializeBody

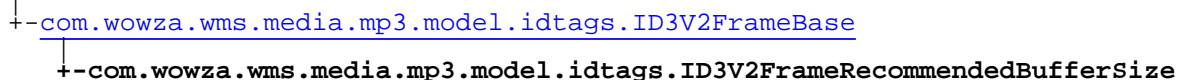
```
public void deserializeBody(byte[] buffer,  
                             int offset,  
                             int len)
```

getBodySize

```
public int getBodySize()
```

com.wowza.wms.media.mp3.model.idtags Class ID3V2FrameRecommendedBufferSize

java.lang.Object



All Implemented Interfaces:

[ID3V2Frame](#)

```

public class ID3V2FrameRecommendedBufferSize
extends ID3V2FrameBase
  
```

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_TCOP](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameRecommendedBufferSize (String idStr, int flags)
public	ID3V2FrameRecommendedBufferSize ()

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
int	getBufferSize ()
byte	getEmbeddedFlag ()
long	getOffsetToNextTag ()
int	serializeBody (byte[] buffer, int offset)
void	setBufferSize (int bufferSize)

void	setEmbeddedFlag (byte embeddedFlag)
void	setOffsetToNextTag (long offsetToNextTag)

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Constructors

ID3V2FrameRecommendedBufferSize

```
public ID3V2FrameRecommendedBufferSize(String idStr,
                                       int flags)
```

ID3V2FrameRecommendedBufferSize

```
public ID3V2FrameRecommendedBufferSize()
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,
                        int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,
                          int offset,
                          int len)
```

(continued from last page)

getBodySize

```
public int getBodySize()
```

getBufferSize

```
public int getBufferSize()
```

setBufferSize

```
public void setBufferSize(int bufferSize)
```

getEmbeddedFlag

```
public byte getEmbeddedFlag()
```

setEmbeddedFlag

```
public void setEmbeddedFlag(byte embeddedFlag)
```

getOffsetToNextTag

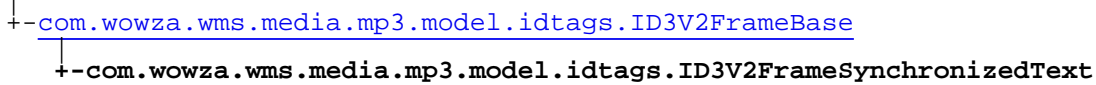
```
public long getOffsetToNextTag()
```

setOffsetToNextTag

```
public void setOffsetToNextTag(long offsetToNextTag)
```

com.wowza.wms.media.mp3.model.idtags Class ID3V2FrameSynchronizedText

java.lang.Object



All Implemented Interfaces:

[IID3V2Frame](#)

```

public class ID3V2FrameSynchronizedText
extends ID3V2FrameBase
  
```

Field Summary

public static final	CONTENTTYPE_CHORD Value: 5
public static final	CONTENTTYPE_EVENTS Value: 4
public static final	CONTENTTYPE_LYRICS Value: 1
public static final	CONTENTTYPE_MOVEMENT Value: 3
public static final	CONTENTTYPE_OTHER Value: 0
public static final	CONTENTTYPE_TRANSCRIPTION Value: 2
public static final	CONTENTTYPE_TRIVIA Value: 6
public static final	CONTENTTYPE_URLIMAGES Value: 8
public static final	CONTENTTYPE_URLWEBPAGES Value: 7
public static final	TIMESTAMPFORMAT_MILLISECONDS Value: 2

public static final	TIMESTAMPFORMAT_MPEG Value: 1
---------------------	---

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_TCOP](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameSynchronizedText (String idStr, int flags)
public	ID3V2FrameSynchronizedText ()

Method Summary

void	addContentDescriptor (ID3V2FrameSynchronizedTextDescriptor contentDescriptor)
void	addContentDescriptor (long timecode, String value)
void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
java.util.List	getContentDescriptors ()
byte	getContentTypes ()
String	getLanguage ()
int	getTextEncoding ()
byte	getTimeStampFormat ()
int	serializeBody (byte[] buffer, int offset)
void	setContentTypes (byte contentType)
void	setLanguage (String language)
void	setTextEncoding (int textEncoding)

void	setTimeStampFormat (byte timeStampFormat)
------	---

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Fields

CONTENTTYPE_OTHER

```
public static final int CONTENTTYPE_OTHER
```

Constant value: **0**

CONTENTTYPE_LYRICS

```
public static final int CONTENTTYPE_LYRICS
```

Constant value: **1**

CONTENTTYPE_TRANSCRIPTION

```
public static final int CONTENTTYPE_TRANSCRIPTION
```

Constant value: **2**

CONTENTTYPE_MOVEMENT

```
public static final int CONTENTTYPE_MOVEMENT
```

Constant value: **3**

CONTENTTYPE_EVENTS

```
public static final int CONTENTTYPE_EVENTS
```

Constant value: **4**

CONTENTTYPE_CHORD

```
public static final int CONTENTTYPE_CHORD
```

Constant value: 5

CONTENTTYPE_TRIVIA

```
public static final int CONTENTTYPE_TRIVIA
```

Constant value: 6

CONTENTTYPE_URLWEBPAGES

```
public static final int CONTENTTYPE_URLWEBPAGES
```

Constant value: 7

CONTENTTYPE_URLIMAGES

```
public static final int CONTENTTYPE_URLIMAGES
```

Constant value: 8

TIMESTAMPFORMAT_MPEG

```
public static final int TIMESTAMPFORMAT_MPEG
```

Constant value: 1

TIMESTAMPFORMAT_MILLISECONDS

```
public static final int TIMESTAMPFORMAT_MILLISECONDS
```

Constant value: 2

Constructors

ID3V2FrameSynchronizedText

```
public ID3V2FrameSynchronizedText(String idStr,  
                                   int flags)
```

ID3V2FrameSynchronizedText

```
public ID3V2FrameSynchronizedText()
```

Methods

(continued from last page)

serializeBody

```
public int serializeBody(byte[] buffer,  
    int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,  
    int offset,  
    int len)
```

getBodySize

```
public int getBodySize()
```

getTextEncoding

```
public int getTextEncoding()
```

setTextEncoding

```
public void setTextEncoding(int textEncoding)
```

getLanguage

```
public String getLanguage()
```

setLanguage

```
public void setLanguage(String language)
```

getTimeStampFormat

```
public byte getTimeStampFormat()
```

setTimeStampFormat

```
public void setTimeStampFormat(byte timeStampFormat)
```

(continued from last page)

getContentType

```
public byte getContentType()
```

setContentType

```
public void setContentType(byte contentType)
```

getContentDescriptors

```
public java.util.List getContentDescriptors()
```

addContentDescriptor

```
public void addContentDescriptor(ID3V2FrameSynchronizedTextDescriptor  
contentDescriptor)
```

addContentDescriptor

```
public void addContentDescriptor(long timecode,  
    String value)
```

com.wowza.wms.media.mp3.model.idtags Class ID3V2FrameSynchronizedTextDescriptor

java.lang.Object

└-com.wowza.wms.media.mp3.model.idtags.ID3V2FrameSynchronizedTextDescriptor

```
public class ID3V2FrameSynchronizedTextDescriptor
extends Object
```

Constructor Summary

public	ID3V2FrameSynchronizedTextDescriptor()
public	ID3V2FrameSynchronizedTextDescriptor(long timecode, String value)

Method Summary

long	getTimecode()
String	getValue()
void	setTimecode(long timecode)
void	setValue(String value)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ID3V2FrameSynchronizedTextDescriptor

```
public ID3V2FrameSynchronizedTextDescriptor()
```

ID3V2FrameSynchronizedTextDescriptor

```
public ID3V2FrameSynchronizedTextDescriptor(long timecode,
                                             String value)
```

Methods

(continued from last page)

getTimecode

```
public long getTimecode()
```

setTimecode

```
public void setTimecode(long timecode)
```

getValue

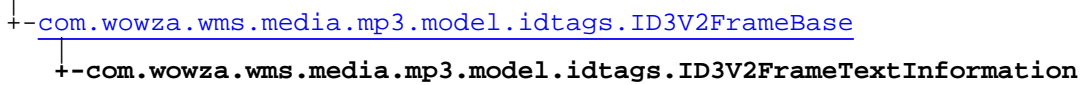
```
public String getValue()
```

setValue

```
public void setValue(String value)
```

com.wowza.wms.media.mp3.model.idtags Class ID3V2FrameTextInformation

java.lang.Object



All Implemented Interfaces:

[ID3V2Frame](#)

```

public class ID3V2FrameTextInformation
extends ID3V2FrameBase
  
```

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_TCOP](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameTextInformation (String idStr, int flags)
public	ID3V2FrameTextInformation (String idStr)

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
int	getTextEncoding ()
String	getValue ()
int	serializeBody (byte[] buffer, int offset)
void	setTextEncoding (int textEncoding)
void	setValue (String value)

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Constructors

ID3V2FrameTextInformation

```
public ID3V2FrameTextInformation(String idStr,  
                                int flags)
```

ID3V2FrameTextInformation

```
public ID3V2FrameTextInformation(String idStr)
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,  
                        int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,  
                           int offset,  
                           int len)
```

getBodySize

```
public int getBodySize()
```


(continued from last page)

getValue

```
public String getValue()
```

setValue

```
public void setValue(String value)
```

getTextEncoding

```
public int getTextEncoding()
```

setTextEncoding

```
public void setTextEncoding(int textEncoding)
```

com.wowza.wms.media.mp3.model.idtags Class ID3V2FrameTextInformationUserDefined

java.lang.Object



All Implemented Interfaces:

[ID3V2Frame](#)

```

public class ID3V2FrameTextInformationUserDefined
extends ID3V2FrameBase
  
```

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_T COP](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameTextInformationUserDefined (String idStr, int flags)
public	ID3V2FrameTextInformationUserDefined (String idStr)
public	ID3V2FrameTextInformationUserDefined ()

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
String	getDescription ()
int	getTextEncoding ()
String	getValue ()
int	serializeBody (byte[] buffer, int offset)

void	setDescription (String description)
void	setTextEncoding (int textEncoding)
void	setValue (String value)

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Constructors

ID3V2FrameTextInformationUserDefined

```
public ID3V2FrameTextInformationUserDefined(String idStr,
                                             int flags)
```

ID3V2FrameTextInformationUserDefined

```
public ID3V2FrameTextInformationUserDefined(String idStr)
```

ID3V2FrameTextInformationUserDefined

```
public ID3V2FrameTextInformationUserDefined()
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,
                          int offset)
```

(continued from last page)

deserializeBody

```
public void deserializeBody(byte[] buffer,  
    int offset,  
    int len)
```

getBodySize

```
public int getBodySize()
```

getValue

```
public String getValue()
```

setValue

```
public void setValue(String value)
```

getTextEncoding

```
public int getTextEncoding()
```

setTextEncoding

```
public void setTextEncoding(int textEncoding)
```

getDescription

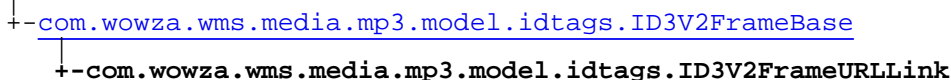
```
public String getDescription()
```

setDescription

```
public void setDescription(String description)
```

com.wowza.wms.media.mp3.model.idtags Class ID3V2FrameURLLink

java.lang.Object



All Implemented Interfaces:

[ID3V2Frame](#)

```

public class ID3V2FrameURLLink
extends ID3V2FrameBase
  
```

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_T COP](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameURLLink (String idStr, int flags)
public	ID3V2FrameURLLink (String idStr)

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
String	getURL ()
int	serializeBody (byte[] buffer, int offset)
void	setURL (String value)

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Constructors

ID3V2FrameURLLink

```
public ID3V2FrameURLLink(String idStr,  
                          int flags)
```

ID3V2FrameURLLink

```
public ID3V2FrameURLLink(String idStr)
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,  
                          int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,  
                             int offset,  
                             int len)
```

getBodySize

```
public int getBodySize()
```

(continued from last page)

getURL

```
public String getURL()
```

setURL

```
public void setURL(String value)
```

com.wowza.wms.media.mp3.model.idtags Class ID3V2FrameURLLinkUserDefined

java.lang.Object



All Implemented Interfaces:

[ID3V2Frame](#)

```

public class ID3V2FrameURLLinkUserDefined
extends ID3V2FrameBase
  
```

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_T COP](#), [TAG_TD EN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameURLLinkUserDefined (String idStr, int flags)
public	ID3V2FrameURLLinkUserDefined (String idStr)
public	ID3V2FrameURLLinkUserDefined ()

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
String	getDescription ()
String	getURL ()
int	serializeBody (byte[] buffer, int offset)
void	setDescription (String description)

void	setURL (String value)
------	---------------------------------------

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Constructors

ID3V2FrameURLLinkUserDefined

```
public ID3V2FrameURLLinkUserDefined(String idStr,
                                     int flags)
```

ID3V2FrameURLLinkUserDefined

```
public ID3V2FrameURLLinkUserDefined(String idStr)
```

ID3V2FrameURLLinkUserDefined

```
public ID3V2FrameURLLinkUserDefined()
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,
                        int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,
                          int offset,
                          int len)
```

(continued from last page)

getBodySize

```
public int getBodySize()
```

getURL

```
public String getURL()
```

setURL

```
public void setURL(String value)
```

getDescription

```
public String getDescription()
```

setDescription

```
public void setDescription(String description)
```

com.wowza.wms.media.mp3.model.idtags Class ID3V2Utils

java.lang.Object

└─com.wowza.wms.media.mp3.model.idtags.ID3V2Utils

public class **ID3V2Utils**
extends Object

Constructor Summary

public	ID3V2Utils()
--------	------------------------------

Method Summary

static int	byteArrayToIntSafeSync (byte[] b, int offset, int count)
static long	byteArrayToLongSafeSync (byte[] b, int offset, int count)
static void	intToByteArraySafeSync (int value, byte[] buffer, int offset, int size)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ID3V2Utils

public **ID3V2Utils**()

Methods

byteArrayToLongSafeSync

public static long **byteArrayToLongSafeSync**(byte[] b,
int offset,
int count)

(continued from last page)

byteArrayToIntSafeSync

```
public static int byteArrayToIntSafeSync(byte[] b,  
    int offset,  
    int count)
```

intToByteArraySafeSync

```
public static void intToByteArraySafeSync(int value,  
    byte[] buffer,  
    int offset,  
    int size)
```

com.wowza.wms.media.mp3.model.idtags Interface IID3V2Frame

All Known Implementing Classes:
[IID3V2FrameBase](#)

public interface **IID3V2Frame**
extends

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
int	getFlags ()
String	getIdStr ()
String	getMapIdStr ()
int	getSize ()
int	serialize (byte[] buffer, int offset)
int	serializeBody (byte[] buffer, int offset)
void	setFlags (int flags)
void	setIdStr (String idStr)

Methods

getIdStr

public String **getIdStr**()

setIdStr

public void **setIdStr**(String idStr)

(continued from last page)

getMapIdStr

```
public String getMapIdStr()
```

getFlags

```
public int getFlags()
```

setFlags

```
public void setFlags(int flags)
```

getSize

```
public int getSize()
```

getBodySize

```
public int getBodySize()
```

deserializeBody

```
public void deserializeBody(byte[] buffer,  
                             int offset,  
                             int len)
```

serializeBody

```
public int serializeBody(byte[] buffer,  
                          int offset)
```

serialize

```
public int serialize(byte[] buffer,  
                    int offset)
```

Package

com.wowza.wms.mediacache.impl

com.wowza.wms.mediacache.impl Interface IMediaCacheHTTPByteReader

public interface **IMediaCacheHTTPByteReader**
extends

Interface for HTTP byte reader implementations

This should be used in conjunction with IMediaCacheItemHTTPReaderFactory and any implementation has to return head and read results.

Method Summary

void	close() Close any open connection.
MediaCacheHTTPByteReaderResult	head(String path)
void	init() Initialize the byte reader.
MediaCacheHTTPByteReaderResult	read(String path, long pos, int flen)
void	setConnectionTimeout(int connectionTimeout) Set the connection timeout, milliseconds.
void	setDestinationAddress(String host, int port) Set the destination host and port where to retrieve data.
void	setMaxRetries(int maxRetries) Set the maximum number retries.
void	setProxyAddress(String host, int port) Set the proxy host and port.
void	setReadTimeout(int readTimeout) Set the read timeout for data, milliseconds.
void	setReceiveBufferSize(int receiveBufferSize) Set the receive buffer size, byte size.
void	setRequestFullURL(boolean requestFullURL) Flag to set if a full URL is required as part of the head/read request.
void	setSendBufferSize(int sendBufferSize) Set the send buffer size, byte size.

Methods

init

```
public void init()
```

Initialize the byte reader.

head

```
public MediaCacheHTTPByteReaderResult head(String path)
```

Retrieve asset information via a HEAD request. Parameters are the path of the object.

This of course does not need to be an actual head command to the remote side, but something that returns the asset length and preferably last modified time.

Assume `contentLength` and `lastModified` were populated from any code implemented you can then create a return object with.

```
long startTime = System.nanoTime();
ret = new MediaCacheHTTPByteReaderResult();
ret.status = 200;
ret.contentLength = contentLength;
ret.lastModified = lastModified;
ret.elapsedTime = (System.nanoTime()-startTime)/1000000L;
```

A return status other than 200 may cause failure within `MediaCache` and consequently cause any client requests to be rejected.

Parameters:

path

Returns:

`MediaCacheHTTPByteReaderResult`

read

```
public MediaCacheHTTPByteReaderResult read(String path,
      long pos,
      int flen)
```

(continued from last page)

Retrieve data from the remote service/server. Parameters are the path of the object, the current position into the object and the amount of data to get (flen).

The remote source should support HTTP/1.1 so partial requests can be made.

The data size returned in the MediaCacheHTTPByteReadResult must match the flen requested otherwise the data will be considered invalid.

Consider you have an input and out byteStream object

```
long startTime = System.nanoTime();
InputStream input = myConnectionToSomeWhere.getInputStream();
ByteArrayOutputStream byteStream = new ByteArrayOutputStream();
byte[] buffer = new byte[this.receiveBufferSize];
int n = - 1;
while ( (n = input.read(buffer)) != -1)
{
    byteStream.write(buffer, 0, n);
}

ret = new MediaCacheHTTPByteReaderResult();
ret.buffer = byteStream.toByteArray();
ret.status = 206;
ret.headerLength = 0;
ret.contentLength = byteStream.size();
ret.roffset = requestStart;
ret.rlen = requestLength;
ret.lastModified = this.mediaCacheConnection.getLastModified();
ret.elapsedTime = (System.nanoTime()-startTime)/1000000L;
```

A return status other than ≥ 200 or ≤ 300 may cause failure within MediaCache and consequently cause any client requests to be rejected.

Parameters:

path
pos
flen

Returns:

MediaCacheHTTPByteReaderResult

close

public void **close**()

(continued from last page)

Close any open connection.

setDestinationAddress

```
public void setDestinationAddress(String host,  
    int port)
```

Set the destination host and port where to retrieve data.

Parameters:

host
port

setProxyAddress

```
public void setProxyAddress(String host,  
    int port)
```

Set the proxy host and port. It is up to the specific byte reader implementation to implement support for proxy connections.

Parameters:

host
port

setRequestFullURL

```
public void setRequestFullURL(boolean requestFullURL)
```

Flag to set if a full URL is required as part of the head/read request. It is up to the specific byte reader implementation to use this flag.

Parameters:

requestFullURL

setReadTimeout

```
public void setReadTimeout(int readTimeout)
```

Set the read timeout for data, milliseconds. It is up to the specific byte reader implementation to use this setting.

Parameters:

readTimeout

setMaxRetries

```
public void setMaxRetries(int maxRetries)
```

Set the maximum number retries. It is up to the specific byte reader implementation to use this setting.

Parameters:

maxRetries

setConnectionTimeout

```
public void setConnectionTimeout(int connectionTimeout)
```

Set the connection timeout, milliseconds. It is up to the specific byte reader implementation to use this setting.

(continued from last page)

Parameters:connectionTimeout

setSendBufferSize

```
public void setSendBufferSize(int sendBufferSize)
```

Set the send buffer size, byte size. It is up to the specific byte reader implementation to use this setting.

Parameters:sendBufferSize

setReceiveBufferSize

```
public void setReceiveBufferSize(int receiveBufferSize)
```

Set the receive buffer size, byte size. It is up to the specific byte reader implementation to use this setting.

Parameters:receiveBufferSize

com.wowza.wms.mediacache.impl Interface IMediaCacheItemHTTPReaderFactory

public interface **IMediaCacheItemHTTPReaderFactory**
extends **IGenericPoolFactory**

Interface for HTTP byte reader factory implementations

You need to have a **IMediaCacheItemHTTPByteReader** implementation available to use with your factory implementation.

In order to make implementation simpler and safer you should extend the factory base with

MediaCacheItemHTTPCustomFactory extends **MediaCacheItemHTTPReaderFactoryBase**

To use your own implementation you should add the following property to the HTTP media cache source entry

```
<Property>
<Name>httpReaderFactoryClass</Name>
<Value>com.wowza.streamschool.mediacache.ExampleHTTPReaderFactory</Value>
<Type>String</Type>
</Property>
```

The value points to the class name of your implementation.

Method Summary

void	addProperties (WMSProperties properties) Add properties to this specific factory, these could be passed from
IMediaCacheHTTPByteReader	createInstance () Create a HTTP byte reader suited to this factory.
void	destroyInstance (IMediaCacheHTTPByteReader instance) Destroy the HTTP Byte reader associated with this factory implementation
int	getConnectionTimeout () Get the current connection timeout set.
IMediaCacheItem	getMediaCacheItem () Get the Media Cache item associated with this instance.
int	getPort () Get the port to be used for connecting to the remote source.

int	<u>getReadRetries()</u> Get the retries set for this instance
int	<u>getReadTimeout()</u> Get the current read time out set.
int	<u>getReceiveBufferSize()</u> Get the receive buffer size set.
int	<u>getSendBufferSize()</u> Get the send buffer size set.
void	<u>init()</u> Initialize the HTTP Reader Factory.
boolean	<u>isRequestFullURL()</u> Set if the request should contain the full URL.
void	<u>setConnectionTimeout(int connectionTimeout)</u> Set the connection timeout, milliseconds.
void	<u>setDestinationAddress(String host, int port)</u> Set the destination host and port where to retrieve data.
void	<u>setMediaCacheItem(IMediaCacheItem mediaCacheItem)</u> Set the Media Cache item associated to this instance.
void	<u>setPort(int port)</u> Set the port to be used for connecting to the remote source.
void	<u>setProxyAddress(String host, int port)</u> Set the proxy host and port.
void	<u>setReadRetries(int readRetries)</u> Set the maximum number retries.
void	<u>setReadTimeout(int readTimeout)</u> Set the read timeout for data, milliseconds.
void	<u>setReceiveBufferSize(int receiveBufferSize)</u> Set the receive buffer size, byte size.
void	<u>setRequestFullURL(boolean requestFullURL)</u> Flag to set if a full URL is required as part of the head/read request.
void	<u>setSendBufferSize(int sendBufferSize)</u> Set the send buffer size, byte size.

Methods inherited from interface `com.wowza.util.IGenericPoolFactory`

`createInstance`, `destroyInstance`

Methods

init

```
public void init()
```

(continued from last page)

Initialize the HTTP Reader Factory.

addProperties

```
public void addProperties(WMSProperties properties)
```

Add properties to this specific factory, these could be passed from

Parameters:

[WMSProperties](#) - properties

createInstance

```
public IMediaCacheHTTPByteReader createInstance()
```

Create a HTTP byte reader suited to this factory.

Returns:

[IMediaCacheHTTPByteReader](#)

destroyInstance

```
public void destroyInstance(IMediaCacheHTTPByteReader instance)
```

Destroy the HTTP Byte reader associated with this factory implementation

Parameters:

[IMediaCacheHTTPByteReader](#) - instance

setMediaCacheItem

```
public void setMediaCacheItem(IMediaCacheItem mediaCacheItem)
```

Set the Media Cache item associated to this instance.

Parameters:

[IMediaCacheItem](#) - mediaCacheItem

getMediaCacheItem

```
public IMediaCacheItem getMediaCacheItem()
```

Get the Media Cache item associated with this instance.

Returns:

[IMediaCacheItem](#)

setDestinationAddress

```
public void setDestinationAddress(String host,  
int port)
```

Set the destination host and port where to retrieve data. It is up to the specific implementation to use these or not.

Parameters:

String - host
int - port

setProxyAddress

```
public void setProxyAddress(String host,  
                             int port)
```

Set the proxy host and port. It is up to the specific byte reader implementation to implement support for proxy connections.

Parameters:

String - host
int - port

isRequestFullURL

```
public boolean isRequestFullURL()
```

Set if the request should contain the full URL. It is up to the specific implementation to use this.

Returns:

boolean

setRequestFullURL

```
public void setRequestFullURL(boolean requestFullURL)
```

Flag to set if a full URL is required as part of the head/read request.

Parameters:

boolean - requestFullURL

getReadTimeout

```
public int getReadTimeout()
```

Get the current read time out set.

Returns:

int

setReadTimeout

```
public void setReadTimeout(int readTimeout)
```

Set the read timeout for data, milliseconds. It is up to the specific byte reader implementation to use this setting.

Parameters:

int - readTimeout

getConnectionTimeout

```
public int getConnectionTimeout()
```

Get the current connection timeout set.

Returns:

int

(continued from last page)

setConnectionTimeout

```
public void setConnectionTimeout(int connectionTimeout)
```

Set the connection timeout, milliseconds. It is up to the specific byte reader implementation to use this setting.

Parameters:

int - connectionTimeout

getPort

```
public int getPort()
```

Get the port to be used for connecting to the remote source.

Returns:

int

setPort

```
public void setPort(int port)
```

Set the port to be used for connecting to the remote source. It is up to the specific byte reader implementation to use this setting.

Parameters:

int - port

getReadRetries

```
public int getReadRetries()
```

Get the retries set for this instance

Returns:

int

setReadRetries

```
public void setReadRetries(int readRetries)
```

Set the maximum number retries. It is up to the specific byte reader implementation to use this setting.

Parameters:

int - maxRetries

getSendBufferSize

```
public int getSendBufferSize()
```

Get the send buffer size set.

Returns:

int

setSendBufferSize

```
public void setSendBufferSize(int sendBufferSize)
```

(continued from last page)

Set the send buffer size, byte size. It is up to the specific byte reader implementation to use this setting.

Parameters:

sendBufferSize

getReceiveBufferSize

```
public int getReceiveBufferSize()
```

Get the receive buffer size set.

Returns:

int

setReceiveBufferSize

```
public void setReceiveBufferSize(int receiveBufferSize)
```

Set the receive buffer size, byte size. It is up to the specific byte reader implementation to use this setting.

Parameters:

receiveBufferSize

com.wowza.wms.mediacache.impl
Interface IMediaCacheNameHandler

public interface **IMediaCacheNameHandler**
extends

Internal - No longer used.

com.wowza.wms.mediacache.impl Interface IMediaCacheSourceBasicPerSourceInfo

public interface **IMediaCacheSourceBasicPerSourceInfo**
extends

Internal - Do not use.

Method Summary

String	getName()
void	setName(String name)

Methods

setName

public void **setName**(String name)

getName

public String **getName**()

com.wowza.wms.mediacache.impl Interface IMediaCacheSourceBasicPerSourceInfoListener

public interface **IMediaCacheSourceBasicPerSourceInfoListener**
extends

Internal - Do not use.

Method Summary

void	onPerSourceInfoAdd (IMediaCacheSourceBasicPerSourceInfo perSourceInfo)
void	onPerSourceInfoRemove (IMediaCacheSourceBasicPerSourceInfo perSourceInfo)

Methods

onPerSourceInfoAdd

public void **onPerSourceInfoAdd**([IMediaCacheSourceBasicPerSourceInfo](#) perSourceInfo)

onPerSourceInfoRemove

public void **onPerSourceInfoRemove**([IMediaCacheSourceBasicPerSourceInfo](#) perSourceInfo)

Package

com.wowza.wms.mediacache.model

com.wowza.wms.mediache.model Interface IMediaCacheContextMapper

public interface **IMediaCacheContextMapper**
extends

Interface for ContextMapper implementations

This interface is invoked via the ContextMapperClass configuration item in the main MediaCache configuration section.

When the context mapper class implementation is in use the configuration parameters

`URLEscapeStreamNameSpaces`

`URLEscapeStreamNameAll`

are no longer implemented and it is up to the context mapper to implement these if needed.

Method Summary

String	getMediaNameFromContext (IApplicationInstance appInstance, IMediaStream stream, String basePath, String mediaName, String mediaExtension)
void	init (MediaCache mediaCache) Initialize the context mapper.

Methods

init

public void **init**(MediaCache mediaCache)

Initialize the context mapper. This provides the context for the instance of media cache being used.

Parameters:

MediaCache - mediaCache

getMediaNameFromContext

public String **getMediaNameFromContext**([IApplicationInstance](#) appInstance, [IMediaStream](#) stream, String basePath, String mediaName, String mediaExtension)

(continued from last page)

This is called each time a request is made into the MediaCache system for retrieval.

The input parameters provide a context of the request

appInstance - Application instance related to the client making the request

stream - IMediaStream object directly attached to the client

basePath - The current source base path the request will be services by. If this is empty then

no source was found for the request

mediaName - The asset name with the source prefixed, such as http/mp4:sample.mp4. This would indicate

the source with a prefix of http/ was being used.

mediaExtension - This is the extension of the asset, so commonly mp4.

The return parameter should be the mediaName needed to satisfy the Media Cache request.

At this stage you can change/manipulate the mediaName to point to a different source, or even serve completely different

content if required.

If you do not want to do anything you can pass the mediaName directly to the output parameter.

Parameters:

appInstance
stream
basePath
mediaName
mediaExtension

Returns:

String

com.wowza.wms.mediacache.model Interface IMediaCacheItem

public interface **IMediaCacheItem**
extends

IMediaCacheItem

Field Summary

public static final	PROPS_ITEM_LASTMODIFIED Value: mediaCacheItem.lastModified
public static final	PROPS_ITEM_LENGTH Value: mediaCacheItem.length
public static final	PROPS_ITEM_MEDIANAME Value: mediaCacheItem.mediaName
public static final	PROPS_SOURCE_BLOCKSIZE Value: mediaCacheSource.blockSize
public static final	PROPS_SOURCE_NAME Value: mediaCacheSource.name

Method Summary

void	addPendingWrites (MediaCacheBlockPtr blockPtr) Add the block to the list of pending writes
long	blockSize () Get the block size configured for this item
void	close () Close the item
void	decPendingWriteCount () Decrement the pending write count
boolean	exists () Return if the item exists
long	getBlockCount () Get the block count
MediaCacheBlockPtr	getBlockPtr (long offset, long length) Get a block pointer for the offset and length given
long	getBlockSize () Get the block size for the item

MediaCacheItemInfo	getInfo() Get the MediaCacheItemInfo object for this item
String	getLocalPath() Get the local path for the item
int	getLockCount() Get the current lock count
long	getMaxTimeToLive() Get the maximum time to live for the item
IMediaCacheSource	getMediaCacheSource() Gets the MediaCache source for the item
java.io.File	getMediaFile() Get the file pointed to for this CacheItem
String	getMediaName() Get the MediaName for this item
long	getMinTimeToLive() Get the minimum time to live for the item
long	getPendingWriteCount() Get the pending write count
MediaCacheBlockPtr	getPendingWrites(long blockId) Get the block from the list of pending writes
IMediaCacheStoreItem	getStoreItem() Get the store item object for this item
IMediaCacheStoreItem	getStoreItem(boolean doLoad) Get the item from the store.
edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock	getSyncLock() Get the WMSReadWriteLock object
void	incPendingWriteCount() Increment the pending write count
boolean	init(String mediaName, IMediaCacheStoreItem storeItem) Initialize the item
boolean	isBlockInCache(long block) Check if the block needed is already cached
boolean	isLocal() Return if the item is local
boolean	isReadAheadTrigger(long pos, int threshold) Determine if the read ahead should occur
long	lastModified() Get the last modified time of the item

long	length() Get the length of the item
int	lock() Add to lock count for item
long	posToBlock(long pos) Convert the position given into a block number
void	preload() Start the readahead system
long	read(MediaCacheReadContext readContext, long foffset, byte[] buffer, long boffset, long length) Reads data using the read context and returns the byte count read
MediaCacheReadResult	read(MediaCacheReadContext readContext, long foffset, long length) Reads data using the read context and returns a MediaCacheReadResult object
void	readAhead() Read ahead for all pending read ahead objects
MediaCacheBlockPtr	removePendingWrites(long blockId) Remove the block from list of pending writes
void	saveBlock(MediaCacheBlockPtr blockPtr) Save the block provided by the block pointer object
void	setLastModified(long lastModified) Set the last modified time of the item
void	setLastRelease(long lastRelease) Set the last release time of the item
void	setLength(long length) Set the length of the item
void	setLocal(boolean isLocal) Set if the item is local
void	setLocalPath(String localPath) Set the local path for the item
void	setMaxTimeToLive(long maxTimeToLive) Set the maximum time to live for the item
void	setMediaCacheSource(IMediaCacheSource mediaCacheSource) Sets the MediaCache source for the item
void	setMediaName(String name) Set the MediaName for this item
void	setMinTimeToLive(long minTimeToLive) Set the minimum time to live for the item
void	tiggerReadAhead(long pos) Cause a read ahead
int	unlock() Remove from lock count from item

boolean	validate() Validate this item
boolean	validate(java.util.Properties props) Validate this item with your own properties

Fields

PROPS_ITEM_LENGTH

```
public static final java.lang.String PROPS_ITEM_LENGTH
```

Constant value: `mediaCacheItem.length`

PROPS_ITEM_LASTMODIFIED

```
public static final java.lang.String PROPS_ITEM_LASTMODIFIED
```

Constant value: `mediaCacheItem.lastModified`

PROPS_ITEM_MEDIANAME

```
public static final java.lang.String PROPS_ITEM_MEDIANAME
```

Constant value: `mediaCacheItem.mediaName`

PROPS_SOURCE_NAME

```
public static final java.lang.String PROPS_SOURCE_NAME
```

Constant value: `mediaCacheSource.name`

PROPS_SOURCE_BLOCKSIZE

```
public static final java.lang.String PROPS_SOURCE_BLOCKSIZE
```

Constant value: `mediaCacheSource.blockSize`

Methods

getMediaCacheSource

```
public IMediaCacheSource getMediaCacheSource()
```

Gets the MediaCache source for the item

Returns:

`IMediaCacheSource`

(continued from last page)

setMediaCacheSource

```
public void setMediaCacheSource(IMediaCacheSource mediaCacheSource)
```

Sets the MediaCache source for the item

Parameters:

mediaCacheSource

lock

```
public int lock()
```

Add to lock count for item

Returns:

int

unlock

```
public int unlock()
```

Remove from lock count from item

Returns:

int

getLockCount

```
public int getLockCount()
```

Get the current lock count

Returns:

int

getSyncLock

```
public edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock  
getSyncLock()
```

Get the WMSReadWriteLock object

Returns:

WMSReadWriteLock

init

```
public boolean init(String mediaName,  
    IMediaCacheStoreItem storeItem)
```

Initialize the item

Parameters:

mediaName

storeItem

Returns:

boolean - false failed to init, true success

close

```
public void close()
```

Close the item

getBlockPtr

```
public MediaCacheBlockPtr getBlockPtr(long offset,  
    long length)
```

Get a block pointer for the offset and length given

Parameters:

offset

length

Returns:

MediaCacheBlockPtr

saveBlock

```
public void saveBlock(MediaCacheBlockPtr blockPtr)
```

Save the block provided by the block pointer object

Parameters:

blockPtr

readAhead

```
public void readAhead()
```

Read ahead for all pending read ahead objects

getMediaFile

```
public java.io.File getMediaFile()
```

Get the file pointed to for this CacheItem

Returns:

File

isBlockInCache

```
public boolean isBlockInCache(long block)
```

Check if the block needed is already cached

Parameters:

block

Returns:

boolean - cached is true, not cached false

(continued from last page)

blockSize

```
public long blockSize()
```

Get the block size configured for this item

Returns:

long

validate

```
public boolean validate()
```

Validate this item

Returns:

boolean - valid is true, not valid is false

validate

```
public boolean validate(java.util.Properties props)
```

Validate this item with your own properties

Parameters:

props

Returns:

boolean - valid is true, not valid is false

getInfo

```
public MediaCacheItemInfo getInfo()
```

Get the MediaCacheItemInfo object for this item

Returns:

MediaCacheItemInfo

getMediaName

```
public String getMediaName()
```

Get the MediaName for this item

Returns:

String

setMediaName

```
public void setMediaName(String name)
```

Set the MediaName for this item

Parameters:

name

(continued from last page)

getStoreItem

```
public IMediaCacheStoreItem getStoreItem()
```

Get the store item object for this item

Returns:

[IMediaCacheStoreItem](#)

getStoreItem

```
public IMediaCacheStoreItem getStoreItem(boolean doLoad)
```

Get the item from the store. If doLoad is set to true or the item is already loaded then the item is returned, otherwise a new store item is returned

Parameters:

doLoad

Returns:

[IMediaCacheStoreItem](#)

addPendingWrites

```
public void addPendingWrites(MediaCacheBlockPtr blockPtr)
```

Add the block to the list of pending writes

Parameters:

blockPtr

removePendingWrites

```
public MediaCacheBlockPtr removePendingWrites(long blockId)
```

Remove the block from list of pending writes

Parameters:

blockId

Returns:

[MediaCacheBlockPtr](#)

getPendingWrites

```
public MediaCacheBlockPtr getPendingWrites(long blockId)
```

Get the block from the list of pending writes

Parameters:

blockId

Returns:

[MediaCacheBlockPtr](#)

incPendingWriteCount

```
public void incPendingWriteCount()
```

(continued from last page)

Increment the pending write count

decPendingWriteCount

```
public void decPendingWriteCount()
```

Decrement the pending write count

getPendingWriteCount

```
public long getPendingWriteCount()
```

Get the pending write count

Returns:

long

getMinTimeToLive

```
public long getMinTimeToLive()
```

Get the minimum time to live for the item

Returns:

long

setMinTimeToLive

```
public void setMinTimeToLive(long minTimeToLive)
```

Set the minimum time to live for the item

Parameters:

minTimeToLive

getMaxTimeToLive

```
public long getMaxTimeToLive()
```

Get the maximum time to live for the item

Returns:

long

setMaxTimeToLive

```
public void setMaxTimeToLive(long maxTimeToLive)
```

Set the maximum time to live for the item

Parameters:

maxTimeToLive

getBlockSize

```
public long getBlockSize()
```

Get the block size for the item

(continued from last page)

Returns:
long

getBlockCount

```
public long getBlockCount()
```

Get the block count

Returns:
long

isReadAheadTrigger

```
public boolean isReadAheadTrigger(long pos,  
int threshold)
```

Determine if the read ahead should occur

Parameters:
pos
threshold

Returns:
boolean - readahead true, no readahead false

tiggerReadAhead

```
public void tiggerReadAhead(long pos)
```

Cause a read ahead

Parameters:
pos

posToBlock

```
public long posToBlock(long pos)
```

Convert the position given into a block number

Parameters:
pos

Returns:
long

preload

```
public void preload()
```

Start the readahead system

getLocalPath

```
public String getLocalPath()
```

Get the local path for the item

(continued from last page)

Returns:
String

setLocalPath

```
public void setLocalPath(String localPath)
```

Set the local path for the item

Parameters:
localPath

isLocal

```
public boolean isLocal()
```

Return if the item is local

Returns:
boolean - local is true, not local is false

setLocal

```
public void setLocal(boolean isLocal)
```

Set if the item is local

Parameters:
isLocal

exists

```
public boolean exists()
```

Return if the item exists

Returns:
boolean - exists is true, does not exist is false

length

```
public long length()
```

Get the length of the item

Returns:
long

setLength

```
public void setLength(long length)
```

Set the length of the item

Parameters:
length

lastModified

```
public long lastModified()
```

Get the last modified time of the item

Returns:

long

setLastModified

```
public void setLastModified(long lastModified)
```

Set the last modified time of the item

Parameters:

lastModified

setLastRelease

```
public void setLastRelease(long lastRelease)
```

Set the last release time of the item

Parameters:

lastRelease

read

```
public long read(MediaCacheReadContext readContext,  
                long foffset,  
                byte[] buffer,  
                long boffset,  
                long length)
```

Reads data using the read context and returns the byte count read

Parameters:

readContext

foffset

buffer

boffset

length

Returns:

long

read

```
public MediaCacheReadResult read(MediaCacheReadContext readContext,  
                                 long foffset,  
                                 long length)
```

Reads data using the read context and returns a MediaCacheReadResult object

Parameters:

readContext

foffset

(continued from last page)

length

Returns:

MediaCacheReadResult

com.wowza.wms.mediacache.model Interface IMediaCacheReader

public interface **IMediaCacheReader**
extends

IMediaCacheReader

Method Summary

void	close() Close the reader
long	getFilePointer() Get the file pointer for this reader
IMediaCacheItem	getMediaCacheItem() Get the MediaCache item associated with this reader
Object	getOpaqueObject() Get the opaque object
long	lastModified() Get the last modified time
long	length() Get the length
void	open() Open the reader
int	read(byte[] buffer, int offset, int len) Read bytes for this reader
void	seek(long pos) Seek to the position provided
void	setMediaCacheItem(IMediaCacheItem mediaCacheItem) Set the MediaCache item associated with this reader
void	setOpaqueObject(Object object) Set the opaque object

Methods

seek

public void **seek**(long pos)

Seek to the position provided

Parameters:

pos

getFilePointer

```
public long getFilePointer()
```

Get the file pointer for this reader

Returns:
long

read

```
public int read(byte[] buffer,  
                int offset,  
                int len)
```

Read bytes for this reader

Parameters:
buffer
offset
len

Returns:
int - number of bytes read

setMediaCacheItem

```
public void setMediaCacheItem(IMediaCacheItem mediaCacheItem)
```

Set the MediaCache item associated with this reader

Parameters:
mediaCacheItem

getMediaCacheItem

```
public IMediaCacheItem getMediaCacheItem()
```

Get the MediaCache item associated with this reader

Returns:
IMediaCacheItem

open

```
public void open()
```

Open the reader

close

```
public void close()
```

Close the reader

(continued from last page)

length

```
public long length()
```

Get the length

Returns:

long

lastModified

```
public long lastModified()
```

Get the last modified time

Returns:

long

getOpaqueObject

```
public Object getOpaqueObject()
```

Get the opaque object

Returns:

Object

setOpaqueObject

```
public void setOpaqueObject(Object object)
```

Set the opaque object

Parameters:

object

com.wowza.wms.mediache.model Interface IMediaCacheSource

public interface **IMediaCacheSource**
extends

Internal use do not use. Please see descriptions in IMediaCacheItemHTTPReaderFactory and IMediaCacheHTTPByteReader

Method Summary

boolean	canHandle (String mediaName)
String	getBaseClass ()
int	getDefaultBlockSize ()
String	getDescription ()
long	getMaxTimeToLive ()
MediaCache	getMediaCache ()
long	getMinTimeToLive ()
String	getName ()
MediaCachePerformance Counter	getPerformanceCount ()
String	getPrefix ()
WMSProperties	getProperties ()
int	getReadAheadThreshold ()
String	getReaderClass ()
String	getSourcePath ()
boolean	isPassThru ()
boolean	isReadAhead ()
IMediaCacheItem	loadCacheItem (String mediaName, IMediaCacheStoreItem storeItem)
IMediaCacheItem	loadCacheItem (String mediaName, IMediaCacheStoreItem storeItem, long length, long lastModified)

IMediaCacheItem	newCacheItem (String mediaName)
void	setBaseClass (String baseClass)
void	setDefaultBlockSize (int defaultBlockSize)
void	setDescription (String description)
void	setMaxTimeToLive (long maxTimeToLive)
void	setMediaCache (MediaCache mediaCache)
void	setMinTimeToLive (long minTimeToLive)
void	setName (String name)
void	setPassThru (boolean isPassThru)
void	setPrefix (String prefix)
void	setProperties (WMSProperties properties)
void	setReadAhead (boolean readAhead)
void	setReadAheadThreshold (int readAheadThreshold)
void	setReaderClass (String readerClass)
void	setSourcePath (String sourcePath)

Methods

canHandle

```
public boolean canHandle(String mediaName)
```

newCacheItem

```
public IMediaCacheItem newCacheItem(String mediaName)
```

loadCacheItem

```
public IMediaCacheItem loadCacheItem(String mediaName,  
IMediaCacheStoreItem storeItem)
```

loadCacheItem

```
public IMediaCacheItem loadCacheItem(String mediaName,  
    IMediaCacheStoreItem storeItem,  
    long length,  
    long lastModified)
```

getName

```
public String getName()
```

setName

```
public void setName(String name)
```

setPrefix

```
public void setPrefix(String prefix)
```

getPrefix

```
public String getPrefix()
```

getDescription

```
public String getDescription()
```

setDescription

```
public void setDescription(String description)
```

getBaseClass

```
public String getBaseClass()
```

setBaseClass

```
public void setBaseClass(String baseClass)
```

getSourcePath

```
public String getSourcePath()
```

setSourcePath

```
public void setSourcePath(String sourcePath)
```

getDefaultBlockSize

```
public int getDefaultBlockSize()
```

setDefaultBlockSize

```
public void setDefaultBlockSize(int defaultBlockSize)
```

getProperties

```
public WMSProperties getProperties()
```

setProperties

```
public void setProperties(WMSProperties properties)
```

getReaderClass

```
public String getReaderClass()
```

setReaderClass

```
public void setReaderClass(String readerClass)
```

getMediaCache

```
public MediaCache getMediaCache()
```

setMediaCache

```
public void setMediaCache(MediaCache mediaCache)
```

(continued from last page)

getPerformanceCount

```
public MediaCachePerformanceCounter getPerformanceCount()
```

getMinTimeToLive

```
public long getMinTimeToLive()
```

setMinTimeToLive

```
public void setMinTimeToLive(long minTimeToLive)
```

getMaxTimeToLive

```
public long getMaxTimeToLive()
```

setMaxTimeToLive

```
public void setMaxTimeToLive(long maxTimeToLive)
```

isReadAhead

```
public boolean isReadAhead()
```

setReadAhead

```
public void setReadAhead(boolean readAhead)
```

getReadAheadThreshold

```
public int getReadAheadThreshold()
```

setReadAheadThreshold

```
public void setReadAheadThreshold(int readAheadThreshold)
```

(continued from last page)

isPassThru

```
public boolean isPassThru()
```

setPassThru

```
public void setPassThru(boolean isPassThru)
```

com.wowza.wms.mediache.model Interface IMediaCacheSourceNotify

public interface **IMediaCacheSourceNotify**
extends

MediaCache Interface for source creation and destroy notifications

This interface can be configured via the CacheSourceListenerClassList configuration item in the main MediaCache configuration section.

```
<CacheSourceListenerClassList>com.wowza.mediache.example.sourcelistener</CacheSourceListenerClassList>
```

It is triggered when a source is added/removed from the running MediaCache configuration. This is done either as MediaCache starts up or dynamically via the API.

Method Summary

void	onMediaCacheSourceCreate (IMediaCacheSource mediaCacheSource) When a source is added this is called with the current source as a parameter.
void	onMediaCacheSourceDestroy (IMediaCacheSource mediaCacheSource) When a source is removed successfully this is called with the source that has been removed as a parameter.

Methods

onMediaCacheSourceCreate

public void **onMediaCacheSourceCreate**([IMediaCacheSource](#) mediaCacheSource)

When a source is added this is called with the current source as a parameter.

Parameters:

mediaCacheSource

onMediaCacheSourceDestroy

public void **onMediaCacheSourceDestroy**([IMediaCacheSource](#) mediaCacheSource)

When a source is removed successfully this is called with the source that has been removed as a parameter.

Parameters:

mediaCacheSource

com.wowza.wms.mediache.model Interface IMediaCacheStoreItem

public interface **IMediaCacheStoreItem**
extends

Interface that describes items within a Media Cache store.

Method Summary

byte[]	getBlockMask() Internal
String	getBlockPath() Get the path of the block associated with this item.
String	getMediaPath() Get the path of the media associated with this item.
java.util.Properties	getProperties() Get the properties for this item
String	getPropertiesPath() Get the full path of the properties
MediaCacheStore	getStore() Get the store associated to this item.
void	initMedia(long length) Initialise the media entry with the length of the asset.
long	length() Get the length of the asset.
void	setBlockMask(byte[] blockMask) Internal
void	setLength(long length) Set the length of the asset.
void	setProperties(java.util.Properties props) Set the properties for this item.
String	toString()
void	updateBlockMask(byte[] blockMask, long offset, long len) Internal

Methods

getStore

public MediaCacheStore **getStore()**

(continued from last page)

Get the store associated to this item.

Returns:

MediaCacheStore

setProperty

```
public void setProperty(java.util.Properties props)
```

Set the properties for this item.

Parameters:

Properties - props

getProperty

```
public java.util.Properties getProperty()
```

Get the properties for this item

Returns:

Properties

getPropertyPath

```
public String getPropertyPath()
```

Get the full path of the properties

Returns:

initMedia

```
public void initMedia(long length)
```

Initialise the media entry with the length of the asset.

Parameters:

length

getMediaPath

```
public String getMediaPath()
```

Get the path of the media associated with this item.

Returns:

String

getBlockPath

```
public String getBlockPath()
```

Get the path of the block associated with this item.

Returns:

String

setBlockMask

```
public void setBlockMask(byte[] blockMask)
```

Internal

Parameters:

blockMask

getBlockMask

```
public byte[] getBlockMask()
```

Internal

Returns:

byte[]

updateBlockMask

```
public void updateBlockMask(byte[] blockMask,  
                             long offset,  
                             long len)
```

Internal

Parameters:

blockMask

offset

len

toString

```
public String toString()
```

length

```
public long length()
```

Get the length of the asset.

Returns:

long

setLength

```
public void setLength(long length)
```

Set the length of the asset. Should be identical size when initMedia is called.

Parameters:

length

com.wowza.wms.mediache.model Interface IMediaCacheStoreItemEvent

public interface **IMediaCacheStoreItemEvent**
extends

Interface for Store Item GC events

When an item within a store is about to be processed for removal this provides the detailed information of the item.

It gives the opportunity to alter the timing parameters of the item so to delay when it is next processed or allow it to be removed.

The default is for the item to be removed unless this is changed with

```
item.setItemRemove(false);
```

Method Summary

boolean	getBadItemTime() Gets the current bad item state
long	getFreedSpaceTotal() Get the total space to be made available
String	getItemName() Get the item name
int	getItemNumber() Get this item number
boolean	getItemRemove() Get the item remove flag
long	getItemSize() Gets the item size in bytes
String	getItemStorePath() Get the item store path
int	getItemTotalCount() Get the total number of items to be processed
boolean	getMaxTTLReached() Gets the MaxTTL reached state
boolean	getMinTTLReached() Gets the MinTTL reached state

long	getReleaseItemTime() Gets release time in milliseconds
void	setBadItemTime(boolean state) Sets the state for bad item time
void	setFreedSpaceTotal(long size) Set the total space to be made available
void	setItemName(String name) Set the item name
void	setItemNumber(int number) Set this item number
void	setItemReleaseTime(long releaseTime) Sets the item current release time
void	setItemRemove(boolean state) Set the item remove flag
void	setItemSize(long size) Sets the item size in bytes
void	setItemStorePath(String path) Set the item store path
void	setItemTotalCount(int count) Set the total number of items to be processed
void	setMaxTTLReached(boolean state) Sets the MaxTTL reached state
void	setMinTTLReached(boolean state) Sets the MinTTL reached state

Methods

setItemName

```
public void setItemName(String name)
```

Set the item name

Parameters:

name

getItemName

```
public String getItemName()
```

Get the item name

Returns:

item name

(continued from last page)

setItemStorePath

```
public void setItemStorePath(String path)
```

Set the item store path

Parameters:
path

getItemStorePath

```
public String getItemStorePath()
```

Get the item store path

Returns:
storage path

setItemReleaseTime

```
public void setItemReleaseTime(long releaseTime)
```

Sets the item current release time

Parameters:
releaseTime - time in milliseconds

getReleaseItemTime

```
public long getReleaseItemTime()
```

Gets release time in milliseconds

Returns:
time in milliseconds

setBadItemTime

```
public void setBadItemTime(boolean state)
```

Sets the state for bad item time

Parameters:
state

getBadItemTime

```
public boolean getBadItemTime()
```

Gets the current bad item state

Returns:
state

setMaxTTLReached

```
public void setMaxTTLReached(boolean state)
```

(continued from last page)

Sets the MaxTTL reached state

Parameters:
state

getMaxTTLReached

```
public boolean getMaxTTLReached()
```

Gets the MaxTTL reached state

Returns:
maxTTL reached state

setMinTTLReached

```
public void setMinTTLReached(boolean state)
```

Sets the MinTTL reached state

Parameters:
state

getMinTTLReached

```
public boolean getMinTTLReached()
```

Gets the MinTTL reached state

Returns:
MinTTL reached state

setItemSize

```
public void setItemSize(long size)
```

Sets the item size in bytes

Parameters:
size

getItemSize

```
public long getItemSize()
```

Gets the item size in bytes

Returns:
item size in bytes

setFreedSpaceTotal

```
public void setFreedSpaceTotal(long size)
```

Set the total space to be made available

Parameters:
size

getFreedSpaceTotal

```
public long getFreedSpaceTotal()
```

Get the total space to be made available

Returns:

total space to be made available

setItemTotalCount

```
public void setItemTotalCount(int count)
```

Set the total number of items to be processed

Parameters:

count

getItemTotalCount

```
public int getItemTotalCount()
```

Get the total number of items to be processed

Returns:

total number of items to be processed

setItemNumber

```
public void setItemNumber(int number)
```

Set this item number

Parameters:

number

getItemNumber

```
public int getItemNumber()
```

Get this item number

Returns:

item number

setItemRemove

```
public void setItemRemove(boolean state)
```

Set the item remove flag

Parameters:

state

getItemRemove

```
public boolean getItemRemove()
```

(continued from last page)

Get the item remove flag

Returns:

item remove flag

com.wowza.wms.mediache.model Interface IMediaCacheStoreItemListener

public interface **IMediaCacheStoreItemListener**
extends

Interface for Store Item GC events

When an item within a store is about to be processed for removal this interface can be called and provide information on the item and the ability to change/update the decision being made.

The interface `IMediaCacheStoreItemEvent` provides the context of the item being removed.

Method Summary

void	init() Initialise the CacheStoreItemListener
void	processMediaCacheItemEvent(IMediaCacheStoreItemEvent itemEvent) Process the itemEvent presented at GC time

Methods

init

public void **init**()

Initialise the CacheStoreItemListener

processMediaCacheItemEvent

public void **processMediaCacheItemEvent**([IMediaCacheStoreItemEvent](#) itemEvent)

Process the itemEvent presented at GC time

Parameters:

itemEvent

com.wowza.wms.mediache.model Interface IMediaCacheStoreNotify

public interface **IMediaCacheStoreNotify**
extends

MediaCache Interface for store creation and destroy notifications

This interface can be configured via the `CacheStoreListenerClassList` configuration item in the main `MediaCache` configuration section.

```
<CacheStoreListenerClassList>com.wowza.mediache.example.storelistener</CacheStoreListenerClassList>
```

It is triggered when a store is added/removed from the running `MediaCache` configuration. This is done either as `MediaCache` starts up or dynamically via the API.

Method Summary

void	onMediaCacheStoreCreate (MediaCacheStore mediaCacheStore) When a store is added this is called with the current store as a parameter.
void	onMediaCacheStoreDestroy (MediaCacheStore mediaCacheStore) When a store is removed successfully this is called with the store removed as a parameter.

Methods

onMediaCacheStoreCreate

```
public void onMediaCacheStoreCreate(MediaCacheStore mediaCacheStore)
```

When a store is added this is called with the current store as a parameter. You can not at this point alter a store configuration, any changes made are ignored.

Parameters:

mediaCacheStore

onMediaCacheStoreDestroy

```
public void onMediaCacheStoreDestroy(MediaCacheStore mediaCacheStore)
```

When a store is removed successfully this is called with the store removed as a parameter.

Parameters:

mediaCacheStore

com.wowza.wms.mediache.model Interface IMediaCacheStoreTraverseFile

public interface **IMediaCacheStoreTraverseFile**
extends

Interface to provide per file access when traversing a file tree

This interface is used as part of the cache reload functionality and can not be changed out from the internal implementation.

Method Summary

void	onFile (java.io.File item) Called when an item is selected.
------	--

Methods

onFile

public void **onFile**(java.io.File item)

Called when an item is selected.

Parameters:

item

com.wowza.wms.mediache.model Interface IMediaCacheStoreTraverseItem

public interface **IMediaCacheStoreTraverseItem**
extends

Interface to provide per MediaCache store item access when traversing the item tree

This interface is used as part of the cache reload functionality and can not be changed out from the internal implementation.

Method Summary

void	onItem(IMediaCacheStoreItem item) Called when an item is selected.
------	---

Methods

onItem

public void **onItem**([IMediaCacheStoreItem](#) item)

Called when an item is selected.

Parameters:

item

Package

com.wowza.wms.mediacaster

com.wowza.wms.mediacaster Interface IMediaCaster

public interface **IMediaCaster**
extends

Field Summary

public static final	MEDIACASTERTYPE_CUPERTINO Value: 4
public static final	MEDIACASTERTYPE_LIVEREPEATER Value: 1
public static final	MEDIACASTERTYPE_MPEGTSTCP Value: 5
public static final	MEDIACASTERTYPE_RTPLIVE Value: 3
public static final	MEDIACASTERTYPE_SHOUTCAST Value: 2
public static final	MEDIACASTERTYPE_SRTRECEIVER Value: 6
public static final	MEDIACASTERTYPE_UNKNOWN Value: 0
public static final	STREAMTIMEOUTREASON_GOOD Value: 100
public static final	STREAMTIMEOUTREASON_MISSING Value: 101
public static final	STREAMTIMEOUTREASON_NORTSPSESSION Value: 6
public static final	STREAMTIMEOUTREASON_NOSESSION Value: 2
public static final	STREAMTIMEOUTREASON_NOSTREAM Value: 4
public static final	STREAMTIMEOUTREASON_NOTIMEOUT Value: 1

public static final	STREAMTIMEOUTREASON_NOURL Value: 3
public static final	STREAMTIMEOUTREASON_RECONNECTRUNNING Value: 5
public static final	STREAMTIMEOUTREASON_UNKNOWN Value: 0

Method Summary

boolean	doWatchdog() Idle processor
void	forceReset() Force a reset/reconnect of this media caster
IApplicationInstance	getAppInstance() Get the application instance this media caster is associated with
long	getConnectLastAttempt() Get system time in milliseconds of last connection attempt
long	getConnectLastForceReset() Get system time in milliseconds of last time forceReset was called
long	getConnectLastSuccess() Get system time in milliseconds of last connection success
int	getIdleTimeout() Get the idle timeout for this media caster (milliseconds)
Object	getLock() Get the MediaCaster lock for an individual MediaCaster item.
MediaCasterItem	getMediaCasterDef() Get the media caster definition
String	getMediaCasterId() Get the media caster id
MediaCasterStreamItem	getMediaCasterStreamItem() Get the media caster item associated with this media caster
int	getMediaCasterType() Get the media caster type.
int	getReconnectWaitTime() Get the minimum time between reconnect attempts (milliseconds)
IMediaStream	getStream() Get the underlying stream being used by this media caster
long	getStreamLastSeq() Get the AMFPacket sequence number of last watchdog processed packet

long	getStreamMissingTime() Get the time in milliseconds the stream has been missing
long	getStreamRunningIndex() Each time a MediaCaster stream switches from not running to running this value is incremented
int	getStreamTimeout() Get the watchdog stream timeout (milliseconds)
long	getStreamTimeoutLastReset() Get system time in milliseconds of last time stream was reset due to stream timeout (debug)
long	getStreamTimeoutLastTime() Get system time in milliseconds of last time stream was considered in missing state (debug)
int	getStreamTimeoutReason() Get the reason the stream is in timeout condition (debug)
IVHost	getVHost() Get the virtual host associated with this media caster
void	init(MediaCasterStreamItem mediaCasterStreamItem, MediaCasterItem mediaCasterDef, IApplicationInstance appInstance, String mediaCasterId, String streamExt) Initialize the media caster
boolean	isSession() Is there current a session attached to this MediaCaster
boolean	isStream() Is there a stream associated with this MediaCaster
boolean	isStreamIsRunning() Return true if stream is currently running
void	registerPlayer(IMediaStreamPlay player) Register a player with this media caster
void	sessionClosed(org.apache.mina.common.IoSession session) sessionClosed callback
void	sessionOpened(org.apache.mina.common.IoSession session) sessionOpened callback
void	setAppInstance(IApplicationInstance appInstance) Set the application instance this media caster is associated with
void	setMediaCasterDef(MediaCasterItem mediaCasterDef) Set the media caster definition
void	setMediaCasterId(String mediaCasterId) Get the media caster id
void	setMediaCasterType(int mediaCasterType) Set the media caster type.
void	setReconnectWaitTime(int reconnectWaitTime) Set the minimum time between reconnect attempts (milliseconds)

void	setStream (IMediaStream stream) Set the underlying stream being used by this media caster
void	setStreamRunning (boolean streamRunning) Called internally to track when streams are running or are stopped.
void	setStreamTimeout (int streamTimeout) Set the watchdog stream timeout (milliseconds)
void	shutdown (boolean isAppInstanceShutdown) Shutdown media caster
void	unregisterPlayer (IMediaStreamPlay player) Unregister a player with this media caster

Fields

STREAMTIMEOUTREASON_UNKNOWN

```
public static final int STREAMTIMEOUTREASON_UNKNOWN
```

Constant value: **0**

STREAMTIMEOUTREASON_NOTIMEOUT

```
public static final int STREAMTIMEOUTREASON_NOTIMEOUT
```

Constant value: **1**

STREAMTIMEOUTREASON_NOSESSION

```
public static final int STREAMTIMEOUTREASON_NOSESSION
```

Constant value: **2**

STREAMTIMEOUTREASON_NOURL

```
public static final int STREAMTIMEOUTREASON_NOURL
```

Constant value: **3**

STREAMTIMEOUTREASON_NOSTREAM

```
public static final int STREAMTIMEOUTREASON_NOSTREAM
```

Constant value: **4**

STREAMTIMEOUTREASON_RECONNECTRUNNING

```
public static final int STREAMTIMEOUTREASON_RECONNECTRUNNING
```

(continued from last page)

Constant value: **5**

STREAMTIMEOUTREASON_NORTSPSESSIONpublic static final int **STREAMTIMEOUTREASON_NORTSPSESSION**Constant value: **6**

STREAMTIMEOUTREASON_GOODpublic static final int **STREAMTIMEOUTREASON_GOOD**Constant value: **100**

STREAMTIMEOUTREASON_MISSINGpublic static final int **STREAMTIMEOUTREASON_MISSING**Constant value: **101**

MEDIACASTERTYPE_UNKNOWNpublic static final int **MEDIACASTERTYPE_UNKNOWN**Constant value: **0**

MEDIACASTERTYPE_LIVEREPEATERpublic static final int **MEDIACASTERTYPE_LIVEREPEATER**Constant value: **1**

MEDIACASTERTYPE_SHOUTCASTpublic static final int **MEDIACASTERTYPE_SHOUTCAST**Constant value: **2**

MEDIACASTERTYPE_RTPLIVEpublic static final int **MEDIACASTERTYPE_RTPLIVE**Constant value: **3**

MEDIACASTERTYPE_CUPERTINOpublic static final int **MEDIACASTERTYPE_CUPERTINO**Constant value: **4**

(continued from last page)

MEDIACASTERTYPE_MPEGTSTCP

```
public static final int MEDIACASTERTYPE_MPEGTSTCP
```

Constant value: **5**

MEDIACASTERTYPE_SRTRECEIVER

```
public static final int MEDIACASTERTYPE_SRTRECEIVER
```

Constant value: **6**

Methods

init

```
public void init(MediaCasterStreamItem mediaCasterStreamItem,  
                MediaCasterItem mediaCasterDef,  
                IApplicationInstance appInstance,  
                String mediaCasterId,  
                String streamExt)
```

Initialize the media caster

Parameters:

`mediaCasterStreamItem` - media caster item
`mediaCasterDef` - media caster definition
`appInstance` - application instance
`mediaCasterId` - media caster id
`streamExt` - stream ext or prefix

getVHost

```
public IVHost getVHost()
```

Get the virtual host associated with this media caster

Returns:

virtual host associated with this media caster

getMediaCasterId

```
public String getMediaCasterId()
```

Get the media caster id

Returns:

media caster id

setMediaCasterId

```
public void setMediaCasterId(String mediaCasterId)
```

Get the media caster id

Parameters:

`mediaCasterId` - media caster id

getStream

```
public IMediaStream getStream()
```

Get the underlying stream being used by this media caster

Returns:

underlying stream being used by this media caster

setStream

```
public void setStream(IMediaStream stream)
```

Set the underlying stream being used by this media caster

Parameters:

stream - underlying stream being used by this media caster

getAppInstance

```
public IApplicationInstance getAppInstance()
```

Get the application instance this media caster is associated with

Returns:

application instance this media caster is associated with

setAppInstance

```
public void setAppInstance(IApplicationInstance appInstance)
```

Set the application instance this media caster is associated with

Parameters:

appInstance - application instance this media caster is associated with

getMediaCasterDef

```
public MediaCasterItem getMediaCasterDef()
```

Get the media caster definition

Returns:

media caster definition

setMediaCasterDef

```
public void setMediaCasterDef(MediaCasterItem mediaCasterDef)
```

Set the media caster definition

Parameters:

mediaCasterDef - media caster definition

shutdown

```
public void shutdown(boolean isAppInstanceShutdown)
```

(continued from last page)

Shutdown media caster

Parameters:

isAppInstanceShutdown - is server shutdown

registerPlayer

```
public void registerPlayer(IMediaStreamPlay player)
```

Register a player with this media caster

Parameters:

player - player to register

unregisterPlayer

```
public void unregisterPlayer(IMediaStreamPlay player)
```

Unregister a player with this media caster

Parameters:

player - player to unregister

getIdleTimeout

```
public int getIdleTimeout()
```

Get the idle timeout for this media caster (milliseconds)

Returns:

idle timeout for this media caster (milliseconds)

sessionOpened

```
public void sessionOpened(org.apache.mina.common.Session session)
```

sessionOpened callback

Parameters:

session - IO Session

sessionClosed

```
public void sessionClosed(org.apache.mina.common.Session session)
```

sessionClosed callback

Parameters:

session - IO Session

getMediaCasterStreamItem

```
public MediaCasterStreamItem getMediaCasterStreamItem()
```

Get the media caster item associated with this media caster

Returns:

media caster item associated with this media caster

forceReset

```
public void forceReset()
```

Force a reset/reconnect of this media caster

doWatchdog

```
public boolean doWatchdog()
```

Idle processor

Returns:

return true if media caster unloaded due to idle event

getStreamTimeout

```
public int getStreamTimeout()
```

Get the watchdog stream timeout (milliseconds)

Returns:

stream timeout

setStreamTimeout

```
public void setStreamTimeout(int streamTimeout)
```

Set the watchdog stream timeout (milliseconds)

Parameters:

streamTimeout - stream timeout

getStreamMissingTime

```
public long getStreamMissingTime()
```

Get the time in milliseconds the stream has been missing

Returns:

time in milliseconds the stream has been missing

getStreamLastSeq

```
public long getStreamLastSeq()
```

Get the AMFPacket sequence number of last watchdog processed packet

Returns:

AMFPacket sequence number

getStreamTimeoutReason

```
public int getStreamTimeoutReason()
```

Get the reason the stream is in timeout condition (debug)

(continued from last page)

Returns:

reason the stream is in timeout condition (debug)

getStreamTimeoutLastTimepublic long **getStreamTimeoutLastTime**()

Get system time in milliseconds of last time stream was considered in missing state (debug)

Returns:

time in milliseconds of last time stream was considered in missing

getStreamTimeoutLastResetpublic long **getStreamTimeoutLastReset**()

Get system time in milliseconds of last time stream was reset due to stream timeout (debug)

Returns:

time in milliseconds of last time stream was reset

isSessionpublic boolean **isSession**()

Is there current a session attached to this MediaCaster

Returns:

true is MediaCaster has session

isStreampublic boolean **isStream**()

Is there a stream associated with this MediaCaster

Returns:

true if stream associated with this MediaCaster

getConnectLastAttemptpublic long **getConnectLastAttempt**()

Get system time in milliseconds of last connection attempt

Returns:

system time in milliseconds of last connection attempt

getConnectLastSuccesspublic long **getConnectLastSuccess**()

Get system time in milliseconds of last connection success

Returns:

system time in milliseconds of last connection success

(continued from last page)

getConnectLastForceReset

```
public long getConnectLastForceReset()
```

Get system time in milliseconds of last time forceReset was called

Returns:

system time in milliseconds of last time forceReset was called

isStreamIsRunning

```
public boolean isStreamIsRunning()
```

Return true if stream is currently running

Returns:

true if stream is currently running

getReconnectWaitTime

```
public int getReconnectWaitTime()
```

Get the minimum time between reconnect attempts (milliseconds)

Returns:

minimum time between reconnect attempts (milliseconds)

setReconnectWaitTime

```
public void setReconnectWaitTime(int reconnectWaitTime)
```

Set the minimum time between reconnect attempts (milliseconds)

Parameters:

reconnectWaitTime - minimum time between reconnect attempts (milliseconds)

getMediaCasterType

```
public int getMediaCasterType()
```

Get the media caster type. See IMediaCaster.MEDIACASTERTYPE_*

Returns:

media caster type

setMediaCasterType

```
public void setMediaCasterType(int mediaCasterType)
```

Set the media caster type. See IMediaCaster.MEDIACASTERTYPE_*

Parameters:

mediaCasterType - media caster type

getLock

```
public Object getLock()
```

(continued from last page)

Get the MediaCaster lock for an individual MediaCaster item.

setStreamRunning

```
public void setStreamRunning(boolean streamRunning)
```

Called internally to track when streams are running or are stopped.

Parameters:

streamRunning - set to true if stream is running

getStreamRunningIndex

```
public long getStreamRunningIndex()
```

Each time a MediaCaster stream switches from not running to running this value is incremented

Returns:

stream running index

com.wowza.wms.mediacaster Interface IMediaCasterDataReceiver

public interface **IMediaCasterDataReceiver**
extends

IMediaCasterDataReceiver: For internal use only.

Method Summary

void	onData (org.apache.mina.common.ByteBuffer data) Data callback
------	--

Methods

onData

public void **onData**(org.apache.mina.common.ByteBuffer data)

Data callback

Parameters:

data - data

com.wowza.wms.mediacaster Interface IMediaCasterNetConnection

public interface **IMediaCasterNetConnection**
extends

IMediaCasterNetConnection: Internal use only

Method Summary

NetConnection	getNetConnection() Receives the INetConnection interface for a live repeater connection
---------------	--

Methods

getNetConnection

public NetConnection **getNetConnection()**

Receives the INetConnection interface for a live repeater connection

Returns:

INetConnection interface

com.wowza.wms.mediacaster Interface IMediaCasterNotify

All Subinterfaces:

[IMediaCasterNotify2](#)

public interface **IMediaCasterNotify**
extends

IMediaCasterNotify: listener interface to MediaCaster system. See IApplicationInstance.addMediaCasterListener().

Method Summary

void	onMediaCasterCreate (IMediaCaster mediaCaster) Invoked when mediaCaster created
void	onMediaCasterDestroy (IMediaCaster mediaCaster) Invoked when MediaCaster destroyed
void	onRegisterPlayer (IMediaCaster mediaCaster, IMediaStreamPlay player) Invoked when a player is added to this mediaCaster
void	onSetSourceStream (IMediaCaster mediaCaster, IMediaStream stream) Invoked when soure stream is set (can be called with stream of null)
void	onUnRegisterPlayer (IMediaCaster mediaCaster, IMediaStreamPlay player) Invoked when a player is removed from this mediaCaster

Methods

onMediaCasterCreate

public void **onMediaCasterCreate**([IMediaCaster](#) mediaCaster)

Invoked when mediaCaster created

Parameters:

mediaCaster

onMediaCasterDestroy

public void **onMediaCasterDestroy**([IMediaCaster](#) mediaCaster)

Invoked when MediaCaster destroyed

Parameters:

mediaCaster

onRegisterPlayer

public void **onRegisterPlayer**([IMediaCaster](#) mediaCaster,
[IMediaStreamPlay](#) player)

(continued from last page)

Invoked when a player is added to this mediaCaster

Parameters:

mediaCaster
player

onUnRegisterPlayer

```
public void onUnRegisterPlayer(IMediaCaster mediaCaster,  
    IMediaStreamPlay player)
```

Invoked when a player is removed from this mediaCaster

Parameters:

mediaCaster
player

onSetSourceStream

```
public void onSetSourceStream(IMediaCaster mediaCaster,  
    IMediaStream stream)
```

Invoked when source stream is set (can be called with stream of null)

Parameters:

mediaCaster
stream

com.wowza.wms.mediacaster Interface IMediaCasterNotify2

All Superinterfaces:

[IMediaCasterNotify](#)

public interface **IMediaCasterNotify2**

extends [IMediaCasterNotify](#)

Method Summary

void	onConnectFailure (IMediaCaster mediaCaster)	Invoked when a connection or reconnection attempt fails
void	onConnectStart (IMediaCaster mediaCaster)	Invoked when a connection or reconnection attempt is invoked
void	onConnectSuccess (IMediaCaster mediaCaster)	Invoked when a connection or reconnection attempt is successful
void	onStreamStart (IMediaCaster mediaCaster)	Invoked when the stream starts receiving media data from the media source.
void	onStreamStop (IMediaCaster mediaCaster)	Invoked when the stream stops receiving media data from the media source after the streamTimeout value has passed.

Methods inherited from interface [com.wowza.wms.mediacaster.IMediaCasterNotify](#)

[onMediaCasterCreate](#), [onMediaCasterDestroy](#), [onRegisterPlayer](#), [onSetSourceStream](#), [onUnregisterPlayer](#)

Methods

onConnectStart

public void **onConnectStart**([IMediaCaster](#) mediaCaster)

Invoked when a connection or reconnection attempt is invoked

Parameters:

mediaCaster

onConnectSuccess

public void **onConnectSuccess**([IMediaCaster](#) mediaCaster)

Invoked when a connection or reconnection attempt is successful

Parameters:

mediaCaster

onConnectFailure

```
public void onConnectFailure(IMediaCaster mediaCaster)
```

Invoked when a connection or reconnection attempt fails

Parameters:

mediaCaster

onStreamStart

```
public void onStreamStart(IMediaCaster mediaCaster)
```

Invoked when the stream starts receiving media data from the media source. This event will only be thrown if the MediaCaster property streamTimeout is set to a non-zero value.

Parameters:

mediaCaster

onStreamStop

```
public void onStreamStop(IMediaCaster mediaCaster)
```

Invoked when the stream stops receiving media data from the media source after the streamTimeout value has passed. This event will only be thrown if the MediaCaster property streamTimeout is set to a non-zero value.

Parameters:

mediaCaster

com.wowza.wms.mediacaster Interface IMediaCasterValidateMediaCaster

public interface **IMediaCasterValidateMediaCaster**
extends

IMediaCasterValidateMediaCaster: interface for implementing stream validators. See
IApplicationInstance.setMediaCasterValidator(IMediaCasterValidateMediaCaster mediaCasterValidator)

Method Summary

boolean	onResetMediaCaster (IApplicationInstance appInstance, IMediaCaster mediaCaster) Called when media caster is reset
boolean	onValidateMediaCaster (IApplicationInstance appInstance, IMediaCaster mediaCaster) Called for each media caster to validate the media caster.
void	onValidateMediaCastersStart (IApplicationInstance appInstance) Called when validation for all streams of an application instance is starting
void	onValidateMediaCastersStop (IApplicationInstance appInstance) Called when validation for all streams of an application instance is done

Methods

onValidateMediaCastersStart

public void **onValidateMediaCastersStart**([IApplicationInstance](#) appInstance)

Called when validation for all streams of an application instance is starting

Parameters:

appInstance - application instance

onValidateMediaCastersStop

public void **onValidateMediaCastersStop**([IApplicationInstance](#) appInstance)

Called when validation for all streams of an application instance is done

Parameters:

appInstance

onValidateMediaCaster

public boolean **onValidateMediaCaster**([IApplicationInstance](#) appInstance, [IMediaCaster](#) mediaCaster)

Called for each media caster to validate the media caster. Return true if valid.

Parameters:

(continued from last page)

appInstance - application instance
mediaCaster - media caster

Returns:

true, if valid

onResetMediaCaster

```
public boolean onResetMediaCaster(IApplicationInstance appInstance,  
    IMediaCaster mediaCaster)
```

Called when media caster is reset

Parameters:

appInstance - application instance
mediaCaster - media caster

Returns:

return true

com.wowza.wms.mediacaster Class MediaCasterItem

java.lang.Object

└-com.wowza.wms.mediacaster.MediaCasterItem

public class **MediaCasterItem**
extends Object

Constructor Summary

public	MediaCasterItem (String name, String streamType, String baseClass) Media caster item constructor
--------	---

Method Summary

void	clearProperty (String name) Clear property
String	getBaseClass () Get base class
int	getConnectionTimeout () Get connection timeout (milliseconds)
String	getDescription () Get description
static String	getIdString (String name, String liveStreamPacketizer, String liveStreamRepeater) Get id string for this media caster item (not used - returns name unchanged)
int	getKeepAliveTime () Get keep alive time (milliseconds)
String	getName () Get name
WMSProperties	getProperties () Get properties collection
String	getProperty (String name) Get property value
String	getStreamType () Get the stream type
String	idStringToName (String idString) Convert name to id string (not used - returns id string unchanged)
static MediaCasterStreamId	parseIdString (String idString)

void	setBaseClass (String baseClass) Set base class
void	setConnectionTimeout (int connectionTimeout) Set connection timeout (milliseconds)
void	setDescription (String description) Set description
void	setKeepAliveTime (int keepAliveTime) Set keep alive time (milliseconds)
void	setName (String name) Set name
void	setProperty (String name, String value) Set a property
void	setStreamType (String streamType) Set stream type
String	toString () toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MediaCasterItem

```
public MediaCasterItem(String name,
                      String streamType,
                      String baseClass)
```

Media caster item constructor

Parameters:

name - media caster name
streamType - stream type
baseClass - base class

Methods

getStreamType

```
public String getStreamType()
```

Get the stream type

Returns:

stream type

(continued from last page)

setStreamType

```
public void setStreamType(String streamType)
```

Set stream type

Parameters:

streamType - stream type

getName

```
public String getName()
```

Get name

Returns:

name

setName

```
public void setName(String name)
```

Set name

Parameters:

name - name

setProperty

```
public void setProperty(String name,  
String value)
```

Set a property

Parameters:

name - name

value - value

clearProperty

```
public void clearProperty(String name)
```

Clear property

Parameters:

name - name

getProperty

```
public String getProperty(String name)
```

Get property value

Parameters:

name - name

Returns:

property value

getProperties

```
public WMSProperties getProperties()
```

Get properties collection

Returns:
properties collection

getDescription

```
public String getDescription()
```

Get description

Returns:
description

setDescription

```
public void setDescription(String description)
```

Set description

Parameters:
description - description

getBaseClass

```
public String getBaseClass()
```

Get base class

Returns:
base class

setBaseClass

```
public void setBaseClass(String baseClass)
```

Set base class

Parameters:
baseClass - base class

getConnectionTimeout

```
public int getConnectionTimeout()
```

Get connection timeout (milliseconds)

Returns:
connection timeout (milliseconds)

setConnectionTimeout

```
public void setConnectionTimeout(int connectionTimeout)
```

(continued from last page)

Set connection timeout (milliseconds)

Parameters:

connectionTimeout - connection timeout (milliseconds)

getKeepAliveTime

```
public int getKeepAliveTime()
```

Get keep alive time (milliseconds)

Returns:

keep alive time (milliseconds)

setKeepAliveTime

```
public void setKeepAliveTime(int keepAliveTime)
```

Set keep alive time (milliseconds)

Parameters:

keepAliveTime - keep alive time (milliseconds)

getIdString

```
public static String getIdString(String name,  
    String liveStreamPacketizer,  
    String liveStreamRepeater)
```

Get id string for this media caster item (not used - returns name unchanged)

Parameters:

name - name

Returns:

id string for this media caster item

parseIdString

```
public static MediaCasterStreamId parseIdString(String idString)
```

idStringToName

```
public String idStringToName(String idString)
```

Convert name to id string (not used - returns id string unchanged)

Parameters:

idString - id string

Returns:

name

toString

```
public String toString()
```

(continued from last page)

toString

com.wowza.wms.mediacaster Class MediaCasterList

java.lang.Object

└─com.wowza.wms.mediacaster.MediaCasterList

public class **MediaCasterList**
extends Object

Constructor Summary

public	MediaCasterList() Constructor
--------	--

Method Summary

MediaCasterItem	getMediaCasterDef (String name) Get media caster definition by name
java.util.Map	getMediaCasterDefs () Get map of media caster items
java.util.List	getMediaCasterNames () Get list of media caster names

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MediaCasterList

public **MediaCasterList**()

Constructor

Methods

getMediaCasterDefs

public java.util.Map **getMediaCasterDefs**()

Get map of media caster items

Returns:

map of media caster items

(continued from last page)

getMediaCasterNames

```
public java.util.List getMediaCasterNames()
```

Get list of media caster names

Returns:

list of media caster names

getMediaCasterDef

```
public MediaCasterItem getMediaCasterDef(String name)
```

Get media caster definition by name

Parameters:

name - name

Returns:

media caster definition

com.wowza.wms.mediacaster Class MediaCasterSettings

java.lang.Object

└─com.wowza.wms.mediacaster.MediaCasterSettings

```
public class MediaCasterSettings
extends Object
```

Constructor Summary

public	MediaCasterSettings()
--------	---------------------------------------

Method Summary

HostPortConfig	getMediaCasterHostPortConfig() Get media caster host port config
int	getMediaCasterProcessorCount() Get the thread count use for this host port
void	setMediaCasterHostPortConfig(HostPortConfig mediaCasterHostPortConfig) Set media caster host port config
void	setMediaCasterProcessorCount(int mediaCasterProcessorCount) Set the thread count for this processor

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MediaCasterSettings

```
public MediaCasterSettings()
```

Methods

getMediaCasterHostPortConfig

```
public HostPortConfig getMediaCasterHostPortConfig()
```

Get media caster host port config

Returns:

host port config

setMediaCasterHostPortConfig

```
public void setMediaCasterHostPortConfig(HostPortConfig mediaCasterHostPortConfig)
```

Set media caster host port config

Parameters:

mediaCasterHostPortConfig

getMediaCasterProcessorCount

```
public int getMediaCasterProcessorCount()
```

Get the thread count use for this host port

Returns:

thread count use for this host port

setMediaCasterProcessorCount

```
public void setMediaCasterProcessorCount(int mediaCasterProcessorCount)
```

Set the thread count for this processor

Parameters:

mediaCasterProcessorCount - thread count use for this host port

com.wowza.wms.mediacaster Class MediaCasterStreamItem

java.lang.Object

└-com.wowza.wms.mediacaster.MediaCasterStreamItem

public class **MediaCasterStreamItem**
extends Object

Constructor Summary

public	MediaCasterStreamItem (long uniqueId) Media caster item constructor
--------	--

Method Summary

void	acquire () Increment acquire lock count for this media caster item
void	acquireAndRelease () Increment then decrement acquire lock count for this media caster item
boolean	doWatchdog () Do idle processing
String	getLiveStreamPacketizer () Get the live stream packetizer for this media caster stream item
String	getLiveStreamRepeater () Get the live stream repeater for this media caster stream item
Object	getLock ()
int	getLockCount () Get the current number of acquire locks on this media caster item
IMediaCaster	getMediaCaster () Get the underlying IMediaCaster interface for this MediaCaster
String	getMediaCasterId () Get this media caster item id
int	getPlayerCount () Get the current number of players associated with this media caster item
String	getStreamExt ()
long	getUniqueId ()

void	init (String mediaCasterId, String streamExt, MediaCasterItem mediaCasterDef, MediaCasterStreamMap parent, String liveStreamPacketizer, String liveStreamRepeater) Initialize the media caster item (internal use)
boolean	isShutdownOnRelease () On last release shutdown the stream even if clients are connected
boolean	isValid ()
void	registerPlayer (IMediaStreamPlay player) Register a player with a media caster item (internal use)
void	release () Decrement acquire lock count for this media caster item
void	reset () Force a reconnect or reset for this media caster item
void	setLiveStreamPacketizer (String liveStreamPacketizer) Set the live stream packetizer for this media caster stream item
void	setLiveStreamRepeater (String liveStreamRepeater) Set the live stream repeater for this media caster stream item
void	setShutdownOnRelease (boolean shutdownOnRelease) On last release shutdown the stream even if clients are connected
void	setStreamExt (String streamExt)
void	setValid (boolean isValid)
void	shutdown (boolean isAppInstanceShutdown) Shutdown this media caster item
void	unregisterPlayer (IMediaStreamPlay player) Unregister a player with a media caster item (internal use)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MediaCasterStreamItem

```
public MediaCasterStreamItem(long uniqueId)
```

Media caster item constructor

Methods

(continued from last page)

getLock

```
public Object getLock()
```

getUniqueId

```
public long getUniqueId()
```

isValid

```
public boolean isValid()
```

setValid

```
public void setValid(boolean isValid)
```

init

```
public void init(String mediaCasterId,  
                String streamExt,  
                MediaCasterItem mediaCasterDef,  
                MediaCasterStreamMap parent,  
                String liveStreamPacketizer,  
                String liveStreamRepeater)
```

Initialize the media caster item (internal use)

Parameters:

mediaCasterId - media caster id
streamExt - stream extension or prefix
mediaCasterDef - media caster definition
parent - parent map

getMediaCasterId

```
public String getMediaCasterId()
```

Get this media caster item id

Returns:

media caster item id

getMediaCaster

```
public IMediaCaster getMediaCaster()
```

Get the underlying IMediaCaster interface for this MediaCaster

Returns:

underlying IMediaCaster interface

registerPlayer

```
public void registerPlayer(IMediaStreamPlay player)
```

Register a player with a media caster item (internal use)

Parameters:

player - player to register

unregisterPlayer

```
public void unregisterPlayer(IMediaStreamPlay player)
```

Unregister a player with a media caster item (internal use)

Parameters:

player - player to unregister

doWatchdog

```
public boolean doWatchdog()
```

Do idle processing

Returns:

return true if caused shutdown of item

reset

```
public void reset()
```

Force a reconnect or reset for this media caster item

shutdown

```
public void shutdown(boolean isAppInstanceShutdown)
```

Shutdown this media caster item

Parameters:

isAppInstanceShutdown - is this due to application shutdown

getPlayerCount

```
public int getPlayerCount()
```

Get the current number of players associated with this media caster item

Returns:

current number of players associated with this media caster item

getLockCount

```
public int getLockCount()
```

Get the current number of acquire locks on this media caster item

(continued from last page)

Returns:

current number of acquire locks on this media caster item

acquireAndRelease

```
public void acquireAndRelease()
```

Increment then decrement acquire lock count for this media caster item

acquire

```
public void acquire()
```

Increment acquire lock count for this media caster item

release

```
public void release()
```

Decrement acquire lock count for this media caster item

getStreamExt

```
public String getStreamExt()
```

setStreamExt

```
public void setStreamExt(String streamExt)
```

isShutdownOnRelease

```
public boolean isShutdownOnRelease()
```

On last release shutdown the stream even if clients are connected

Returns:

true if shutting down on release

setShutdownOnRelease

```
public void setShutdownOnRelease(boolean shutdownOnRelease)
```

On last release shutdown the stream even if clients are connected

Parameters:

shutdownOnRelease - true if shutting down on release

getLiveStreamPacketizer

```
public String getLiveStreamPacketizer()
```

Get the live stream packetizer for this media caster stream item

Returns:

(continued from last page)

live stream packetizer

setLiveStreamPacketizer

```
public void setLiveStreamPacketizer(String liveStreamPacketizer)
```

Set the live stream packetizer for this media caster stream item

Parameters:

liveStreamPacketizer - live stream packetizer

getLiveStreamRepeater

```
public String getLiveStreamRepeater()
```

Get the live stream repeater for this media caster stream item

Returns:

live stream repeater

setLiveStreamRepeater

```
public void setLiveStreamRepeater(String liveStreamRepeater)
```

Set the live stream repeater for this media caster stream item

Parameters:

liveStreamRepeater - live stream repeater

com.wowza.wms.mediacaster Class MediaCasterStreamManager

java.lang.Object

└-com.wowza.wms.mediacaster.MediaCasterStreamManager

```
public class MediaCasterStreamManager
extends Object
```

Constructor Summary

public	MediaCasterStreamManager (MediaCasterStreamMap mediaCasterStreamMap)
--------	---

Method Summary

String[]	getStreamArray () Get a list of active streams
java.util.List	getStreamList () Get a list of active streams
boolean	startStream (String streamName, String mediaCasterType) Start a stream by name
boolean	stopStream (String streamName) Stop a stream by name
boolean	streamExists (String streamName) Returns true if stream exists

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MediaCasterStreamManager

```
public MediaCasterStreamManager(MediaCasterStreamMap mediaCasterStreamMap)
```

Methods

getStreamArray

```
public String[] getStreamArray()
```

Get a list of active streams

(continued from last page)

Returns:

list of active streams

getStreamList

```
public java.util.List getStreamList()
```

Get a list of active streams

Returns:

list of active streams

streamExists

```
public boolean streamExists(String streamName)
```

Returns true if stream exists

Parameters:

streamName - stream name

Returns:

true if stream exists

stopStream

```
public boolean stopStream(String streamName)
```

Stop a stream by name

Parameters:

streamName - stream name

Returns:

true is successful

startStream

```
public boolean startStream(String streamName,  
String mediaCasterType)
```

Start a stream by name

Parameters:

streamName - stream name

mediaCasterType - MediaCaster type as defined in the name field of conf/MediaCasters.xml

Returns:

true is successful

com.wowza.wms.mediacaster Class MediaCasterStreamMap

java.lang.Object

└─com.wowza.wms.mediacaster.MediaCasterStreamMap

public class **MediaCasterStreamMap**
extends Object

Constructor Summary

public	MediaCasterStreamMap (IApplicationInstance appInstance) Create a new mediacaster map
--------	--

Method Summary

MediaCasterStreamItem	acquire (String streamName) Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away).
MediaCasterStreamItem	acquire (String inStreamName, MediaCasterItem mediaCasterDef) Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away).
MediaCasterStreamItem	acquire (String inStreamName, String streamType) Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away).
MediaCasterStreamItem	acquire (String streamName, String liveStreamPacketizer, String liveStreamRepeater) Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away).
MediaCasterStreamItem	acquire (String inStreamName, String liveStreamPacketizer, String liveStreamRepeater, MediaCasterItem mediaCasterDef) Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away).
MediaCasterStreamItem	acquire (String inStreamName, String liveStreamPacketizer, String liveStreamRepeater, String streamType) Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away).
MediaCasterStreamItem	acquireAndRelease (String inStreamName, String liveStreamPacketizer, String liveStreamRepeater, MediaCasterItem mediaCasterDef) Increment and then decrement the lock count for a media caster item (so that it is loaded and will stay loaded for at least the KeepAliveTime).
void	addStreamSrcToMediaCaster (long streamSrc, String mediaCasterId)
void	clearStreamSrcToMediaCaster (long streamSrc)
void	doWatchdog () Do periodic idle time processing

IApplicationInstance	getApplicationInstance() Get the parent application instance for this map
edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock	getLock() Get the read/write lock for this interface
MediaCasterStreamItem	getMediaCaster(String streamName) Get media caster item based on given stream name
MediaCasterStreamItem	getMediaCaster(String streamName, String liveStreamPacketizer, String liveStreamRepeater) Get media caster item based on given stream name
int	getMediaCasterCount() Get the number of mediacasters current running
java.util.List	getMediaCasterNames() Get a list of all the currently running media caster names
java.util.List	getMediaCasterStreamItems()
MediaCasterStreamManager	getStreamManager() Get the stream manager interface for managing the starting and stopping of streams
void	registerPlayer(IMediaStreamPlay player, MediaCasterItem mediaCasterDef) Register a player to a media caster item (internal use)
void	release(MediaCasterStreamItem mediaCasterStreamItem) Decrement lock count on media caster item
void	release(MediaCasterStreamItem mediaCasterStreamItem, boolean removeIfZero)
void	remove(MediaCasterStreamItem mediaCasterStreamItem)
void	shutdown(boolean isAppInstanceShutdown) Shutdown this media caster and close all running media casters
String	streamSrcToMediaCaster(long streamSrc)
void	unregisterPlayer(IMediaStreamPlay player, MediaCasterItem mediaCasterDef) Unregister a player to a media caster item (internal use)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MediaCasterStreamMap

```
public MediaCasterStreamMap(IApplicationInstance appInstance)
```

(continued from last page)

Create a new mediacaster map

Parameters:

appInstance - application instance

Methods

getLock

```
public edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock getLock()
```

Get the read/write lock for this interface

Returns:

read/write lock

getStreamManager

```
public MediaCasterStreamManager getStreamManager()
```

Get the stream manager interface for managing the starting and stopping of streams

Returns:

stream manager interface

getApplicationInstance

```
public IApplicationInstance getApplicationInstance()
```

Get the parent application instance for this map

Returns:

parent application instance for this map

getMediaCasterCount

```
public int getMediaCasterCount()
```

Get the number of mediacasters current running

Returns:

number of mediacasters current running

getMediaCasterStreamItems

```
public java.util.List getMediaCasterStreamItems()
```

doWatchdog

```
public void doWatchdog()
```

Do periodic idle time processing

(continued from last page)

shutdown

```
public void shutdown(boolean isAppInstanceShutdown)
```

Shutdown this media caster and close all running media casters

Parameters:

isAppInstanceShutdown - is this due to application shutdown

getMediaCasterNames

```
public java.util.List getMediaCasterNames()
```

Get a list of all the currently running media caster names

Returns:

list of all the currently running media caster names

getMediaCaster

```
public MediaCasterStreamItem getMediaCaster(String streamName)
```

Get media caster item based on given stream name

Parameters:

streamName - stream name

Returns:

media caster item

getMediaCaster

```
public MediaCasterStreamItem getMediaCaster(String streamName,  
String liveStreamPacketizer,  
String liveStreamRepeater)
```

Get media caster item based on given stream name

Parameters:

streamName - stream name

liveStreamPacketizer - live stream packetizer name

liveStreamRepeater - live stream repeater name

Returns:

media caster item

acquire

```
public MediaCasterStreamItem acquire(String streamName,  
String liveStreamPacketizer,  
String liveStreamRepeater)
```

Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away). Will load the media caster if not already loaded. Uses default application instance stream type.

Parameters:

streamName - stream name

liveStreamPacketizer - live stream packetizer name

liveStreamRepeater - live stream repeater name

(continued from last page)

Returns:
media caster item

acquire

```
public MediaCasterStreamItem acquire(String streamName)
```

Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away). Will load the media caster if not already loaded. Uses default application instance stream type.

Parameters:
streamName - stream name

Returns:
media caster item

acquire

```
public MediaCasterStreamItem acquire(String inStreamName,  
    MediaCasterItem mediaCasterDef)
```

Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away). Will load the media caster if not already loaded. This API allow loading of a MediaCaster into a non-MediaCaster stream type such as the "live" or "liverepeater-origin" stream type.

Parameters:
inStreamName - stream name
mediaCasterDef - MediaCaster definition

Returns:
media caster item

acquire

```
public MediaCasterStreamItem acquire(String inStreamName,  
    String liveStreamPacketizer,  
    String liveStreamRepeater,  
    MediaCasterItem mediaCasterDef)
```

Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away). Will load the media caster if not already loaded. This API allow loading of a MediaCaster into a non-MediaCaster stream type such as the "live" or "liverepeater-origin" stream type.

Parameters:
inStreamName - stream name
liveStreamPacketizer - live stream packetizer name
liveStreamRepeater - live stream repeater name
mediaCasterDef - MediaCaster definition

Returns:
media caster item

acquireAndRelease

```
public MediaCasterStreamItem acquireAndRelease(String inStreamName,  
    String liveStreamPacketizer,  
    String liveStreamRepeater,  
    MediaCasterItem mediaCasterDef)
```


(continued from last page)

Increment and then decrement the lock count for a media caster item (so that it is loaded and will stay loaded for at least the `KeepAliveTime`). Will load the media caster if not already loaded. This API allow loading of a `MediaCaster` into a non-`MediaCaster` stream type such as the "live" or "liverepeater-origin" stream type.

Parameters:

`inStreamName` - stream name
`liveStreamPacketizer` - live stream packetizer name
`liveStreamRepeater` - live stream repeater name
`mediaCasterDef` - `MediaCaster` definition

Returns:

media caster item

acquire

```
public MediaCasterStreamItem acquire(String inStreamName,  
                                     String streamType)
```

Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away). Will load the media caster if not already loaded.

Parameters:

`inStreamName` - stream name
`streamType` - stream type to use (null will use default application `streamType`)

Returns:

media caster item

acquire

```
public MediaCasterStreamItem acquire(String inStreamName,  
                                     String liveStreamPacketizer,  
                                     String liveStreamRepeater,  
                                     String streamType)
```

Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away). Will load the media caster if not already loaded.

Parameters:

`inStreamName` - stream name
`liveStreamPacketizer` - live stream packetizer name
`liveStreamRepeater` - live stream repeater name
`streamType` - stream type to use (null will use default application `streamType`)

Returns:

media caster item

release

```
public void release(MediaCasterStreamItem mediaCasterStreamItem)
```

Decrement lock count on media caster item

Parameters:

`mediaCasterStreamItem` - media caster item to decrement

release

```
public void release(MediaCasterStreamItem mediaCasterStreamItem,  
                  boolean removeIfZero)
```

(continued from last page)

remove

```
public void remove(MediaCasterStreamItem mediaCasterStreamItem)
```

streamSrcToMediaCaster

```
public String streamSrcToMediaCaster(long streamSrc)
```

addStreamSrcToMediaCaster

```
public void addStreamSrcToMediaCaster(long streamSrc,  
    String mediaCasterId)
```

clearStreamSrcToMediaCaster

```
public void clearStreamSrcToMediaCaster(long streamSrc)
```

registerPlayer

```
public void registerPlayer(IMediaStreamPlay player,  
    MediaCasterItem mediaCasterDef)
```

Register a player to a media caster item (internal use)

Parameters:

player - player to register
mediaCasterDef - media caster definition

unregisterPlayer

```
public void unregisterPlayer(IMediaStreamPlay player,  
    MediaCasterItem mediaCasterDef)
```

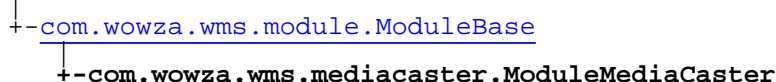
Unregister a player to a media caster item (internal use)

Parameters:

player - player to unregister
mediaCasterDef - media caster definition

com.wowza.wms.mediacaster Class ModuleMediaCaster

java.lang.Object



All Implemented Interfaces:

[IModuleOnApp](#)

```

public class ModuleMediaCaster
extends ModuleBase
implements IModuleOnApp
  
```

ModuleMediaCaster: Module for manipulating media casters through a Flash UI.

Fields inherited from class [com.wowza.wms.module.ModuleBase](#)

[CALLBACK_PARAM1](#), [CALLBACK_PARAM10](#), [CALLBACK_PARAM2](#), [CALLBACK_PARAM3](#), [CALLBACK_PARAM4](#), [CALLBACK_PARAM5](#), [CALLBACK_PARAM6](#), [CALLBACK_PARAM7](#), [CALLBACK_PARAM8](#), [CALLBACK_PARAM9](#), [PARAM1](#), [PARAM10](#), [PARAM2](#), [PARAM3](#), [PARAM4](#), [PARAM5](#), [PARAM6](#), [PARAM7](#), [PARAM8](#), [PARAM9](#), [PARAMMETHODNAME](#), [PLAYTRANSITION_APPEND](#), [PLAYTRANSITION_APPEND_IMMEDIATE](#), [PLAYTRANSITION_RESET](#), [PLAYTRANSITION_RESET_IMMEDIATE](#), [PLAYTRANSITION_STOP](#), [PLAYTRANSITION_SWAP](#), [PLAYTRANSITION_SWITCH](#), [PLAYTRANSITION_UNKNOWN](#), [PLAYTRANSITIONSTR_APPEND](#), [PLAYTRANSITIONSTR_RESET](#), [PLAYTRANSITIONSTR_STOP](#), [PLAYTRANSITIONSTR_SWAP](#), [PLAYTRANSITIONSTR_SWITCH](#), [PLAYTRANSITIONSTR_UNKNOWN](#)

Constructor Summary

public	ModuleMediaCaster()
--------	-------------------------------------

Method Summary

void	acquireMediaCaster (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Increment the lock count of a media caster stream.
void	getLockCount (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get the current lock count for a stream
void	getPlayerCount (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get the numbers of players associated with a particular media caster
void	getStreamNames (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get an array of stream names that are media casters associate with this application instance (returned as AMFDataArray)
void	onAppStart (IApplicationInstance appInstance) onAppStart

void	onAppStop (IApplicationInstance appInstance) onAppStop
void	releaseMediaCaster (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Decrement the lock count of a media caster stream
void	resetStream (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Reset a media caster stream
void	shutdownStream (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Force shutdown a media caster stream

Methods inherited from class [com.wowza.wms.module.ModuleBase](#)

[getAppInstance](#), [getApplication](#), [getCallbackParamCount](#), [getLogger](#), [getParam](#), [getParamBoolean](#), [getParamBoolean](#), [getParamCount](#), [getParamDate](#), [getParamDouble](#), [getParamDouble](#), [getParamInt](#), [getParamInt](#), [getParamLong](#), [getParamLong](#), [getParamMixedArray](#), [getParamObj](#), [getParamString](#), [getParamString](#), [getParamType](#), [getStream](#), [getVHost](#), [invokePrevious](#), [invokePrevious](#), [isSendResult](#), [sendClientOnStatusError](#), [sendResult](#), [sendResult](#), [sendResult](#), [sendResult](#), [sendResult](#), [sendStreamOnStatusError](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.module.IModuleOnApp](#)

[onAppStart](#), [onAppStop](#)

Constructors

ModuleMediaCaster

```
public ModuleMediaCaster()
```

Methods

onAppStart

```
public void onAppStart(IApplicationInstance appInstance)
```

onAppStart

onAppStop

```
public void onAppStop(IApplicationInstance appInstance)
```

onAppStop

getLockCount

```
public void getLockCount(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Get the current lock count for a stream

Parameters:

client - client
function - function
params - {streamName}

getPlayerCount

```
public void getPlayerCount(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Get the numbers of players associated with a particular media caster

Parameters:

client - client
function - function
params - {streamName}

getStreamNames

```
public void getStreamNames(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Get an array of stream names that are media casters associate with this application instance (returned as AMFDataArray)

Parameters:

client - client
function - function
params - (no params)

resetStream

```
public void resetStream(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Reset a media caster stream

Parameters:

client - client
function - function
params - {streamName}

shutdownStream

```
public void shutdownStream(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Force shutdown a media caster stream

(continued from last page)

Parameters:

client - client
function - function
params - {streamName}

acquireMediaCaster

```
public void acquireMediaCaster(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Increment the lock count of a media caster stream. If the media caster does not exist create it and connect.

Parameters:

client - client
function - function
params - {streamName, streamType [optional]}

releaseMediaCaster

```
public void releaseMediaCaster(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Decrement the lock count of a media caster stream

Parameters:

client - client
function - function
params - {streamName}

Package

com.wowza.wms.mediacaster.cupertino

com.wowza.wms.mediacaster.cupertino Interface ICupertinoMediaCasterChunkFetch

public interface **ICupertinoMediaCasterChunkFetch**
extends

Interface to fetch Apple HLS chunks for processing This can be replaced by a custom implementation from the default using the property in MediaCaster -> Properties Name: cupertinoChunkFetchClass Value: Full Class Path Type: String

Method Summary

CupertinoMediaCasterFetchedResult	fetchBlock (String path, int timeOut, int retries) Called when a manifest is to be fetched
CupertinoMediaCasterFetchedResult	fetchManifest (String path, int timeOut, int retries) Called when a manifest is to be fetched
void	init (IApplicationInstance appins, CupertinoMediaCasterContext context) Called when the class is initiated.

Methods

init

```
public void init(IApplicationInstance appins,
    CupertinoMediaCasterContext context)
```

Called when the class is initiated.

Parameters:

appins - Application instance
context - MediaCaster context object containing configuration settings

fetchManifest

```
public CupertinoMediaCasterFetchedResult fetchManifest(String path,
    int timeOut,
    int retries)
```

Called when a manifest is to be fetched

Parameters:

path - - The path to the manifest to be fetched. It is up to the class to handle the path
timeOut - - The time in milliseconds to wait for a timeout
retries - - The number of retries to perform when attempt to get the data requested

Returns:

CupertinoMediaCasterFetchedResult - The data type should be set to CupertinoMediaCasterFetchedResult.textType

(continued from last page)

fetchBlock

```
public CupertinoMediaCasterFetchResult fetchBlock(String path,  
    int timeout,  
    int retries)
```

Called when a manifest is to be fetched

Parameters:

path - - The path to the asset to be fetched. It is up to the class to handle the path

timeout - - The time in milliseconds to wait for a timeout

retries - - The number of retries to perform when attempt to get the data requested

Returns:

CupertinoMediaCasterFetchResult - The data type should be set to CupertinoMediaCasterFetchResult.dataType

com.wowza.wms.mediacaster.cupertino Interface ICupertinoMediaCasterHolder

public interface **ICupertinoMediaCasterHolder**
extends

Interface to define parameters potentially retrievable when a stream is found within a manifest along with maintaining a list of elements that are made available within a chunklist It is up to the ICupertinoMediaCasterPlaylistParser implementation to set these parameters. The ICupertinoMediaCasterHolder object is made available to the ICupertinoMediaCasterManageStreamName implementation so to provide context when determining stream names to use.

Method Summary

void	addIndexElement (String ElementValue, long duration) Add an Index element to the list
boolean	checkIndexAvailable (String url) Check if the URL provided is in this holder
String	getAudioCodec () Get the audio codec
long	getCurrentDuration () Get the current duration
int	getIndexAudioTag () Get the audio tag
int	getIndexBitrate () Get the bitrate
int	getIndexBitsPerSample () Get the bits per sample
int	getIndexChannel () Get the channel count
int	getIndexChunkCount () Get the chunk count
String	getIndexCodecPrivateData () Get the index codec private data
int	getIndexDisplayHeight () Get the display height
int	getIndexDisplayWidth () Get the index display width
int	getIndexElementCount () Get the element count
String	getIndexFourCC () Get the FourCC parameter

String	getIndexGroupID() Get the group ID
int	getIndexId() Get the index ID
String	getIndexLanguage() Get the language
int	getIndexMaxHeight() Get the max height
int	getIndexMaxWidth() Get the max width
String	getIndexMediaLine() Get the media line
String	getIndexName() Get the index name
int	getIndexPacketSize() Get the index packet size
String	getIndexProgramID() Get the program ID
String	getIndexResolution() Get the resolution
int	getIndexSampleRate() Get the sample rate
String	getIndexType() Get the index type
String	getIndexURL() Get the URL
boolean	getisLive() Get this isLive flag
String	getNextIndexElement() Get the next index element
String	getVideoCodec() Get the video codec
void	setAudioCodec(String audiocodec) Set the audio codec
void	setIndexAudioLocation(String audioLocation) Set the audio location
void	setIndexAudioTag(int audiotag) Set the audio tag
void	setIndexBitrate(String bitrate) Set the bitrate

void	<u>setIndexBitsPerSample</u> (int bitpersample) Set the bits per sample
void	<u>setIndexChannel</u> (int channel) Set the channel count
void	<u>setIndexChunkCount</u> (int index) Set the chunk count
void	<u>setIndexCodecPrivateData</u> (String codecprivatedata) Set the index codec private data
void	<u>setIndexCODECS</u> (String completeCodecs) Set the codec string
void	<u>setIndexDefault</u> (String defaultSetting) Set the default setting
void	<u>setIndexDisplayHeight</u> (int displayheight) Set the display height
void	<u>setIndexDisplayWidth</u> (int displaywidth) Set the index display width
void	<u>setIndexFourCC</u> (String fourcc) Set the FourCC parameter
void	<u>setIndexGroupID</u> (String groupid) Set the group ID
void	<u>setIndexId</u> (int index) Set the index ID
void	<u>setIndexLanguage</u> (String lang) Set the language
void	<u>setIndexMaxHeight</u> (int maxheight) Set the max height
void	<u>setIndexMaxWidth</u> (int maxwidth) Set the max width
void	<u>setIndexMediaLine</u> (String medialine) Set the media line
void	<u>setIndexName</u> (String name) Set the index name
void	<u>setIndexPacketSize</u> (int packetsize) Set the index packet size
void	<u>setIndexProgramID</u> (String id) Set the program ID
void	<u>setIndexResolution</u> (String resolution) Set the resolution
void	<u>setIndexSampleRate</u> (int samplerate) Set the sample rate

void	setIndexType (String type) Set the index type
void	setIndexURL (String url) Set the URL
void	setisLive (boolean live) Set the isLive flag
void	setVideoCodec (String videocodec) Set the video codec

Methods

getisLive

```
public boolean getisLive()
```

Get this isLive flag

Returns:

setisLive

```
public void setisLive(boolean live)
```

Set the isLive flag

Parameters:

live

getNextIndexElement

```
public String getNextIndexElement()
```

Get the next index element

Returns:

String

addIndexElement

```
public void addIndexElement(String ElementValue,  
    long duration)
```

Add an Index element to the list

Parameters:

ElementValue

duration

getCurrentDuration

```
public long getCurrentDuration()
```

(continued from last page)

Get the current duration

Returns:
long

setIndexCodecPrivateData

```
public void setIndexCodecPrivateData(String codecprivatedata)
```

Set the index codec private data

Parameters:
codecprivatedata

getIndexCodecPrivateData

```
public String getIndexCodecPrivateData()
```

Get the index codec private data

Returns:
String

setIndexDisplayWidth

```
public void setIndexDisplayWidth(int displaywidth)
```

Set the index display width

Parameters:
displaywidth

getIndexDisplayWidth

```
public int getIndexDisplayWidth()
```

Get the index display width

Returns:
int

setIndexDisplayHeight

```
public void setIndexDisplayHeight(int displayheight)
```

Set the display height

Parameters:
displayheight

getIndexDisplayHeight

```
public int getIndexDisplayHeight()
```

Get the display height

Returns:
int

setIndexMaxHeight

```
public void setIndexMaxHeight(int maxheight)
```

Set the max height

Parameters:

maxheight

getIndexMaxHeight

```
public int getIndexMaxHeight()
```

Get the max height

Returns:

int

setIndexMaxWidth

```
public void setIndexMaxWidth(int maxwidth)
```

Set the max width

Parameters:

maxwidth

getIndexMaxWidth

```
public int getIndexMaxWidth()
```

Get the max width

Returns:

int

setIndexAudioTag

```
public void setIndexAudioTag(int audiotag)
```

Set the audio tag

Parameters:

audiotag

getIndexAudioTag

```
public int getIndexAudioTag()
```

Get the audio tag

Returns:

int

setIndexPacketSize

```
public void setIndexPacketSize(int packetsize)
```

(continued from last page)

Set the index packet size

Parameters:

packetSize

getIndexPacketSize

```
public int getIndexPacketSize()
```

Get the index packet size

Returns:

setIndexBitsPerSample

```
public void setIndexBitsPerSample(int bitsPerSample)
```

Set the bits per sample

Parameters:

bitsPerSample

getIndexBitsPerSample

```
public int getIndexBitsPerSample()
```

Get the bits per sample

Returns:

int

setIndexBitrate

```
public void setIndexBitrate(String bitrate)
```

Set the bitrate

Parameters:

bitrate

getIndexBitrate

```
public int getIndexBitrate()
```

Get the bitrate

Returns:

int

setIndexChannel

```
public void setIndexChannel(int channel)
```

Set the channel count

Parameters:

channel

getIndexChannel

```
public int getIndexChannel()
```

Get the channel count

Returns:
int

setIndexSampleRate

```
public void setIndexSampleRate(int samplerate)
```

Set the sample rate

Parameters:
samplerate

getIndexSampleRate

```
public int getIndexSampleRate()
```

Get the sample rate

Returns:
int

setIndexFourCC

```
public void setIndexFourCC(String fourcc)
```

Set the FourCC parameter

Parameters:
fourcc

getIndexFourCC

```
public String getIndexFourCC()
```

Get the FourCC parameter

Returns:

setIndexChunkCount

```
public void setIndexChunkCount(int index)
```

Set the chunk count

Parameters:
index

getIndexChunkCount

```
public int getIndexChunkCount()
```

(continued from last page)

Get the chunk count

Returns:
int

setIndexCODECS

public void **setIndexCODECS**(String completeCodecs)

Set the codec string

Parameters:
completeCodecs

setIndexId

public void **setIndexId**(int index)

Set the index ID

Parameters:
index

getIndexId

public int **getIndexId**()

Get the index ID

Returns:
int

setAudioCodec

public void **setAudioCodec**(String audiocodec)

Set the audio codec

Parameters:
audiocodec

getAudioCodec

public String **getAudioCodec**()

Get the audio codec

Returns:
String

setVideoCodec

public void **setVideoCodec**(String videocodec)

Set the video codec

Parameters:
videocodec

getVideoCodec

```
public String getVideoCodec()
```

Get the video codec

Returns:
String

setIndexMediaLine

```
public void setIndexMediaLine(String medialine)
```

Set the media line

Parameters:
medialine

getIndexMediaLine

```
public String getIndexMediaLine()
```

Get the media line

Returns:
String

setIndexType

```
public void setIndexType(String type)
```

Set the index type

Parameters:
type

getIndexType

```
public String getIndexType()
```

Get the index type

Returns:
String

setIndexGroupID

```
public void setIndexGroupID(String groupid)
```

Set the group ID

Parameters:
groupid

getIndexGroupID

```
public String getIndexGroupID()
```

(continued from last page)

Get the group ID

Returns:
String

setIndexLanguage

```
public void setIndexLanguage(String lang)
```

Set the language

Parameters:
lang

getIndexLanguage

```
public String getIndexLanguage()
```

Get the language

Returns:
String

setIndexName

```
public void setIndexName(String name)
```

Set the index name

Parameters:
name

getIndexName

```
public String getIndexName()
```

Get the index name

Returns:
String

getIndexElementCount

```
public int getIndexElementCount()
```

Get the element count

Returns:
int

setIndexURL

```
public void setIndexURL(String url)
```

Set the URL

Parameters:
url

getIndexURL

```
public String getIndexURL()
```

Get the URL

Returns:
String

setIndexProgramID

```
public void setIndexProgramID(String id)
```

Set the program ID

Parameters:
id

getIndexProgramID

```
public String getIndexProgramID()
```

Get the program ID

Returns:
String

setIndexResolution

```
public void setIndexResolution(String resolution)
```

Set the resolution

Parameters:
resolution

getIndexResolution

```
public String getIndexResolution()
```

Get the resolution

Returns:
String

checkIndexAvailable

```
public boolean checkIndexAvailable(String url)
```

Check if the URL provided is in this holder

Parameters:
url

Returns:
boolean - available is true, not available false

setIndexDefault

```
public void setIndexDefault(String defaultSetting)
```

Set the default setting

Parameters:

defaultSetting

setIndexAudioLocation

```
public void setIndexAudioLocation(String audioLocation)
```

Set the audio location

Parameters:

audioLocation

com.wowza.wms.mediacaster.cupertino Interface ICupertinoMediaCasterHolders

public interface **ICupertinoMediaCasterHolders**
extends

ICupertinoMediaCasterHolders

Method Summary	
void	addAudioIndex(ICupertinoMediaCasterHolder thisHolder) Add a CupertinoCasterHolder to the audio index
void	addVideoIndex(ICupertinoMediaCasterHolder thisHolder) Add a CupertinoCasterHolder to the video index
void	clearCupertinoHolder() Clear this holder
java.util.ArrayList	getAudioBitrates() Get the audio bitrates for the object
int	getAudioCount() Get the audio count
int	getAudioSegmentID() Get the AudioSegmentID for this object
ICupertinoMediaCasterHolder	getCupertinoAudioIndex(int indexposition) Get the CupertinoCaster holder from audio index by position
ICupertinoMediaCasterHolder	getCupertinoVideoIndex(int indexposition) Get the CupertinoCaster holder from video index by position
boolean	getisLive() Get this isLive flag
String	getManifestURL() Get the manifest URL
String	getSessionID() Get the session ID for this object
java.util.ArrayList	getVideoBitrates() Get the video bitrates for the object
int	getVideoCount() Get the video count
int	getVideoSegmentID() Get the VideoSegmentID for this object
void	init(WMSProperties props) Initialize this object

void	setAudioSegmentID (int segment) Set the AudioSegmentID for this object
void	setExtVersion (int extversion) Set the EXT version for this object
void	setisLive (boolean live) Set the isLive flag
void	setManifestURL (String url) Set the manifest URL
void	setSessionID (String session) Set the session ID for this object
void	setVideoSegmentID (int segment) Set the VideoSegmentID for this object

Methods

init

```
public void init(WMSProperties props)
```

Initialize this object

Parameters:

props

setSessionID

```
public void setSessionID(String session)
```

Set the session ID for this object

Parameters:

session

getSessionID

```
public String getSessionID()
```

Get the session ID for this object

Returns:

String

getisLive

```
public boolean getisLive()
```

Get this isLive flag

Returns:

boolean

setisLive

```
public void setisLive(boolean live)
```

Set the isLive flag

Parameters:

live

setExtVersion

```
public void setExtVersion(int extversion)
```

Set the EXT version for this object

Parameters:

extversion

setAudioSegmentID

```
public void setAudioSegmentID(int segment)
```

Set the AudioSegmentID for this object

Parameters:

segment

getAudioSegmentID

```
public int getAudioSegmentID()
```

Get the AudioSegmentID for this object

Returns:

int

setVideoSegmentID

```
public void setVideoSegmentID(int segment)
```

Set the VideoSegmentID for this object

Parameters:

segment

getVideoSegmentID

```
public int getVideoSegmentID()
```

Get the VideoSegmentID for this object

Returns:

int

getManifestURL

```
public String getManifestURL()
```

(continued from last page)

Get the manifest URL

Returns:
String

setManifestURL

```
public void setManifestURL(String url)
```

Set the manifest URL

Parameters:
url

clearCupertinoHolder

```
public void clearCupertinoHolder()
```

Clear this holder

addAudioIndex

```
public void addAudioIndex(ICupertinoMediaCasterHolder thisHolder)
```

Add a CupertinoCasterHolder to the audio index

Parameters:
thisHolder

addVideoIndex

```
public void addVideoIndex(ICupertinoMediaCasterHolder thisHolder)
```

Add a CupertinoCasterHolder to the video index

Parameters:
thisHolder

getVideoCount

```
public int getVideoCount()
```

Get the video count

Returns:
int

getAudioCount

```
public int getAudioCount()
```

Get the audio count

Returns:
int

(continued from last page)

getCupertinoAudioIndex

```
public ICupertinoMediaCasterHolder getCupertinoAudioIndex(int indexposition)
```

Get the CupertinoCaster holder from audio index by position

Parameters:

indexposition

Returns:

ICupertinoMediaCasterHolder

getCupertinoVideoIndex

```
public ICupertinoMediaCasterHolder getCupertinoVideoIndex(int indexposition)
```

Get the CupertinoCaster holder from video index by position

Parameters:

indexposition

Returns:

ICupertinoMediaCasterHolder

getVideoBitrates

```
public java.util.ArrayList getVideoBitrates()
```

Get the video bitrates for the object

Returns:

ArrayList

getAudioBitrates

```
public java.util.ArrayList getAudioBitrates()
```

Get the audio bitrates for the object

Returns:

ArrayList

com.wowza.wms.mediacaster.cupertino Interface ICupertinoMediaCasterID3Processor

public interface **ICupertinoMediaCasterID3Processor**
extends

Method Summary

void	clearID3()
boolean	getDebug()
java.util.HashMap	getID3()
void	init(IApplicationInstance appins, CupertinoMediaCasterContext context)
boolean	isID3Available()
int	processBuffer (byte[] buffer, int offset, int len)
void	processMetaData()
void	setDebug (boolean debug)

Methods

init

```
public void init(IApplicationInstance appins,  
                 CupertinoMediaCasterContext context)
```

setDebug

```
public void setDebug(boolean debug)
```

getDebug

```
public boolean getDebug()
```

clearID3

```
public void clearID3()
```

(continued from last page)

processBuffer

```
public int processBuffer(byte[] buffer,  
    int offset,  
    int len)
```

processMetaData

```
public void processMetaData()
```

isID3Available

```
public boolean isID3Available()
```

getID3

```
public java.util.HashMap getID3()
```

com.wowza.wms.mediacaster.cupertino

Interface ICupertinoMediaCasterManageStreamName

public interface **ICupertinoMediaCasterManageStreamName**
 extends

Interface to control the naming scheme used for Apple HLS ingest This can be replaced by a custom implementation from the default using the property in MediaCaster -> Properties Name: cupertinoManageStreamNameClass Value: Full Class Path Type: String

Method Summary

String	getStreamName (String inputName, int streamsSize, int count, ICupertinoMediaCasterHolder inboundStreamInformation) Called when a new stream is being created by the Apple HLS ingestion code
void	init (IApplicationInstance appins, IMediaCaster mediacaster, CupertinoMediaCasterContext context) Called when the called is initiated

Methods

init

```
public void init(IApplicationInstance appins,
                 IMediaCaster mediacaster,
                 CupertinoMediaCasterContext context)
```

Called when the called is initiated

Parameters:

appins -- Application instance
 mediacaster -- The mediacaster making the call
 context -- MediaCaster context object containing configuration settings

getStreamName

```
public String getStreamName(String inputName,
                              int streamsSize,
                              int count,
                              ICupertinoMediaCasterHolder inboundStreamInformation)
```

Called when a new stream is being created by the Apple HLS ingestion code

Parameters:

inputName -- The basename of the stream being created. This should be the name of the .stream name
 streamsSize -- The number of streams found when the base manifest was parsed
 count -- The number of this stream in relation to the main count
 inboundStreamInformation -- The context information when the manifest was parsed

Returns:

String - The stream name to be used for this stream creation The default for this code is if (streamsSize == 1 || count == 0) return inputName; else return inputName+"_"+String.valueOf(count); If the size

com.wowza.wms.mediacaster.cupertino Interface ICupertinoMediaCasterPlaylistParser

public interface **ICupertinoMediaCasterPlaylistParser**
extends

Interface to parse manifests for processing This can be replaced by a custom implementation from the default using the property in MediaCaster -> Properties Name: cupertinoPlaylistParserClass Value: Full Class Path Type: String

Method Summary

int	getCurrentIndex() Returns the current manifest number
void	init(ICupertinoMediaCasterHolders myholders, WMSProperties props) Called when the class is initiated.
int	parseCupertinoChunklist(String baseurl, String chunklist, ICupertinoMediaCasterHolder holder, int indexpos) Parses a specific chunklist found in the main manifest via the chunklist string provided In order to support absolute URIs the baseurl used to retrieve the manifest is also made available.
void	parseCupertinoPlaylist(String baseurl, String mainplaylist) Parses the main manifest string provided in mainplaylist.
void	setContext(CupertinoMediaCasterContext context) Called when the class is initiated.
void	setCurrentIndex(int index) Sets the current manifest number

Methods

init

```
public void init(ICupertinoMediaCasterHolders myholders,
WMSProperties props)
```

Called when the class is initiated.

Parameters:

myholders - Management framework object for manifest entries
props - MediaCaster properties object

setContext

```
public void setContext(CupertinoMediaCasterContext context)
```

Called when the class is initiated.

Parameters:

context - MediaCaster context object containing configuration settings

getCurrentIndex

```
public int getCurrentIndex()
```

Returns the current manifest number

Returns:

int Current manifest index number

setCurrentIndex

```
public void setCurrentIndex(int index)
```

Sets the current manifest number

Parameters:

index

parseCupertinoPlaylist

```
public void parseCupertinoPlaylist(String baseurl,  
    String mainplaylist)
```

Parses the main manifest string provided in mainplaylist. In order to support absolute URIs the baseurl used to retrieve the manifest is also made available.

Parameters:

baseurl -- baseurl used to retrieve the chunklist

mainplaylist -- string containing the playlist For each new entry found a new ICupertinoMediaCasterHolder is added to ICupertinoMediaCasterHolders

parseCupertinoChunklist

```
public int parseCupertinoChunklist(String baseurl,  
    String chunklist,  
    ICupertinoMediaCasterHolder holder,  
    int indexpos)
```

Parses a specific chunklist found in the main manifest via the chunklist string provided In order to support absolute URIs the baseurl used to retrieve the manifest is also made available.

Parameters:

baseurl -- baseurl used to retrieve the chunklist

chunklist -- string containing the chunklist

holder -- pointer to the holder of this chunklist information to be updated

indexpos -- index of this chunk list against the main playlist

Returns:

int - Should contain the index number of the last chunk processed

com.wowza.wms.mediacaster.cupertino Interface ICupertinoMediaCasterSegments

public interface **ICupertinoMediaCasterSegments**
extends

ICupertinoMediaCasterSegments

Method Summary	
void	addMPEGTSegment (CupertinoMediaCasterMPEGTSegment segment) Add a CupertinoMediaCasterMPEGTSegment to the process list
int	getBufferMaxBlockCount () Get the buffer max block count
CupertinoMediaCasterContext	getContext () Get the CupertinoMediaCasterContext for this object
CupertinoMediaCasterConnection	getMediaCasterConnection () Get the CupertinoMediaCasterConnection for this object
CupertinoMediaCaster	getMediaCasterObject () Get the CupertinoMediaCaster object
int	getMPEGTSegmentCount () Get the number of segments available
CupertinoMediaCasterMPEGTSegment	getNextMPEGTSegment () Get the next CupertinoMediaCasterMPEGTSegment to be processed
String	getStreamName () Get the stream name
void	init (CupertinoMediaCasterConnection connection, IApplicationInstance appins, CupertinoMediaCasterContext context) Initialise this segments handler
boolean	isRunning () Get the running state of the segments handler
void	quit () Quit the segments handler
void	setBufferBlockCount (int blockcount) Set the buffer block count
void	setBufferMaxBlockCount (int maxblockcount) Set the buffer max block count
void	setMediaCasterObject (CupertinoMediaCaster caster) Set the CupertinoMediaCaster object
void	setRunning (boolean state) Set the running state of the segments handler

void	setStreamName (String name) Set the stream name
------	--

Methods

init

```
public void init(CupertinoMediaCasterConnection connection,  
                 IApplicationInstance appins,  
                 CupertinoMediaCasterContext context)
```

Initialise this segments handler

Parameters:

connection
appins
context

getContext

```
public CupertinoMediaCasterContext getContext()
```

Get the CupertinoMediaCasterContext for this object

Returns:

CupertinoMediaCasterContext

getMediaCasterConnection

```
public CupertinoMediaCasterConnection getMediaCasterConnection()
```

Get the CupertinoMediaCasterConnection for this object

Returns:

CupertinoMediaCasterConnection

setBufferBlockCount

```
public void setBufferBlockCount(int blockcount)
```

Set the buffer block count

Parameters:

blockcount

setBufferMaxBlockCount

```
public void setBufferMaxBlockCount(int maxblockcount)
```

Set the buffer max block count

Parameters:

maxblockcount

(continued from last page)

getBufferMaxBlockCount

```
public int getBufferMaxBlockCount()
```

Get the buffer max block count

Returns:
int

setStreamName

```
public void setStreamName(String name)
```

Set the stream name

Parameters:
name

getStreamName

```
public String getStreamName()
```

Get the stream name

Returns:

setMediaCasterObject

```
public void setMediaCasterObject(CupertinoMediaCaster caster)
```

Set the CupertinoMediaCaster object

Parameters:
caster

getMediaCasterObject

```
public CupertinoMediaCaster getMediaCasterObject()
```

Get the CupertinoMediaCaster object

Returns:
CupertinoMediaCaster

addMPEGTSsegment

```
public void addMPEGTSsegment(CupertinoMediaCasterMPEGTSsegment segment)
```

Add a CupertinoMediaCasterMPEGTSsegment to the process list

Parameters:
segment

getNextMPEGTSsegment

```
public CupertinoMediaCasterMPEGTSsegment getNextMPEGTSsegment()
```

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Get the next CupertinoMediaCasterMPEGTSsegment to be processed

Returns:

CupertinoMediaCasterMPEGTSsegment

getMPEGTSsegmentCount

```
public int getMPEGTSsegmentCount()
```

Get the number of segments available

Returns:

int

isRunning

```
public boolean isRunning()
```

Get the running state of the segments handler

Returns:

setRunning

```
public void setRunning(boolean state)
```

Set the running state of the segments handler

Parameters:

state

quit

```
public void quit()
```

Quit the segments handler

Package

com.wowza.wms.mediacaster.rtp

com.wowza.wms.mediacaster.rtp Interface IRTPSessionDescriptionDataProvider

public interface IRTPSessionDescriptionDataProvider
extends

IRTPSessionDescriptionDataProvider: Internal use.

Method Summary

boolean	doIdle (MediaCaster mediaCaster)
RTPSessionDescription Data	getSessionDescriptionData (IApplicationInstance appInstance, String streamName, int retryCount, IRTPSessionDescriptionSessionHandler handler, IMediaCaster mediaCaster)
void	init (MediaCaster mediaCaster)
void	sessionStart (RTPSession rtpSession)
void	sessionStop (RTPSession rtpSession)

Methods

init

```
public void init(MediaCaster mediaCaster)
```

getSessionDescriptionData

```
public RTPSessionDescriptionData getSessionDescriptionData(IApplicationInstance appInstance,  
    String streamName,  
    int retryCount,  
    IRTPSessionDescriptionSessionHandler handler,  
    IMediaCaster mediaCaster)
```

sessionStart

```
public void sessionStart(RTPSession rtpSession)
```

sessionStop

```
public void sessionStop(RTPSession rtpSession)
```

(continued from last page)

doIdle

```
public boolean doIdle(MediaCaster mediaCaster)
```

com.wowza.wms.mediacaster.rtp Interface IRTPSessionDescriptionSessionHandler

public interface **IRTPSessionDescriptionSessionHandler**
extends

IRTPSessionDescriptionSessionHandler: Internal use.

Method Summary

void	onDisconnect()
------	--------------------------------

Methods

onDisconnect

public void **onDisconnect()**

Package

com.wowza.wms.mediacaster.shoutcast

com.wowza.wms.mediacaster.shoutcast Interface IShoutCastFrameReceiver

public interface **IShoutCastFrameReceiver**
extends

IShoutCastFrameReceiver: Internal use.

Method Summary

void	onCodecConfigAAC (com.wowza.wms.media.aac.AACFrame frame, byte[] buffer, long offset)
void	onCodecConfigOpus (byte[] codecinfo, byte[] commentData, long timecode)
void	onCodecConfigVorbis (byte[] codecinfo, byte[] commentData, byte[] firstAudioInfo, long timecode)
void	onFrameAAC (com.wowza.wms.media.aac.AACFrame frame, byte[] buffer, long offset)
void	onFrameMP3 (int frequency, int samplesPerFrame, int channels, byte[] syncHeader, byte[] packetHeader, byte[] frameData)
void	onFrameOgg (com.wowza.wms.media.ogg.OggHeader oggData)
void	onHeaderData (java.util.Map headerMap)
void	onMetaData (java.util.Map metaMap)
void	onTrim ()

Methods

onFrameMP3

```
public void onFrameMP3(int frequency,
    int samplesPerFrame,
    int channels,
    byte[] syncHeader,
    byte[] packetHeader,
    byte[] frameData)
```

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onCodecConfigAAC

```
public void onCodecConfigAAC(com.wowza.wms.media.aac.AACFrame frame,  
    byte[] buffer,  
    long offset)
```

onFrameAAC

```
public void onFrameAAC(com.wowza.wms.media.aac.AACFrame frame,  
    byte[] buffer,  
    long offset)
```

onFrameOgg

```
public void onFrameOgg(com.wowza.wms.media.ogg.OggHeader oggData)
```

onCodecConfigVorbis

```
public void onCodecConfigVorbis(byte[] codecinfo,  
    byte[] commentData,  
    byte[] firstAudioInfo,  
    long timecode)
```

onCodecConfigOpus

```
public void onCodecConfigOpus(byte[] codecinfo,  
    byte[] commentData,  
    long timecode)
```

onTrim

```
public void onTrim()
```

onHeaderData

```
public void onHeaderData(java.util.Map headerMap)
```

onMetaData

```
public void onMetaData(java.util.Map metaMap)
```

com.wowza.wms.mediacaster.shoutcast Interface IShoutCastHeaderDecoder

public interface **IShoutCastHeaderDecoder**
extends

Method Summary

void	addHeader (String name, String value)
java.util.Map	decodeHeader (byte[] headerBytes)
void	setAppInstance (IApplicationInstance appins)

Methods

setAppInstance

public void **setAppInstance**([IApplicationInstance](#) appins)

decodeHeader

public java.util.Map **decodeHeader**(byte[] headerBytes)

addHeader

public void **addHeader**(String name,
String value)

com.wowza.wms.mediacaster.shoutcast Interface IShoutCastMetaDataListener

public interface **IShoutCastMetaDataListener**
extends

IShoutCastMetaDataListener: Internal use.

Method Summary

void	addMetaDataListener (IShoutCastMetaDataNotify listener)
boolean	removeMetaDataListener (IShoutCastMetaDataNotify listener)

Methods

addMetaDataListener

public void **addMetaDataListener**([IShoutCastMetaDataNotify](#) listener)

removeMetaDataListener

public boolean **removeMetaDataListener**([IShoutCastMetaDataNotify](#) listener)

com.wowza.wms.mediacaster.shoutcast Interface IShoutCastMetaDataNotify

public interface **IShoutCastMetaDataNotify**
extends

IShoutCastMetaDataNotify: Internal use.

Method Summary

void	onAACEncodeInfo (IMediaCaster mediaCaster, int frequency, int channels, int samplesPerFrame)
void	onHeaderData (IMediaCaster mediaCaster, java.util.Map headerMap)
void	onMetaData (IMediaCaster mediaCaster, java.util.Map metaMap)
void	onMP3EncodeInfo (IMediaCaster mediaCaster, int frequency, int channels, int samplesPerFrame)

Methods

onHeaderData

```
public void onHeaderData(IMediaCaster mediaCaster,  
    java.util.Map headerMap)
```

onMetaData

```
public void onMetaData(IMediaCaster mediaCaster,  
    java.util.Map metaMap)
```

onAACEncodeInfo

```
public void onAACEncodeInfo(IMediaCaster mediaCaster,  
    int frequency,  
    int channels,  
    int samplesPerFrame)
```

onMP3EncodeInfo

```
public void onMP3EncodeInfo(IMediaCaster mediaCaster,  
    int frequency,  
    int channels,  
    int samplesPerFrame)
```

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Package

com.wowza.wms.medialist

com.wowza.wms.medialist

Class MediaList

java.lang.Object

└-com.wowza.wms.medialist.MediaList

```
public class MediaList
extends Object
```

Field Summary

protected	lock
protected	name
protected	properties
protected	segments
protected	title

Constructor Summary

public	MediaList()
--------	-----------------------------

Method Summary

void	addSegment (int index, MediaListSegment mediaListSegment)
void	addSegment (MediaListSegment mediaListSegment)
void	clearSegments ()
MediaListSegment	getFirstSegment ()
Object	getLock ()
String	getName ()
WMSProperties	getProperties ()
WMSProperties	getProperties (boolean write)
MediaListSegment	getSegment (int index)

java.util.List	getSegments()
String	getTitle()
MediaListSegment	removeSegment(int index)
void	removeSegment(MediaListSegment mediaListSegment)
void	reset()
void	setName(String name)
void	setTitle(String title)
String	toSMILString()
String	toString()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

name

protected java.lang.String **name**

title

protected java.lang.String **title**

segments

protected java.util.List **segments**

properties

protected com.wowza.wms.application.WMSProperties **properties**

(continued from last page)

lock

protected java.lang.Object **lock**

Constructors

MediaList

```
public MediaList()
```

Methods

toString

```
public String toString()
```

toSMILString

```
public String toSMILString()
```

reset

```
public void reset()
```

getSegments

```
public java.util.List getSegments()
```

addSegment

```
public void addSegment(MediaListSegment mediaListSegment)
```

addSegment

```
public void addSegment(int index,  
    MediaListSegment mediaListSegment)
```

removeSegment

```
public void removeSegment(MediaListSegment mediaListSegment)
```

removeSegment

```
public MediaListSegment removeSegment(int index)
```

clearSegments

```
public void clearSegments()
```

getFirstSegment

```
public MediaListSegment getFirstSegment()
```

getSegment

```
public MediaListSegment getSegment(int index)
```

getLock

```
public Object getLock()
```

getProperties

```
public WMSProperties getProperties()
```

getProperties

```
public WMSProperties getProperties(boolean write)
```

getName

```
public String getName()
```

setName

```
public void setName(String name)
```

getTitle

```
public String getTitle()
```

(continued from last page)

setTitle

```
public void setTitle(String title)
```

com.wowza.wms.medialist Class MediaListRendition

java.lang.Object

└-com.wowza.wms.medialist.MediaListRendition

```
public class MediaListRendition  
extends Object
```

Field Summary

protected	aspectRatio
protected	audioCodecId
protected	audioLanguage
protected	audioRole
protected	bitrateAudio
protected	bitrateTotal
protected	bitrateVideo
protected	bitrateVideoPeak
protected	essentialPropertySet
protected	height
protected	language
protected	lock
protected	mediaListSegment
protected	name
protected	playDuration
protected	playSeek
protected	playStart

protected	properties
protected	role
protected	supplementalPropertySet
protected	title
protected	type
protected	videoCodecId
protected	videoLanguage
protected	videoRole
protected	vodTranscodeNGRP
protected	width
protected	wowzaAudioOnly
protected	wowzaKeyFrameOnly
protected	wowzaVideoOnly

Constructor Summary

public	MediaListRendition()
--------	--------------------------------------

Method Summary

void	buildProperties (java.util.Map params)
String	getAspectRatio ()
String	getAudioCodecId ()
String	getAudioLanguage ()
String	getAudioRole ()
int	getBitrateAudio ()
int	getBitrateTotal ()
int	getBitrateTotalPeak ()

int	getBitrateVideo()
int	getBitrateVideoPeak()
String	getCodecId()
java.util.HashSet	getEssentialPropertySet()
int	getHeight()
String	getLanguage()
Object	getLock()
MediaListSegment	getMediaListSegment()
String	getName()
long	getPlayDuration()
long	getPlaySeek()
long	getPlayStart()
WMSProperties	getProperties()
WMSProperties	getProperties(boolean write)
String	getRole()
int[]	getSize()
java.util.HashSet	getSupplementalPropertySet()
String	getTitle()
int	getType()
String	getTypeAsString()
String	getVideoCodecId()
String	getVideoLanguage()
String	getVideoRole()
String	getVODTranscodeNGRP()

int	getWidth()
boolean	isWowzaAudioOnly()
boolean	isWowzaKeyFrameOnly()
boolean	isWowzaVideoOnly()
static java.util.ArrayList	parseCommaSeparatedLanguages (String langStr)
void	setAspectRatio (String aspectRatio)
void	setAudioCodecId (String audioCodecId)
void	setAudioLanguage (String audioLanguage)
void	setAudioRole (String audioRole)
void	setBitrateAudio (int bitrateAudio)
void	setBitrateTotal (int bitrateTotal)
void	setBitrateVideo (int bitrateVideo)
void	setBitrateVideoPeak (int bitrateVideoPeak)
void	setEssentialPropertySet (java.util.HashSet essentialPropertySet)
void	setHeight (int height)
void	setLanguage (String language)
void	setLock (Object lock)
void	setMediaListSegment (MediaListSegment mediaListSegment)
void	setName (String name)
void	setPlayDuration (long playDuration)
void	setPlaySeek (long playSeek)
void	setPlayStart (long playStart)
void	setRole (String role)
void	setSize (int width, int height)

void	setSupplementalPropertySet (java.util.HashSet supplementalPropertySet)
void	setTitle (String title)
void	setType (int type)
void	setVideoCodecId (String videoCodecId)
void	setVideoLanguage (String videoLanguage)
void	setVideoRole (String videoRole)
void	setVODTranscodeNGRP (String vodTranscodeNGRP)
void	setWidth (int width)
void	setWowzaAudioOnly (boolean wowzaAudioOnly)
void	setWowzaKeyFrameOnly (boolean wowzaKeyFrameOnly)
void	setWowzaVideoOnly (boolean wowzaVideoOnly)
String	toSMILString ()
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

lock

protected java.lang.Object **lock**

mediaListSegment

protected com.wowza.wms.medialist.MediaListSegment **mediaListSegment**

properties

protected com.wowza.wms.application.WMSProperties **properties**

name

protected java.lang.String **name**

type

protected int **type**

bitrateTotal

protected int **bitrateTotal**

bitrateAudio

protected int **bitrateAudio**

bitrateVideo

protected int **bitrateVideo**

bitrateVideoPeak

protected int **bitrateVideoPeak**

videoCodecId

protected java.lang.String **videoCodecId**

audioCodecId

protected java.lang.String **audioCodecId**

wowzaAudioOnly

protected boolean **wowzaAudioOnly**

wowzaVideoOnly

protected boolean **wowzaVideoOnly**

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wowzaKeyFrameOnly

protected boolean **wowzaKeyFrameOnly**

width

protected int **width**

height

protected int **height**

playStart

protected long **playStart**

playDuration

protected long **playDuration**

playSeek

protected long **playSeek**

vodTranscodeNGRP

protected java.lang.String **vodTranscodeNGRP**

language

protected java.lang.String **language**

audioLanguage

protected java.lang.String **audioLanguage**

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videoLanguageprotected java.lang.String **videoLanguage**

titleprotected java.lang.String **title**

aspectRatioprotected java.lang.String **aspectRatio**

roleprotected java.lang.String **role**

audioRoleprotected java.lang.String **audioRole**

videoRoleprotected java.lang.String **videoRole**

essentialPropertySetprotected java.util.HashSet **essentialPropertySet**

supplementalPropertySetprotected java.util.HashSet **supplementalPropertySet**

Constructors

MediaListRenditionpublic **MediaListRendition**()

Methods

(continued from last page)

toString

```
public String toString()
```

toSMILString

```
public String toSMILString()
```

getTypeAsString

```
public String getTypeAsString()
```

getLock

```
public Object getLock()
```

setLock

```
public void setLock(Object lock)
```

getMediaListSegment

```
public MediaListSegment getMediaListSegment()
```

setMediaListSegment

```
public void setMediaListSegment(MediaListSegment mediaListSegment)
```

getProperties

```
public WMSProperties getProperties()
```

getProperties

```
public WMSProperties getProperties(boolean write)
```

getBitrateTotal

```
public int getBitrateTotal()
```

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getBitrateTotalPeak

```
public int getBitrateTotalPeak()
```

setBitrateTotal

```
public void setBitrateTotal(int bitrateTotal)
```

getBitrateAudio

```
public int getBitrateAudio()
```

setBitrateAudio

```
public void setBitrateAudio(int bitrateAudio)
```

getBitrateVideo

```
public int getBitrateVideo()
```

setBitrateVideo

```
public void setBitrateVideo(int bitrateVideo)
```

getBitrateVideoPeak

```
public int getBitrateVideoPeak()
```

setBitrateVideoPeak

```
public void setBitrateVideoPeak(int bitrateVideoPeak)
```

getVideoCodecId

```
public String getVideoCodecId()
```

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setVideoCodecId

```
public void setVideoCodecId(String videoCodecId)
```

getCodecId

```
public String getCodecId()
```

getAudioCodecId

```
public String getAudioCodecId()
```

setAudioCodecId

```
public void setAudioCodecId(String audioCodecId)
```

isWowzaAudioOnly

```
public boolean isWowzaAudioOnly()
```

setWowzaAudioOnly

```
public void setWowzaAudioOnly(boolean wowzaAudioOnly)
```

getName

```
public String getName()
```

setName

```
public void setName(String name)
```

getType

```
public int getType()
```

setType

```
public void setType(int type)
```

(continued from last page)

getWidth

```
public int getWidth()
```

setWidth

```
public void setWidth(int width)
```

getHeight

```
public int getHeight()
```

setHeight

```
public void setHeight(int height)
```

setSize

```
public void setSize(int width,  
                    int height)
```

getSize

```
public int[] getSize()
```

getPlayStart

```
public long getPlayStart()
```

setPlayStart

```
public void setPlayStart(long playStart)
```

getPlayDuration

```
public long getPlayDuration()
```

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setPlayDuration

```
public void setPlayDuration(long playDuration)
```

getPlaySeek

```
public long getPlaySeek()
```

setPlaySeek

```
public void setPlaySeek(long playSeek)
```

getVODTranscodeNGRP

```
public String getVODTranscodeNGRP()
```

setVODTranscodeNGRP

```
public void setVODTranscodeNGRP(String vodTranscodeNGRP)
```

setLanguage

```
public void setLanguage(String language)
```

getLanguage

```
public String getLanguage()
```

getAudioLanguage

```
public String getAudioLanguage()
```

setAudioLanguage

```
public void setAudioLanguage(String audioLanguage)
```

getVideoLanguage

```
public String getVideoLanguage()
```

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setVideoLanguage

```
public void setVideoLanguage(String videoLanguage)
```

parseCommaSeparatedLanguages

```
public static java.util.ArrayList parseCommaSeparatedLanguages(String langStr)
```

isWowzaVideoOnly

```
public boolean isWowzaVideoOnly()
```

setWowzaVideoOnly

```
public void setWowzaVideoOnly(boolean wowzaVideoOnly)
```

isWowzaKeyFrameOnly

```
public boolean isWowzaKeyFrameOnly()
```

setWowzaKeyFrameOnly

```
public void setWowzaKeyFrameOnly(boolean wowzaKeyFrameOnly)
```

getTitle

```
public String getTitle()
```

setTitle

```
public void setTitle(String title)
```

getAspectRatio

```
public String getAspectRatio()
```

(continued from last page)

setAspectRatio

```
public void setAspectRatio(String aspectRatio)
```

getRole

```
public String getRole()
```

setRole

```
public void setRole(String role)
```

getAudioRole

```
public String getAudioRole()
```

setAudioRole

```
public void setAudioRole(String audioRole)
```

getVideoRole

```
public String getVideoRole()
```

setVideoRole

```
public void setVideoRole(String videoRole)
```

getEssentialPropertySet

```
public java.util.HashSet getEssentialPropertySet()
```

setEssentialPropertySet

```
public void setEssentialPropertySet(java.util.HashSet essentialPropertySet)
```

getSupplementalPropertySet

```
public java.util.HashSet getSupplementalPropertySet()
```

(continued from last page)

setSupplementalPropertySet

```
public void setSupplementalPropertySet(java.util.HashSet supplementalPropertySet)
```

buildProperties

```
public void buildProperties(java.util.Map params)
```

com.wowza.wms.medialist Class MediaListSegment

java.lang.Object

└-com.wowza.wms.medialist.MediaListSegment

```
public class MediaListSegment
extends Object
```

Field Summary

protected	lock
protected	mediaList
protected	properties
protected	renditions

Constructor Summary

public	MediaListSegment()
--------	------------------------------------

Method Summary

void	addRendition (int index, MediaListRendition mediaListRendition)
void	addRendition (MediaListRendition mediaListRendition)
void	clearSegments ()
MediaListRendition	getFirstRendition ()
Object	getLock ()
MediaList	getMediaList ()
WMSProperties	getProperties ()
WMSProperties	getProperties (boolean write)
MediaListRendition	getRendition (int index)
java.util.List	getRenditions ()

MediaListRendition	removeRendition (int index)
void	removeRendition (MediaListRendition mediaListRendition)
void	setLock (Object lock)
void	setMediaList (MediaList mediaList)
String	toSMILString ()
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

lock

protected java.lang.Object **lock**

mediaList

protected com.wowza.wms.medialist.MediaList **mediaList**

renditions

protected java.util.List **renditions**

properties

protected com.wowza.wms.application.WMSProperties **properties**

Constructors

MediaListSegment

public **MediaListSegment**()

Methods

(continued from last page)

toString

```
public String toString()
```

toSMILString

```
public String toSMILString()
```

getRenditions

```
public java.util.List getRenditions()
```

addRendition

```
public void addRendition(MediaListRendition mediaListRendition)
```

addRendition

```
public void addRendition(int index,  
    MediaListRendition mediaListRendition)
```

removeRendition

```
public void removeRendition(MediaListRendition mediaListRendition)
```

removeRendition

```
public MediaListRendition removeRendition(int index)
```

clearSegments

```
public void clearSegments()
```

getFirstRendition

```
public MediaListRendition getFirstRendition()
```

(continued from last page)

getRendition

```
public MediaListRendition getRendition(int index)
```

getLock

```
public Object getLock()
```

setLock

```
public void setLock(Object lock)
```

getMediaList

```
public MediaList getMediaList()
```

setMediaList

```
public void setMediaList(MediaList mediaList)
```

getProperties

```
public WMSProperties getProperties()
```

getProperties

```
public WMSProperties getProperties(boolean write)
```

Package

com.wowza.wms.module

com.wowza.wms.module Interface IModuleCallResult

public interface **IModuleCallResult**
extends

IModuleCallResult: callback interface used by IClient call.

Method Summary

void	<code>onResult(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params)</code> Triggered on client side result from call to IClient.call
------	--

Methods

onResult

```
public void onResult(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Triggered on client side result from call to IClient.call

Parameters:

client - client
function - function object
params - result parameters

com.wowza.wms.module Interface IModuleNotify

public interface **IModuleNotify**
extends

IModuleNotify: listener interface for listening to module loading and unloading. See
IApplicationInstance.addModuleListener(IModuleNotify moduleListener)

Method Summary

void	onModuleLoad (ModuleItem item) Called when module loaded
void	onModuleUnload (ModuleItem item) Called when module unloaded

Methods

onModuleLoad

public void **onModuleLoad**(ModuleItem item)

Called when module loaded

Parameters:

item - module

onModuleUnload

public void **onModuleUnload**(ModuleItem item)

Called when module unloaded

Parameters:

item - module

com.wowza.wms.module Interface IModuleOnApp

All Subinterfaces:

[IModuleOnApp2](#)

All Known Implementing Classes:

[ModuleMediaCaster](#)

```
public interface IModuleOnApp
extends
```

IModuleCallResult: method interface examples for application level methods in a module.

Since module method must be implemented as static method a module cannot directly implements this interface. This interface only serves as an example of the method names and call signature needed to implement these application methods.

Method Summary

void	onAppStart (IApplicationInstance appInstance) Invoked when an application instance is started.
void	onAppStop (IApplicationInstance appInstance) Invoked when an application instance is stopped (destroyed).

Methods

onAppStart

```
public void onAppStart(IApplicationInstance appInstance)
```

Invoked when an application instance is started.

Parameters:

appInstance - application instance

onAppStop

```
public void onAppStop(IApplicationInstance appInstance)
```

Invoked when an application instance is stopped (destroyed).

Parameters:

appInstance - application instance

com.wowza.wms.module Interface IModuleOnApp2

All Superinterfaces:

[IModuleOnApp](#)

public interface **IModuleOnApp2**

extends [IModuleOnApp](#)

Method Summary

void	onAppCreate (IApplicationInstance appInstance) Invoked when an application instance is created.
void	onAppDestroy (IApplicationInstance appInstance) Invoked when an application instance is destroyed

Methods inherited from interface [com.wowza.wms.module.IModuleOnApp](#)

[onAppStart](#), [onAppStop](#)

Methods

onAppCreate

public void **onAppCreate**([IApplicationInstance](#) appInstance)

Invoked when an application instance is created.

Parameters:

appInstance - application instance

onAppDestroy

public void **onAppDestroy**([IApplicationInstance](#) appInstance)

Invoked when an application instance is destroyed

Parameters:

appInstance - application instance

com.wowza.wms.module Interface IModuleOnCall

```
public interface IModuleOnCall
extends
```

IModuleOnCall: method interface example for the catch-all method handler onCall.

Since module method must be implemented as static method a module cannot directly implements this interface. This interface only serves as an example of the method name and call signature needed to implement this method. The onCall method, when defined in a module, is invoked for all handlers that are undefined in a given module. The onCall handler can also be used to catch calls to server side component calls.

Method Summary

void	<code>onCall(String handlerName, IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params)</code> Catch-all method handler.
------	--

Methods

onCall

```
public void onCall(String handlerName,
    IClient client,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Catch-all method handler. The onCall method, when defined in a module, is invoked for all handlers that are undefined in a given module.

Parameters:

handlerName - handler name
client - client
function - function object
params - function parameters

com.wowza.wms.module Interface IModuleOnConnect

public interface **IModuleOnConnect**
extends

IModuleOnConnect: method interface examples for client level methods in a module.

Since module method must be implemented as static method a module cannot directly implements this interface. This interface only serves as an example of the method names and call signature needed to implement these client methods.

Method Summary

void	onConnect (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Invoked when a client connection is initiated.
void	onConnectAccept (IClient client) Invoked when a client connection is accepted.
void	onConnectReject (IClient client) Invoked when a client connection is rejected.
void	onDisconnect (IClient client) Invoked when a client disconnects.

Methods

onConnect

```
public void onConnect(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Invoked when a client connection is initiated. It is within this method that module can call to client.acceptConnection or client.rejectConnection.

Parameters:

client - client
function - function object
params - function parameters

onDisconnect

```
public void onDisconnect(IClient client)
```

Invoked when a client disconnects.

Parameters:

client - client

(continued from last page)

onConnectAccept

```
public void onConnectAccept(IClient client)
```

Invoked when a client connection is accepted.

Parameters:

client - client

onConnectReject

```
public void onConnectReject(IClient client)
```

Invoked when a client connection is rejected.

Parameters:

client - client

com.wowza.wms.module Interface IModuleOnHTTTCupertinoEncryption

public interface **IModuleOnHTTTCupertinoEncryption**
extends

IModuleOnHTTTCupertinoEncryption: listener interface for listening to AES-128 encryption events.

Field Summary

public static final	KEYDATA_MODE_ENCRYPT Value: 3
public static final	KEYDATA_MODE_INIT Value: 1
public static final	KEYDATA_MODE_KEYFRAME_ENCRYPT Value: 6
public static final	KEYDATA_MODE_KEYFRAME_INIT Value: 4
public static final	KEYDATA_MODE_KEYFRAME_PLAYLIST Value: 5
public static final	KEYDATA_MODE_PLAYLIST Value: 2

Method Summary

void	onHTTTCupertinoEncryptionKeyCreateLive (IApplicationInstance appInstance, String streamName, byte[] encKey) Called when live stream key is requested (per-published stream)
void	onHTTTCupertinoEncryptionKeyCreateVOD (HTTPStreamerSessionCupertino httpSession, byte[] encKey) Called when video on demand key is requested (per-session)
void	onHTTTCupertinoEncryptionKeyData (HTTPStreamerSessionCupertino httpSession, IHTTPRequest req, IHTTPResponse resp, byte[] encKeyData) Called when a key data is requested.
void	onHTTTCupertinoEncryptionKeyLiveChunk (ILiveStreamPacketizer liveStreamPacketizer, String streamName, CupertinoEncInfo encInfo, long chunkId, int mode) Called when live stream key is requested (per-published stream, per-chunk - for rotating keys)
void	onHTTTCupertinoEncryptionKeyRequest (HTTPStreamerSessionCupertino httpSession, IHTTPRequest req, IHTTPResponse resp) Called when a key is requested.

void	onHTTPCupertinoEncryptionKeyVODChunk (HTTPStreamerSessionCupertino httpSession, IHTTPStreamerCupertinoIndex index, CupertinoEncInfo encInfo, long chunkId, int mode) Called when video on demand key is requested (per-session).
------	--

Fields

KEYDATA_MODE_INIT

```
public static final int KEYDATA_MODE_INIT
```

Constant value: **1**

KEYDATA_MODE_PLAYLIST

```
public static final int KEYDATA_MODE_PLAYLIST
```

Constant value: **2**

KEYDATA_MODE_ENCRYPT

```
public static final int KEYDATA_MODE_ENCRYPT
```

Constant value: **3**

KEYDATA_MODE_KEYFRAME_INIT

```
public static final int KEYDATA_MODE_KEYFRAME_INIT
```

Constant value: **4**

KEYDATA_MODE_KEYFRAME_PLAYLIST

```
public static final int KEYDATA_MODE_KEYFRAME_PLAYLIST
```

Constant value: **5**

KEYDATA_MODE_KEYFRAME_ENCRYPT

```
public static final int KEYDATA_MODE_KEYFRAME_ENCRYPT
```

Constant value: **6**

Methods

onHTTPCupertinoEncryptionKeyRequest

```
public void onHTTPCupertinoEncryptionKeyRequest(HTTPStreamerSessionCupertino
httpSession,
IHTTPRequest req,
IHTTPResponse resp)
```

(continued from last page)

Called when a key is requested. Call `httpSession.rejectSession` to reject the streaming session and stop delivery of the encryption key.

Parameters:

`httpSession` - HTTP session
`req` - HTTP request
`resp` - HTTP response

onHTTPCupertinoEncryptionKeyData

```
public void onHTTPCupertinoEncryptionKeyData(HTTPStreamerSessionCupertino httpSession,
IHTTPRequest req,
IHTTPResponse resp,
byte[] encKeyData)
```

Called when a key data is requested. Set `encKeyData` to the key data to be sent to the client.

Parameters:

`httpSession` - HTTP session
`req` - request
`resp` - response
`encKeyData` - key data

onHTTPCupertinoEncryptionKeyCreateVOD

```
public void onHTTPCupertinoEncryptionKeyCreateVOD(HTTPStreamerSessionCupertino
httpSession,
byte[] encKey)
```

Called when video on demand key is requested (per-session)

Parameters:

`httpSession` - HTTP session
`encKey` - encryption key

onHTTPCupertinoEncryptionKeyVODChunk

```
public void onHTTPCupertinoEncryptionKeyVODChunk(HTTPStreamerSessionCupertino
httpSession,
IHTTPStreamerCupertinoIndex index,
CupertinoEncInfo encInfo,
long chunkId,
int mode)
```

Called when video on demand key is requested (per-session). Allows setting of encryption key and URL.

Parameters:

`httpSession` - HTTP session
`index` - file index
`encInfo` - encryption key
`mode` - KEYDATA_MODE_*

onHTTPCupertinoEncryptionKeyCreateLive

```
public void onHTTPCupertinoEncryptionKeyCreateLive(IApplicationInstance appInstance,
String streamName,
byte[] encKey)
```

Called when live stream key is requested (per-published stream)

(continued from last page)

Parameters:

appInstance - application instance
streamName - stream name
encKey - encryption key

onHTTPCupertinoEncryptionKeyLiveChunk

```
public void onHTTPCupertinoEncryptionKeyLiveChunk(ILiveStreamPacketizer  
liveStreamPacketizer,  
    String streamName,  
    CupertinoEncInfo encInfo,  
    long chunkId,  
    int mode)
```

Called when live stream key is requested (per-published stream, per-chunk - for rotating keys)

Parameters:

liveStreamPacketizer - live stream packetizer
streamName - stream name
encInfo - encryption info
chunkId - chunk ID, -1 for stream creation
mode - KEYDATA_MODE_*

com.wowza.wms.module Interface IModuleOnHTTPCupertinoStreamingSession

public interface **IModuleOnHTTPCupertinoStreamingSession**
extends

IModuleOnHTTPSession: method interface for HTTP Cupertino Streaming session create/destroy.

Method Summary

void	onHTTPCupertinoStreamingSessionCreate (HTTPStreamerSessionCupertino httpCupertinoStreamingSession) Invoked when an HTTP Cupertino Streaming session is created.
void	onHTTPCupertinoStreamingSessionDestroy (HTTPStreamerSessionCupertino httpCupertinoStreamingSession) Invoked when an HTTP Cupertino Streaming session is destroyed.

Methods

onHTTPCupertinoStreamingSessionCreate

public void **onHTTPCupertinoStreamingSessionCreate**([HTTPStreamerSessionCupertino](#) [httpCupertinoStreamingSession](#))

Invoked when an HTTP Cupertino Streaming session is created.

Parameters:

[httpCupertinoStreamingSession](#) - [httpCupertinoStreamingSession](#)

onHTTPCupertinoStreamingSessionDestroy

public void **onHTTPCupertinoStreamingSessionDestroy**([HTTPStreamerSessionCupertino](#) [httpCupertinoStreamingSession](#))

Invoked when an HTTP Cupertino Streaming session is destroyed.

Parameters:

[httpCupertinoStreamingSession](#) - [httpCupertinoStreamingSession](#)

com.wowza.wms.module Interface IModuleOnHTTPMPEGDashEncryption

public interface **IModuleOnHTTPMPEGDashEncryption**
extends

IModuleOnHTTPMPEGDashEncryption: listener interface for listening to MPEG-DASH encryption events.

Method Summary

void	onHTTPMPEGDashEncryptionKeyLiveChunk (ILiveStreamPacketizer liveStreamPacketizer, String streamName, CencInfo cencInfo, long chunkId) Called when live stream key is requested (per-published stream)
void	onHTTPMPEGDashEncryptionKeyVODChunk (HTTPStreamerSessionMPEGDash httpSession, IHTTPStreamerMPEGDashIndex index, CencInfo cencInfo, long chunkId) Called when video on demand key is requested (per-session).

Methods

onHTTPMPEGDashEncryptionKeyVODChunk

```
public void onHTTPMPEGDashEncryptionKeyVODChunk(HTTPStreamerSessionMPEGDash
httpSession,
IHTTPStreamerMPEGDashIndex index,
CencInfo cencInfo,
long chunkId)
```

Called when video on demand key is requested (per-session). Allows setting of encryption key and URL.

Parameters:

httpSession - HTTP session
 index - file index
 cencInfo - Common Encryption information
 chunkId - chunk identifier

onHTTPMPEGDashEncryptionKeyLiveChunk

```
public void onHTTPMPEGDashEncryptionKeyLiveChunk(ILiveStreamPacketizer
liveStreamPacketizer,
String streamName,
CencInfo cencInfo,
long chunkId)
```

Called when live stream key is requested (per-published stream)

Parameters:

liveStreamPacketizer - live stream packetizer
 streamName - stream name
 cencInfo - Common Encryption information
 chunkId - chunk identifier

com.wowza.wms.module Interface IModuleOnHTTPMPEGDashStreamingSession

public interface IModuleOnHTTPMPEGDashStreamingSession
extends

IModuleOnHTTPMPEGDashStreamingSession: method interface for HTTP MPEGDash Streaming session create/destroy.

Method Summary

void	onHTTPMPEGDashStreamingSessionCreate (HTTPStreamerSessionMPEGDash httpMPEGDashStreamingSession) Invoked when an HTTP MPEGDash Streaming session is created.
void	onHTTPMPEGDashStreamingSessionDestroy (HTTPStreamerSessionMPEGDash httpMPEGDashStreamingSession) Invoked when an HTTP MPEGDash Streaming session is destroyed.

Methods

onHTTPMPEGDashStreamingSessionCreate

public void **onHTTPMPEGDashStreamingSessionCreate**([HTTPStreamerSessionMPEGDash](#)
[httpMPEGDashStreamingSession](#))

Invoked when an HTTP MPEGDash Streaming session is created.

Parameters:

[httpMPEGDashStreamingSession](#) - [httpMPEGDashStreamingSession](#)

onHTTPMPEGDashStreamingSessionDestroy

public void **onHTTPMPEGDashStreamingSessionDestroy**([HTTPStreamerSessionMPEGDash](#)
[httpMPEGDashStreamingSession](#))

Invoked when an HTTP MPEGDash Streaming session is destroyed.

Parameters:

[httpMPEGDashStreamingSession](#) - [httpMPEGDashStreamingSession](#)

com.wowza.wms.module Interface IModuleOnHTTPSanJoseStreamingSession

public interface IModuleOnHTTPSanJoseStreamingSession
extends

IModuleOnHTTPSanJoseStreamingSession: method interface for HTTP SanJose Streaming session create/destroy.

Method Summary

void	onHTTPSanJoseStreamingSessionCreate (HTTPStreamerSessionSanJose httpSanJoseStreamingSession) Invoked when an HTTP SanJose Streaming session is created.
void	onHTTPSanJoseStreamingSessionDestroy (HTTPStreamerSessionSanJose httpSanJoseStreamingSession) Invoked when an HTTP SanJose Streaming session is destroyed.

Methods

onHTTPSanJoseStreamingSessionCreate

public void **onHTTPSanJoseStreamingSessionCreate**([HTTPStreamerSessionSanJose](#)
[httpSanJoseStreamingSession](#))

Invoked when an HTTP SanJose Streaming session is created.

Parameters:

[httpSanJoseStreamingSession](#) - [httpSanJoseStreamingSession](#)

onHTTPSanJoseStreamingSessionDestroy

public void **onHTTPSanJoseStreamingSessionDestroy**([HTTPStreamerSessionSanJose](#)
[httpSanJoseStreamingSession](#))

Invoked when an HTTP SanJose Streaming session is destroyed.

Parameters:

[httpSanJoseStreamingSession](#) - [httpSanJoseStreamingSession](#)

com.wowza.wms.module Interface IModuleOnHTTPSession

public interface **IModuleOnHTTPSession**
extends

IModuleOnHTTPSession: method interface for HTTP Streaming session create/destroy.

Method Summary

void	onHTTPSessionCreate(IHTTPStreamerSession httpSession) Invoked when an HTTP Session is created (both Smooth and Cupertino sessions).
void	onHTTPSessionDestroy(IHTTPStreamerSession httpSession) Invoked when an HTTP Session is destroyed (both Smooth and Cupertino sessions).

Methods

onHTTPSessionCreate

public void **onHTTPSessionCreate**([IHTTPStreamerSession](#) httpSession)

Invoked when an HTTP Session is created (both Smooth and Cupertino sessions).

Parameters:

httpSession - httpSession

onHTTPSessionDestroy

public void **onHTTPSessionDestroy**([IHTTPStreamerSession](#) httpSession)

Invoked when an HTTP Session is destroyed (both Smooth and Cupertino sessions).

Parameters:

httpSession - httpSession

com.wowza.wms.module Interface IModuleOnHTTPSmoothStreamingPlayReady

public interface **IModuleOnHTTPSmoothStreamingPlayReady**
extends

IModuleOnHTTPSmoothStreamingPlayReady: Still working on this...

Method Summary

void	onHTTPSmoothStreamingPlayReadyCreateLive (IApplicationInstance appInstance, String streamName, com.wowza.wms.drm.playready.PlayReadyKeyInfo playReadyKeyInfo)
void	onHTTPSmoothStreamingPlayReadyCreateVOD (HTTPStreamerSessionSmoothStreamer httpSession, com.wowza.wms.drm.playready.PlayReadyKeyInfo playReadyKeyInfo)

Methods

onHTTPSmoothStreamingPlayReadyCreateVOD

```
public void onHTTPSmoothStreamingPlayReadyCreateVOD(HTTPStreamerSessionSmoothStreamer
httpSession,
    com.wowza.wms.drm.playready.PlayReadyKeyInfo playReadyKeyInfo)
```

onHTTPSmoothStreamingPlayReadyCreateLive

```
public void onHTTPSmoothStreamingPlayReadyCreateLive(IApplicationInstance appInstance,
    String streamName,
    com.wowza.wms.drm.playready.PlayReadyKeyInfo playReadyKeyInfo)
```

com.wowza.wms.module Interface IModuleOnHTTPSmoothStreamingSession

public interface **IModuleOnHTTPSmoothStreamingSession**
extends

IModuleOnHTTPSession: method interface for HTTP Smooth Streaming session create/destroy.

Method Summary

void	onHTTPSmoothStreamingSessionCreate (HTTPStreamerSessionSmoothStreamer httpSmoothStreamingSession) Invoked when an HTTP Smooth Streaming session is created.
void	onHTTPSmoothStreamingSessionDestroy (HTTPStreamerSessionSmoothStreamer httpSmoothStreamingSession) Invoked when an HTTP Smooth Streaming session is destroyed.

Methods

onHTTPSmoothStreamingSessionCreate

public void **onHTTPSmoothStreamingSessionCreate**([HTTPStreamerSessionSmoothStreamer](#)
[httpSmoothStreamingSession](#))

Invoked when an HTTP Smooth Streaming session is created.

Parameters:

[httpSmoothStreamingSession](#) - [httpSmoothStreamingSession](#)

onHTTPSmoothStreamingSessionDestroy

public void **onHTTPSmoothStreamingSessionDestroy**([HTTPStreamerSessionSmoothStreamer](#)
[httpSmoothStreamingSession](#))

Invoked when an HTTP Smooth Streaming session is destroyed.

Parameters:

[httpSmoothStreamingSession](#) - [httpSmoothStreamingSession](#)

com.wowza.wms.module Interface IModuleOnPushPublish

public interface **IModuleOnPushPublish**
extends

Method Summary

void	onPushPublishSessionCreate (String streamName, IMediaStream stream, IPushPublishSession pushPublishSession) Invoked when push publish session is created
void	onPushPublishSessionDestroy (String streamName, IMediaStream stream, IPushPublishSession pushPublishSession) Invoked when push publish session is destroyed

Methods

onPushPublishSessionCreate

```
public void onPushPublishSessionCreate(String streamName,  
    IMediaStream stream,  
    IPushPublishSession pushPublishSession)
```

Invoked when push publish session is created

Parameters:

streamName - stream name
stream - stream
pushPublishSession - push publish session

onPushPublishSessionDestroy

```
public void onPushPublishSessionDestroy(String streamName,  
    IMediaStream stream,  
    IPushPublishSession pushPublishSession)
```

Invoked when push publish session is destroyed

Parameters:

streamName - stream name
stream - stream
pushPublishSession - push publish session

com.wowza.wms.module Interface IModuleOnRTPSession

public interface **IModuleOnRTPSession**
extends

IModuleOnRTPSession: method interface for RTP session create/destroy.

Method Summary

void	onRTPSessionCreate(RTPSession rtpSession) Invoked when an RTP Session is created.
void	onRTPSessionDestroy(RTPSession rtpSession) Invoked when an RTP Session is destroyed.

Methods

onRTPSessionCreate

public void **onRTPSessionCreate**([RTPSession](#) rtpSession)

Invoked when an RTP Session is created.

Parameters:

rtpSession - rtpSession

onRTPSessionDestroy

public void **onRTPSessionDestroy**([RTPSession](#) rtpSession)

Invoked when an RTP Session is destroyed.

Parameters:

rtpSession - rtpSession

com.wowza.wms.module Interface IModuleOnStream

public interface **IModuleOnStream**
extends

IModuleOnStream: method interface examples for stream level methods in a module.

Method Summary

void	onStreamCreate (IMediaStream stream) Invoked when a stream is created.
void	onStreamDestroy (IMediaStream stream) Invoked when a stream is destroyed.

Methods

onStreamCreate

public void **onStreamCreate**([IMediaStream](#) stream)

Invoked when a stream is created.

Parameters:

stream - stream object

onStreamDestroy

public void **onStreamDestroy**([IMediaStream](#) stream)

Invoked when a stream is destroyed.

Parameters:

stream - stream object

com.wowza.wms.module Interface IModulePingResult

public interface **IModulePingResult**
extends

IModulePingResult: callback interface used by IClient ping.

Method Summary

void	onResult (IClient client, long pingTime, int pingId, boolean result) Triggered on client side result from call to IClient.ping.
------	---

Methods

onResult

```
public void onResult(IClient client,  
                    long pingTime,  
                    int pingId,  
                    boolean result)
```

Triggered on client side result from call to IClient.ping. This method will be called on a success or failure (ping timeout) of a ping.

Parameters:

client - client
pingTime - time in server time (milliseconds) when the ping was initiated
pingId - internal server id for the ping request
result - true is ping was successful false if failure (timeout)

com.wowza.wms.module Class ModuleBase

java.lang.Object

└-com.wowza.wms.module.ModuleBase

Direct Known Subclasses:

[ModuleCore](#), [ModuleClientLogging](#), [ModuleMediaCaster](#)

public abstract class **ModuleBase**
extends Object

ModuleBase: Base class that all server side modules should extend. Provides basic utility functionality for handling function parameters and return data. Also provides a simplified API for logging.

Field Summary	
public static final	CALLBACK_PARAM1 Callback param: param1 Value: 1
public static final	CALLBACK_PARAM10 Callback param: param10 Value: 10
public static final	CALLBACK_PARAM2 Callback param: param2 Value: 2
public static final	CALLBACK_PARAM3 Callback param: param3 Value: 3
public static final	CALLBACK_PARAM4 Callback param: param4 Value: 4
public static final	CALLBACK_PARAM5 Callback param: param5 Value: 5
public static final	CALLBACK_PARAM6 Callback param: param6 Value: 6
public static final	CALLBACK_PARAM7 Callback param: param7 Value: 7
public static final	CALLBACK_PARAM8 Callback param: param8 Value: 8

public static final	CALLBACK_PARAM9 Callback param: param9 Value: 9
public static final	PARAM1 Method param: param1 Value: 3
public static final	PARAM10 Method param: param10 Value: 12
public static final	PARAM2 Method param: param2 Value: 4
public static final	PARAM3 Method param: param3 Value: 5
public static final	PARAM4 Method param: param4 Value: 6
public static final	PARAM5 Method param: param5 Value: 7
public static final	PARAM6 Method param: param6 Value: 8
public static final	PARAM7 Method param: param7 Value: 9
public static final	PARAM8 Method param: param8 Value: 10
public static final	PARAM9 Method param: param9 Value: 11
public static final	PARAMMETHODNAME Method: method name Value: 0
public static final	PLAYTRANSITION_APPEND Value: 0
public static final	PLAYTRANSITION_APPEND_IMMEDIATE Value: 2

public static final	PLAYTRANSITION_RESET Value: 1
public static final	PLAYTRANSITION_RESET_IMMEDIATE Value: 3
public static final	PLAYTRANSITION_STOP Value: 10
public static final	PLAYTRANSITION_SWAP Value: 12
public static final	PLAYTRANSITION_SWITCH Value: 13
public static final	PLAYTRANSITION_UNKNOWN Value: 14
public static final	PLAYTRANSITIONSTR_APPEND Play2 transition: APPEND Value: append
public static final	PLAYTRANSITIONSTR_RESET Play2 transition: RESET Value: reset
public static final	PLAYTRANSITIONSTR_STOP Play2 transition: STOP Value: stop
public static final	PLAYTRANSITIONSTR_SWAP Play2 transition: SWAP Value: swap
public static final	PLAYTRANSITIONSTR_SWITCH Play2 transition: SWITCH Value: switch
public static final	PLAYTRANSITIONSTR_UNKNOWN Play2 transition: UNKNOWN Value: unknown

Constructor Summary

public	ModuleBase()
--------	------------------------------

Method Summary

static IApplicationInstance	getAppInstance(IClient client) Get applicationInstance of a client.
--	--

static IApplication	getApplication (IClient client) Get application of a client.
static int	getCallbackParamCount (AMFDataList params) Get the total number of parameters passed to callback.
static WMSLogger	getLogger () Get the logging interface.
static AMFData	getParam (AMFDataList params, int index) Get parameter by index.
static boolean	getParamBoolean (AMFDataList params, int index) Get parameter by index, Return as boolean.
static boolean	getParamBoolean (AMFDataList params, int index, boolean defaultVal) Get parameter by index, Return as boolean.
static int	getParamCount (AMFDataList params) Get the total number of parameters passed to method.
static java.util.Date	getParamDate (AMFDataList params, int index) Get parameter by index, Return as Date.
static double	getParamDouble (AMFDataList params, int index) Get parameter by index, Return as double.
static double	getParamDouble (AMFDataList params, int index, double defaultVal) Get parameter by index, Return as double.
static int	getParamInt (AMFDataList params, int index) Get parameter by index, Return as int.
static int	getParamInt (AMFDataList params, int index, int defaultVal) Get parameter by index, Return as int.
static long	getParamLong (AMFDataList params, int index) Get parameter by index, Return as long.
static long	getParamLong (AMFDataList params, int index, long defaultVal) Get parameter by index, Return as long.
static AMFDataMixedArray	getParamMixedArray (AMFDataList params, int index) Get parameter by index, Return as AMFDataMixedArray.
static AMFDataObj	getParamObj (AMFDataList params, int index) Get parameter by index, Return as Object.
static String	getParamString (AMFDataList params, int index) Get parameter by index, Return as String.
static String	getParamString (AMFDataList params, int index, String defaultVal) Get parameter by index, Return as String.
static int	getParamType (AMFDataList params, int index) Get parameter type.

static IMediaStream	getStream (IClient client, com.wowza.wms.request.RequestFunction function) For methods called from the client side object NetStream (publish, play, deleteStream) get the IMediaStream object associated with the call.
static IVHost	getVHost (IClient client) Get vHost of a client.
void	invokePrevious (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Wowza Pro will determine command priority based on the order of the modules in the module list.
static void	invokePrevious (Object instance, IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Wowza Pro will determine command priority based on the order of the modules in the module list.
static boolean	isSendResult (AMFDataList params) Is this method call expecting sendResult to be called.
static void	sendClientOnStatusError (IClient client, String code, String description) Send an error message to the client-side client.onStatus handler
static boolean	sendResult (IClient client, AMFDataList params, AMFData data) Send a result to client method call as a AMFData object.
static boolean	sendResult (IClient client, AMFDataList params, boolean value) Send a result to client method call as a single boolean value.
static boolean	sendResult (IClient client, AMFDataList params, double value) Send a result to client method call as a single double value.
static boolean	sendResult (IClient client, AMFDataList params, int value) Send a result to client method call as a single int value.
static boolean	sendResult (IClient client, AMFDataList params, String value) Send a result to client method call as a single String value.
static void	sendStreamOnStatusError (IMediaStream stream, String code, String description) Send an error to the client-side NetStream.onStatus handler

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

PARAMMETHODNAME

```
public static final int PARAMMETHODNAME
```

Method: method name
Constant value: 0

(continued from last page)

PARAM1

```
public static final int PARAM1
```

Method param: param1
Constant value: **3**

PARAM2

```
public static final int PARAM2
```

Method param: param2
Constant value: **4**

PARAM3

```
public static final int PARAM3
```

Method param: param3
Constant value: **5**

PARAM4

```
public static final int PARAM4
```

Method param: param4
Constant value: **6**

PARAM5

```
public static final int PARAM5
```

Method param: param5
Constant value: **7**

PARAM6

```
public static final int PARAM6
```

Method param: param6
Constant value: **8**

PARAM7

```
public static final int PARAM7
```

Method param: param7
Constant value: **9**

PARAM8

```
public static final int PARAM8
```

Method param: param8
Constant value: **10**

PARAM9

```
public static final int PARAM9
```

(continued from last page)

Method param: param9
Constant value: **11**

PARAM10

public static final int **PARAM10**

Method param: param10
Constant value: **12**

CALLBACK_PARAM1

public static final int **CALLBACK_PARAM1**

Callback param: param1
Constant value: **1**

CALLBACK_PARAM2

public static final int **CALLBACK_PARAM2**

Callback param: param2
Constant value: **2**

CALLBACK_PARAM3

public static final int **CALLBACK_PARAM3**

Callback param: param3
Constant value: **3**

CALLBACK_PARAM4

public static final int **CALLBACK_PARAM4**

Callback param: param4
Constant value: **4**

CALLBACK_PARAM5

public static final int **CALLBACK_PARAM5**

Callback param: param5
Constant value: **5**

CALLBACK_PARAM6

public static final int **CALLBACK_PARAM6**

Callback param: param6
Constant value: **6**

CALLBACK_PARAM7

public static final int **CALLBACK_PARAM7**

Callback param: param7
Constant value: **7**

CALLBACK_PARAM8

```
public static final int CALLBACK_PARAM8
```

Callback param: param8
Constant value: **8**

CALLBACK_PARAM9

```
public static final int CALLBACK_PARAM9
```

Callback param: param9
Constant value: **9**

CALLBACK_PARAM10

```
public static final int CALLBACK_PARAM10
```

Callback param: param10
Constant value: **10**

PLAYTRANSITIONSTR_APPEND

```
public static final java.lang.String PLAYTRANSITIONSTR_APPEND
```

Play2 transition: APPEND
Constant value: **append**

PLAYTRANSITIONSTR_RESET

```
public static final java.lang.String PLAYTRANSITIONSTR_RESET
```

Play2 transition: RESET
Constant value: **reset**

PLAYTRANSITIONSTR_STOP

```
public static final java.lang.String PLAYTRANSITIONSTR_STOP
```

Play2 transition: STOP
Constant value: **stop**

PLAYTRANSITIONSTR_SWAP

```
public static final java.lang.String PLAYTRANSITIONSTR_SWAP
```

Play2 transition: SWAP
Constant value: **swap**

PLAYTRANSITIONSTR_SWITCH

```
public static final java.lang.String PLAYTRANSITIONSTR_SWITCH
```

Play2 transition: SWITCH
Constant value: **switch**

(continued from last page)

PLAYTRANSITIONSTR_UNKNOWN

```
public static final java.lang.String PLAYTRANSITIONSTR_UNKNOWN
```

Play2 transition: UNKNOWN
Constant value: **unknown**

PLAYTRANSITION_APPEND

```
public static final int PLAYTRANSITION_APPEND
```

Constant value: **0**

PLAYTRANSITION_RESET

```
public static final int PLAYTRANSITION_RESET
```

Constant value: **1**

PLAYTRANSITION_APPEND_IMMEDIATE

```
public static final int PLAYTRANSITION_APPEND_IMMEDIATE
```

Constant value: **2**

PLAYTRANSITION_RESET_IMMEDIATE

```
public static final int PLAYTRANSITION_RESET_IMMEDIATE
```

Constant value: **3**

PLAYTRANSITION_STOP

```
public static final int PLAYTRANSITION_STOP
```

Constant value: **10**

PLAYTRANSITION_SWAP

```
public static final int PLAYTRANSITION_SWAP
```

Constant value: **12**

PLAYTRANSITION_SWITCH

```
public static final int PLAYTRANSITION_SWITCH
```

Constant value: **13**

PLAYTRANSITION_UNKNOWN

```
public static final int PLAYTRANSITION_UNKNOWN
```

(continued from last page)

Constant value: **14**

Constructors

ModuleBase

```
public ModuleBase()
```

Methods

getParamCount

```
protected static int getParamCount(AMFDataList params)
```

Get the total number of parameters passed to method.

Parameters:

params - parameters

Returns:

total number of parameters

getCallbackParamCount

```
protected static int getCallbackParamCount(AMFDataList params)
```

Get the total number of parameters passed to callback.

Parameters:

params - parameters

Returns:

total number of parameters

getParamType

```
protected static int getParamType(AMFDataList params,  
int index)
```

Get parameter type.

Parameters:

params - parameters

index - parameter index

Returns:

parameter type (AMFData.DATA_TYPE_*)

getParam

```
protected static AMFData getParam(AMFDataList params,  
int index)
```

Get parameter by index. Return as AMFData object.

(continued from last page)

Parameters:

params - parameters
index - parameter index

Returns:

parameter value as AMFData object, null if out of bounds

getParamMixedArray

```
protected static AMFDataMixedArray getParamMixedArray(AMFDataList params,  
int index)
```

Get parameter by index, Return as AMFDataMixedArray.

Parameters:

params - parameters
index - parameter index

Returns:

parameter value as AMFDataMixedArray object, null if out of bounds

getParamObj

```
protected static AMFDataObj getParamObj(AMFDataList params,  
int index)
```

Get parameter by index, Return as Object.

Parameters:

params - parameters
index - parameter index

Returns:

parameter value as Object object, null if out of bounds

getParamString

```
protected static String getParamString(AMFDataList params,  
int index)
```

Get parameter by index, Return as String.

Parameters:

params - parameters
index - parameter index

Returns:

parameter value as String object, null if out of bounds

getParamString

```
protected static String getParamString(AMFDataList params,  
int index,  
String defaultVal)
```

Get parameter by index, Return as String.

Parameters:

params - parameters

(continued from last page)

index - parameter index
defaultVal - default value

Returns:

parameter value as String object, defaultVal if out of bounds

getParamDate

protected static java.util.Date **getParamDate**([AMFDataList](#) params,
int index)

Get parameter by index, Return as Date.

Parameters:

params - parameters
index - parameter index

Returns:

parameter value as Date object, null if out of bounds

getParamInt

protected static int **getParamInt**([AMFDataList](#) params,
int index)

Get parameter by index, Return as int.

Parameters:

params - parameters
index - parameter index

Returns:

parameter value as int, 0 if out of bounds

getParamInt

protected static int **getParamInt**([AMFDataList](#) params,
int index,
int defaultVal)

Get parameter by index, Return as int.

Parameters:

params - parameters
index - parameter index
defaultVal - default value

Returns:

parameter value as int, defaultVal if out of bounds

getParamDouble

protected static double **getParamDouble**([AMFDataList](#) params,
int index)

Get parameter by index, Return as double.

Parameters:

params - parameters

(continued from last page)

index - parameter index

Returns:

parameter value as double, 0 if out of bounds

getParamDouble

```
protected static double getParamDouble(AMFDataList params,  
    int index,  
    double defaultVal)
```

Get parameter by index, Return as double.

Parameters:

params - parameters
index - parameter index
defaultVal - default value

Returns:

parameter value as double, 0 if out of bounds

getParamLong

```
protected static long getParamLong(AMFDataList params,  
    int index)
```

Get parameter by index, Return as long.

Parameters:

params - parameters
index - parameter index

Returns:

parameter value as long, 0 if out of bounds

getParamLong

```
protected static long getParamLong(AMFDataList params,  
    int index,  
    long defaultVal)
```

Get parameter by index, Return as long.

Parameters:

params - parameters
index - parameter index
defaultVal - default value

Returns:

parameter value as long, defaultVal if out of bounds

getParamBoolean

```
protected static boolean getParamBoolean(AMFDataList params,  
    int index)
```

Get parameter by index, Return as boolean.

Parameters:

params - parameters

(continued from last page)

index - parameter index

Returns:

parameter value as boolean, false if out of bounds

getParamBoolean

```
protected static boolean getParamBoolean(AMFDataList params,  
int index,  
boolean defaultVal)
```

Get parameter by index, Return as boolean.

Parameters:params - parameters
index - parameter index
defaultVal - default value**Returns:**

parameter value as boolean, defaultVal if out of bounds

getAppInstance

```
protected static IApplicationInstance getAppInstance(IClient client)
```

Get applicationInstance of a client.

Parameters:

client - client

Returns:

applicationInstance

getApplication

```
protected static IApplication getApplication(IClient client)
```

Get application of a client.

Parameters:

client - client

Returns:

application

isSendResult

```
protected static boolean isSendResult(AMFDataList params)
```

Is this method call expecting sendResult to be called. If on the client side the call to `NetConnection.call("handlerName", resultObj, param1...);` had a value for resultObj (non-null), then the method is expecting some type of result or return data. Calling a variant of sendResult will provide this callback.

Parameters:

params - parameters

Returns:

true if client side call is expecting call to sendResult

getVHost

protected static [IVHost](#) **getVHost**([IClient](#) client)

Get vHost of a client.

Parameters:

client - client

Returns:

vHost

sendResult

protected static boolean **sendResult**([IClient](#) client,
[AMFDataList](#) params,
String value)

Send a result to client method call as a single String value.

Parameters:

client - client

params - parameters

value - return value

Returns:

true if client side call is expecting call to sendResult

sendResult

protected static boolean **sendResult**([IClient](#) client,
[AMFDataList](#) params,
boolean value)

Send a result to client method call as a single boolean value.

Parameters:

client - client

params - parameters

value - return value

Returns:

true if client side call is expecting call to sendResult

sendResult

protected static boolean **sendResult**([IClient](#) client,
[AMFDataList](#) params,
int value)

Send a result to client method call as a single int value.

Parameters:

client - client

params - parameters

value - return value

Returns:

true if client side call is expecting call to sendResult

sendResult

protected static boolean **sendResult**([IClient](#) client,
[AMFDataList](#) params,
double value)

Send a result to client method call as a single double value.

Parameters:

client - client
params - parameters
value - return value

Returns:

true if client side call is expecting call to sendResult

sendResult

protected static boolean **sendResult**([IClient](#) client,
[AMFDataList](#) params,
[AMFData](#) data)

Send a result to client method call as a AMFData object. This can be a single AMFData value like new AMFDataItem((double)1.234) or a complex type like AMFDataMixedArray, AMFDataArray or AMFDataObj.

Parameters:

client - client
params - parameters
data - return value

Returns:

true if client side call is expecting call to sendResult

getLogger

protected static [WMSLogger](#) **getLogger**()

Get the logging interface.

See Also:

[WMSLogger](#)

getStream

protected static [IMediaStream](#) **getStream**([IClient](#) client,
com.wowza.wms.request.RequestFunction function)

For methods called from the client side object NetStream (publish, play, deleteStream) get the IMediaStream object associated with the call.

Parameters:

client - client
function - functions

Returns:

media stream

(continued from last page)

invokePrevious

```
protected static void invokePrevious(Object instance,  
    IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Wowza Pro will determine command priority based on the order of the modules in the module list. Wowza Pro by default will only invoke the last module that defines a given command. This method enables you to call the method by the same name in the previous module that defines that command. For example if you have three modules defined in the module list; ModuleCore, ModuleSecureURLParams and ModuleMyModule and all three modules implement the "play" command. When "play" is invoked it will invoke the "play" command in ModuleMyModule. If in ModuleMyModule you would like to call the "play" command in ModuleSecureURLParams, you can call: invokePrevious(this, client, function, params); and it will invoke the "play" command defined in ModuleSecureURLParams.

Parameters:

instance - instance of the current module
client - client object passed into command
function - function passed into command
params - parameters passed into command

invokePrevious

```
protected void invokePrevious(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Wowza Pro will determine command priority based on the order of the modules in the module list. Wowza Pro by default will only invoke the last module that defines a given command. This method enables you to call the method by the same name in the previous module that defines that command. For example if you have three modules defined in the module list; ModuleCore, ModuleSecureURLParams and ModuleMyModule and all three modules implement the "play" command. When "play" is invoked it will invoke the "play" command in ModuleMyModule. If in ModuleMyModule you would like to call the "play" command in ModuleSecureURLParams, you can call: this.invokePrevious(client, function, params); and it will invoke the "play" command defined in ModuleSecureURLParams.

Parameters:

client - client object passed into command
function - function passed into command
params - parameters passed into command

sendClientOnStatusError

```
protected static void sendClientOnStatusError(IClient client,  
    String code,  
    String description)
```

Send an error message to the client-side client.onStatus handler

Parameters:

client - destination client
code - code
description - description

sendStreamOnStatusError

```
protected static void sendStreamOnStatusError(IMediaStream stream,  
    String code,  
    String description)
```

Send an error to the client-side NetStream.onStatus handler

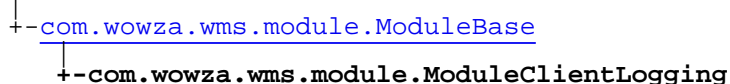
Parameters:

(continued from last page)

stream - destination stream
code - code
description - description

com.wowza.wms.module Class ModuleClientLogging

java.lang.Object



```

public class ModuleClientLogging
extends ModuleBase
  
```

Fields inherited from class [com.wowza.wms.module.ModuleBase](#)

[CALLBACK_PARAM1](#), [CALLBACK_PARAM10](#), [CALLBACK_PARAM2](#), [CALLBACK_PARAM3](#), [CALLBACK_PARAM4](#),
[CALLBACK_PARAM5](#), [CALLBACK_PARAM6](#), [CALLBACK_PARAM7](#), [CALLBACK_PARAM8](#), [CALLBACK_PARAM9](#), [PARAM1](#),
[PARAM10](#), [PARAM2](#), [PARAM3](#), [PARAM4](#), [PARAM5](#), [PARAM6](#), [PARAM7](#), [PARAM8](#), [PARAM9](#), [PARAMMETHODNAME](#),
[PLAYTRANSITION_APPEND](#), [PLAYTRANSITION_APPEND_IMMEDIATE](#), [PLAYTRANSITION_RESET](#),
[PLAYTRANSITION_RESET_IMMEDIATE](#), [PLAYTRANSITION_STOP](#), [PLAYTRANSITION_SWAP](#),
[PLAYTRANSITION_SWITCH](#), [PLAYTRANSITION_UNKNOWN](#), [PLAYTRANSITIONSTR_APPEND](#),
[PLAYTRANSITIONSTR_RESET](#), [PLAYTRANSITIONSTR_STOP](#), [PLAYTRANSITIONSTR_SWAP](#),
[PLAYTRANSITIONSTR_SWITCH](#), [PLAYTRANSITIONSTR_UNKNOWN](#)

Constructor Summary

public	ModuleClientLogging()
--------	---------------------------------------

Method Summary

static void	logDebug (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Send a debug message to the logging system <code>NetConnection.call("logDebug", null, message);</code>
static void	logError (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Send a error message to the logging system <code>NetConnection.call("logError", null, message);</code>
static void	logInfo (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Send a info message to the logging system <code>NetConnection.call("logInfo", null, message);</code>
static void	logWarn (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Send a warning message to the logging system <code>NetConnection.call("logWarn", null, message);</code>

Methods inherited from class [com.wowza.wms.module.ModuleBase](#)

[getAppInstance](#), [getApplication](#), [getCallbackParamCount](#), [getLogger](#), [getParam](#),
[getParamBoolean](#), [getParamBoolean](#), [getParamCount](#), [getParamDate](#), [getParamDouble](#),
[getParamDouble](#), [getParamInt](#), [getParamInt](#), [getParamLong](#), [getParamLong](#),
[getParamMixedArray](#), [getParamObj](#), [getParamString](#), [getParamString](#), [getParamType](#),
[getStream](#), [getVHost](#), [invokePrevious](#), [invokePrevious](#), [isSendResult](#),
[sendClientOnStatusError](#), [sendResult](#), [sendResult](#), [sendResult](#), [sendResult](#), [sendResult](#),
[sendStreamOnStatusError](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ModuleClientLogging

```
public ModuleClientLogging()
```

Methods

logDebug

```
public static void logDebug(IClient client,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Send a debug message to the logging system `NetConnection.call("logDebug", null, message);`

Parameters:

client - client
function - function
params - params (message)

logInfo

```
public static void logInfo(IClient client,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Send a info message to the logging system `NetConnection.call("logInfo", null, message);`

Parameters:

client - client
function - function
params - params (message)

logWarn

```
public static void logWarn(IClient client,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Send a warning message to the logging system `NetConnection.call("logWarn", null, message);`

Parameters:

client - client
function - function
params - params (message)

(continued from last page)

logError

```
public static void logError(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Send a error message to the logging system `NetConnection.call("logError", null, message);`

Parameters:

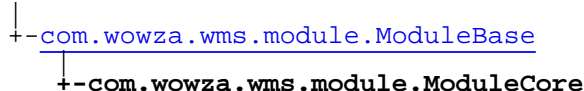
client - client

function - function

params - params (message)

com.wowza.wms.module Class ModuleCore

java.lang.Object



public class **ModuleCore**
extends [ModuleBase](#)

ModuleCore includes all the basic commands support by the NetStream and NetConnection client side objects. Any of these methods can be overwritten in a custom module. Below is an example of custom module that overrides the play method to modify the name of the file to be played:

```

package com.wowza.wms.plugin.overrideexample;

import com.wowza.wms.amf.*;
import com.wowza.wms.client.*;
import com.wowza.wms.module.*;
import com.wowza.wms.request.*;

public class ModuleOverrideExample extends ModuleBase
{
    public void play(IClient client, RequestFunction function, AMFDataList params)
    {
        if (params.get(PARAM1).getType() == AMFData.DATA_TYPE_STRING)
        {
            String playName = params.getString(PARAM1);
            params.set(PARAM1, new AMFDataItem(playName+"_newname"));
        }
        this.invokePrevious(client, function, params);
    }
}
  
```

Fields inherited from class [com.wowza.wms.module.ModuleBase](#)

[CALLBACK_PARAM1](#), [CALLBACK_PARAM10](#), [CALLBACK_PARAM2](#), [CALLBACK_PARAM3](#), [CALLBACK_PARAM4](#), [CALLBACK_PARAM5](#), [CALLBACK_PARAM6](#), [CALLBACK_PARAM7](#), [CALLBACK_PARAM8](#), [CALLBACK_PARAM9](#), [PARAM1](#), [PARAM10](#), [PARAM2](#), [PARAM3](#), [PARAM4](#), [PARAM5](#), [PARAM6](#), [PARAM7](#), [PARAM8](#), [PARAM9](#), [PARAMMETHODNAME](#), [PLAYTRANSITION_APPEND](#), [PLAYTRANSITION_APPEND_IMMEDIATE](#), [PLAYTRANSITION_RESET](#), [PLAYTRANSITION_RESET_IMMEDIATE](#), [PLAYTRANSITION_STOP](#), [PLAYTRANSITION_SWAP](#), [PLAYTRANSITION_SWITCH](#), [PLAYTRANSITION_UNKNOWN](#), [PLAYTRANSITIONSTR_APPEND](#), [PLAYTRANSITIONSTR_RESET](#), [PLAYTRANSITIONSTR_STOP](#), [PLAYTRANSITIONSTR_SWAP](#), [PLAYTRANSITIONSTR_SWITCH](#), [PLAYTRANSITIONSTR_UNKNOWN](#)

Constructor Summary

public	ModuleCore()
--------	------------------------------

Method Summary

static void	closeStream(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Server side implementation of NetStream.close();
static void	createStream(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Create new server side NetStream object (internal to Flash workings).
static void	deleteStream(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Delete server side stream object (internal to Flash workings).
static void	FCPublish(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) FCPublish method called by FME 2.5
static void	FCSubscribe(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) FCSubscribe subscribes to a live stream (if origin edge will start the stream from the origin to the edge)
static void	FCUnpublish(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params)
static void	FCUnPublish(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) FCUnpublish method called by FME 2.5
static void	FCUnsubscribe(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) FCUnSubscribe to a live stream
static void	FCUnSubscribe(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params)
static void	getClientID(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get the clientId for a client connection NetConnection.call("getClientID", resultObj);
static void	getLastStreamId(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get the id for the last created stream NetConnection.call("getLastStreamId", resultObj);
static void	getLiveStreamPacketizer(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get the live stream packetizer list for a client connection NetConnection.call("getLiveStreamPacketizer", resultObj);
static void	getMediaList(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params)
static void	getPageUrl(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) getPageUrl returns the pageUrl from the onConnect metadata

static void	getReferrer (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) getReferrer returns the referrer from the onConnect metadata
static void	getRepeaterOriginUrl (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get the Repeater Origin URL for this client
void	getStreamBitrate (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get stream bitrate in bits-per-second for a video on demand stream (will not work for live).
static void	getStreamLength (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get stream length in seconds NetConnection.call("getStreamLength", resultObj, streamName); If you pass in an array of streamNames it will return an array of durations.
static void	getStreamType (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get the default stream type for a client connection NetConnection.call("getStreamType", resultObj);
static void	getVersion (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get the Wowza Pro server version and build number NetConnection.call("getVersion", resultObj);
static void	initLiveStreamRepeating (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Initialize a stream for live stream repeating
static void	initStream (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Create new server side NetStream object (internal to Flash workings).
static void	pause (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Server side implementation of NetStream.pause([flag : Boolean]);
static void	pauseRaw (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) pauseRaw method introduced in Flash player 10
static void	play (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Server side implementation of NetStream.play(name : Object [,start : Number], len : Number[, reset : Object]);
static void	play2 (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Server side implementation of NetStream.play(playOptions : NetStreamPlayOptions);
static void	publish (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Server side implementation of NetStream.publish(name : String [, howToPublish : String]);
static void	receiveAudio (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Server side implementation of NetStream.receiveAudio(receive : Boolean);
static void	receiveVideo (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Server side implementation of NetStream.receiveVideo(receive : Boolean FPS : Number); FPS does not work the same as FMS.

static void	releaseStream (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params)
static void	seek (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Server side implementation of NetStream.seek(offset : Number);
static void	setBandwidthLimit (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params)
static void	setBufferTime (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Server side implementation of NetStream.setBufferTime(bufferTime : Number);
static void	setLiveStreamPacketizer (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Set the live stream packetizer for a stream
static void	setRepeaterOriginUrl (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Set the Repeater Origin URL for this client
static void	setStreamType (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Set the default stream type for a client connection NetConnection.call("setStreamType", null, streamType);
static void	startTransmit (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params)
static void	stopTransmit (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params)

Methods inherited from class [com.wowza.wms.module.ModuleBase](#)

[getAppInstance](#), [getApplication](#), [getCallbackParamCount](#), [getLogger](#), [getParam](#), [getParamBoolean](#), [getParamBoolean](#), [getParamCount](#), [getParamDate](#), [getParamDouble](#), [getParamDouble](#), [getParamInt](#), [getParamInt](#), [getParamLong](#), [getParamLong](#), [getParamMixedArray](#), [getParamObj](#), [getParamString](#), [getParamString](#), [getParamType](#), [getStream](#), [getVHost](#), [invokePrevious](#), [invokePrevious](#), [isSendResult](#), [sendClientOnStatusError](#), [sendResult](#), [sendResult](#), [sendResult](#), [sendResult](#), [sendResult](#), [sendResult](#), [sendStreamOnStatusError](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

ModuleCore

```
public ModuleCore()
```

Methods

(continued from last page)

createStream

```
public static void createStream(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Create new server side NetStream object (internal to Flash workings).

Parameters:

client - client
function - function
params - parameters (no params)

initStream

```
public static void initStream(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Create new server side NetStream object (internal to Flash workings).

Parameters:

client - client
function - function
params - parameters (streamIndex, boolean)

releaseStream

```
public static void releaseStream(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

getLastStreamId

```
public static void getLastStreamId(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Get the id for the last created stream `NetConnection.call("getLastStreamId", resultObj);`

Parameters:

client - client
function - client
params - params (no params)

deleteStream

```
public static void deleteStream(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Delete server side stream object (internal to Flash workings).

Parameters:

client - client
function - function
params - params

publish

```
public static void publish(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Server side implementation of NetStream.publish(name : String [, howToPublish : String]);

Parameters:

client - client

function - function

params - params (name [if name = "false" or "null" stop publishing], howToPublish ["record", "live", "append"])

setBandwidthLimit

```
public static void setBandwidthLimit(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

play2

```
public static void play2(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Server side implementation of NetStream.play(playOptions : NetStreamPlayOptions);

Parameters:

client

function

params

play

```
public static void play(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Server side implementation of NetStream.play(name : Object [,start : Number[, len : Number[, reset : Object]]]);

Parameters:

client - client

function - function

params - params (name, start, len, reset)

closeStream

```
public static void closeStream(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Server side implementation of NetStream.close();

Parameters:

client - client

function - function

params - params (no params)

seek

```
public static void seek(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Server side implementation of NetStream.seek(offset : Number);

Parameters:

client - client
function - function
params - params (offset)

pause

```
public static void pause(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Server side implementation of NetStream.pause([flag : Boolean]);

Parameters:

client - client
function - function
params - params (flag)

setBufferTime

```
public static void setBufferTime(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Server side implementation of NetStream.setBufferTime(bufferTime : Number);

Parameters:

client - client
function - function
params - params (bufferTime)

getClientID

```
public static void getClientID(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Get the clientId for a client connection NetConnection.call("getClientID", resultObj);

Parameters:

client - client
function - function
params - params (no params)

getVersion

```
public static void getVersion(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Get the Wowza Pro server version and build number NetConnection.call("getVersion", resultObj);

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Parameters:

client - client
function - function
params - params (no params)

setLiveStreamPacketizer

```
public static void setLiveStreamPacketizer(IClient client,  
com.wowza.wms.request.RequestFunction function,  
AMFDataList params)
```

Set the live stream packetizer for a stream

Parameters:

client - client
function - function
params - params (liveStreamPacketizer)

initLiveStreamRepeating

```
public static void initLiveStreamRepeating(IClient client,  
com.wowza.wms.request.RequestFunction function,  
AMFDataList params)
```

Initialize a stream for live stream repeating

Parameters:

client - client
function - function
params - params (liveStreamPacketizer, liveStreamRepeater)

getLiveStreamPacketizer

```
public static void getLiveStreamPacketizer(IClient client,  
com.wowza.wms.request.RequestFunction function,  
AMFDataList params)
```

Get the live stream packetizer list for a client connection `NetConnection.call("getLiveStreamPacketizer", resultObj);`

Parameters:

client - client
function - function
params - params (no params)

setStreamType

```
public static void setStreamType(IClient client,  
com.wowza.wms.request.RequestFunction function,  
AMFDataList params)
```

Set the default stream type for a client connection `NetConnection.call("setStreamType", null, streamType);`

Parameters:

client - client
function - function
params - params (streamType)

(continued from last page)

getStreamType

```
public static void getStreamType(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Get the default stream type for a client connection `NetConnection.call("getStreamType", resultObj);`

Parameters:

client - client
function - function
params - params (no params)

receiveAudio

```
public static void receiveAudio(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Server side implementation of `NetStream.receiveAudio(receive : Boolean);`

Parameters:

client - client
function - function
params - params (receive)

receiveVideo

```
public static void receiveVideo(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Server side implementation of `NetStream.receiveVideo(receive : Boolean | FPS : Number);` FPS does not work the same as FMS. Wowza Pro accepts the following values:

- true: Send all video frames
- false: Send no video
- -1: Send all video frames
- -2: Send half the frames (remove B frames) (Note: only works with Sorenson Spark video with B-frames)
- -3: Send only key frames

Parameters:

client - client
function - function
params - params (receive | FPS)

getStreamBitrate

```
public void getStreamBitrate(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Get stream bitrate in bits-per-second for a video on demand stream (will not work for live). To call, `NetConnection.call("getStreamBitrate", resultObj, streamName);`

Parameters:

client - client
function - function
params - params (streamName:String)

getStreamLength

```
public static void getStreamLength(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Get stream length in seconds `NetConnection.call("getStreamLength", resultObj, streamName)`; If you pass in an array of streamNames it will return an array of durations.

Parameters:

client - client
function - function
params - params (streamName:String or streamNames:Array)

getRepeaterOriginUrl

```
public static void getRepeaterOriginUrl(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Get the Repeater Origin URL for this client

Parameters:

client - client
function - function
params - params

setRepeaterOriginUrl

```
public static void setRepeaterOriginUrl(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Set the Repeater Origin URL for this client

Parameters:

client - client
function - function
params - params (repeaterOriginUrl)

FCPublish

```
public static void FCPublish(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

FCPublish method called by FME 2.5

Parameters:

client - client
function - function
params - params

FCUnPublish

```
public static void FCUnPublish(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

(continued from last page)

FCUnpublish method called by FME 2.5

Parameters:

client - client
function - function
params - params

FCUnpublish

```
public static void FCUnpublish(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

pauseRaw

```
public static void pauseRaw(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

pauseRaw method introduced in Flash player 10

Parameters:

client - client
function - function
params - params

getReferrer

```
public static void getReferrer(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

getReferrer returns the referrer from the onConnect metadata

Parameters:

client - client
function - function
params - params

getPageUrl

```
public static void getPageUrl(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

getPageUrl returns the pageUrl from the onConnect metadata

Parameters:

client - client
function - function
params - params

FCSubscribe

```
public static void FCSubscribe(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

(continued from last page)

FCSubscribe subscribes to a live stream (if origin edge will start the stream from the origin to the edge)

Parameters:

client - client
function - function
params - params (streamName:String, [mediaCasterType:String])

FCUnsubscribe

```
public static void FCUnsubscribe(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

FCUnSubscribe to a live stream

Parameters:

client - client
function - function
params - params (streamName:String)

FCUnSubscribe

```
public static void FCUnSubscribe(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

startTransmit

```
public static void startTransmit(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

stopTransmit

```
public static void stopTransmit(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

getMediaList

```
public static void getMediaList(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

com.wowza.wms.module

Class ServerListenerStreamDemoPublisher

java.lang.Object

└-com.wowza.wms.module.ServerListenerStreamDemoPublisher

All Implemented Interfaces:

[IApplicationInstanceNotify](#), [IApplicationNotify](#), [IVHostNotify](#), [IServerNotify2](#)

public class **ServerListenerStreamDemoPublisher**

extends Object

implements [IServerNotify2](#), [IVHostNotify](#), [IApplicationNotify](#), [IApplicationInstanceNotify](#)

Nested Class Summary

class	ServerListenerStreamDemoPublisher.DemoPublisher ServerListenerStreamDemoPublisher.DemoPublisher
class	ServerListenerStreamDemoPublisher.DemoPublisherConfig ServerListenerStreamDemoPublisher.DemoPublisherConfig
class	ServerListenerStreamDemoPublisher.ServerPublisherMap ServerListenerStreamDemoPublisher.ServerPublisherMap
class	ServerListenerStreamDemoPublisher.VHostPublishersMap ServerListenerStreamDemoPublisher.VHostPublishersMap

Field Summary

public static final	EVENTTYPE_APPLICATION_START Value: 3
public static final	EVENTTYPE_STREAM_START Value: 2
public static final	EVENTTYPE_STREAM_STOP Value: 1

Constructor Summary

public	ServerListenerStreamDemoPublisher()
--------	---

Method Summary

IApplicationInstance	getAppInstance (IVHost vhost, ServerListenerStreamDemoPublisher.DemoPublisherConfig config)
IApplicationInstance	getAppInstance (IVHost vhost, String appName, String appInstName)

ServerListenerStreamDemoPublisher.ServerPublisherMap	getServerPublisherMap()
void	onApplicationCreate(IApplication application)
void	onApplicationDestroy(IApplication application)
void	onApplicationInstanceCreate(IApplicationInstance applicationInstance)
void	onApplicationInstanceDestroy(IApplicationInstance applicationInstance)
void	onServerConfigLoaded(IServer server)
void	onServerCreate(IServer server)
void	onServerInit(IServer server)
void	onServerShutdownComplete(IServer server)
void	onServerShutdownStart(IServer server)
void	onVHostClientConnect(IVHost vhost, IClient inClient, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onVHostCreate(IVHost vhost)
void	onVHostInit(IVHost vhost)
void	onVHostShutdownComplete(IVHost vhost)
void	onVHostShutdownStart(IVHost vhost)
void	shutdownPublisher(ServerListenerStreamDemoPublisher.DemoPublisher demoPublisher)
void	startupPublisher(IApplicationInstance applicationInstance, ServerListenerStreamDemoPublisher.DemoPublisher demoPublisher)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.server.IServerNotify2](#)

[onServerConfigLoaded](#)

Methods inherited from interface [com.wowza.wms.server.IServerNotify](#)

[onServerCreate](#), [onServerInit](#), [onServerShutdownComplete](#), [onServerShutdownStart](#)

Methods inherited from interface [com.wowza.wms.vhost.IVHostNotify](#)

[onVHostClientConnect](#), [onVHostCreate](#), [onVHostInit](#), [onVHostShutdownComplete](#),
[onVHostShutdownStart](#)

Methods inherited from interface [com.wowza.wms.application.IApplicationNotify](#)

[onApplicationCreate](#), [onApplicationDestroy](#)

Methods inherited from interface [com.wowza.wms.application.IApplicationInstanceNotify](#)

[onApplicationInstanceCreate](#), [onApplicationInstanceDestroy](#)

Fields

EVENTTYPE_STREAM_STOP

```
public static final int EVENTTYPE_STREAM_STOP
```

Constant value: **1**

EVENTTYPE_STREAM_START

```
public static final int EVENTTYPE_STREAM_START
```

Constant value: **2**

EVENTTYPE_APPLICATION_START

```
public static final int EVENTTYPE_APPLICATION_START
```

Constant value: **3**

Constructors

ServerListenerStreamDemoPublisher

```
public ServerListenerStreamDemoPublisher()
```

Methods

onServerCreate

```
public void onServerCreate(IServer server)
```

onServerConfigLoaded

```
public void onServerConfigLoaded(IServer server)
```

(continued from last page)

onServerInit

```
public void onServerInit(IServer server)
```

onServerShutdownStart

```
public void onServerShutdownStart(IServer server)
```

onServerShutdownComplete

```
public void onServerShutdownComplete(IServer server)
```

onVHostCreate

```
public void onVHostCreate(IVHost vhost)
```

getServerPublisherMap

```
public ServerListenerStreamDemoPublisher.ServerPublisherMap getServerPublisherMap()
```

onVHostInit

```
public void onVHostInit(IVHost vhost)
```

onVHostShutdownStart

```
public void onVHostShutdownStart(IVHost vhost)
```

onVHostShutdownComplete

```
public void onVHostShutdownComplete(IVHost vhost)
```

onVHostClientConnect

```
public void onVHostClientConnect(IVHost vhost,  
    IClient inClient,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

onApplicationInstanceCreate

```
public void onApplicationInstanceCreate(IApplicationInstance applicationInstance)
```

onApplicationInstanceDestroy

```
public void onApplicationInstanceDestroy(IApplicationInstance applicationInstance)
```

onApplicationCreate

```
public void onApplicationCreate(IApplication application)
```

onApplicationDestroy

```
public void onApplicationDestroy(IApplication application)
```

getAppInstance

```
public IApplicationInstance getAppInstance(IVHost vhost,  
ServerListenerStreamDemoPublisher.DemoPublisherConfig config)
```

getAppInstance

```
public IApplicationInstance getAppInstance(IVHost vhost,  
String appName,  
String appInstName)
```

startupPublisher

```
public void startupPublisher(IApplicationInstance applicationInstance,  
ServerListenerStreamDemoPublisher.DemoPublisher demoPublisher)
```

shutdownPublisher

```
public void shutdownPublisher(ServerListenerStreamDemoPublisher.DemoPublisher  
demoPublisher)
```

com.wowza.wms.module Class ServerListenerStreamDemoPublisher.DemoPublisher

java.lang.Object

└-com.wowza.wms.module.ServerListenerStreamDemoPublisher.DemoPublisher

```
public class ServerListenerStreamDemoPublisher.DemoPublisher
extends Object
```

Field Summary

public	config
--------	------------------------

Constructor Summary

public	ServerListenerStreamDemoPublisher.DemoPublisher()
--------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

config

```
public com.wowza.wms.module.ServerListenerStreamDemoPublisher.DemoPublisherConfig
config
```

Constructors

ServerListenerStreamDemoPublisher.DemoPublisher

```
public ServerListenerStreamDemoPublisher.DemoPublisher()
```

com.wowza.wms.module**Class ServerListenerStreamDemoPublisher.VHostPublishersMap**

java.lang.Object

└-com.wowza.wms.module.ServerListenerStreamDemoPublisher.VHostPublishersMap

```
public class ServerListenerStreamDemoPublisher.VHostPublishersMap
extends Object
```

Constructor Summary

public	ServerListenerStreamDemoPublisher.VHostPublishersMap (Object lock)
--------	--

Method Summary

void	addDemoPublishers (String appKey, ServerListenerStreamDemoPublisher.DemoPublisher demoPublisher)
void	addEvent (ServerListenerStreamDemoPublisher.CycleEvent event)
void	clearDemoPublishers ()
java.util.List	getDemoPublishers (String appKey)
java.util.List	getPublishers (String key)
java.util.Set	keySet ()
void	processEvents (long currTime)
java.util.List	remove (String appKey)
java.util.List	removeTriggeredEvents (long currTime)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors**ServerListenerStreamDemoPublisher.VHostPublishersMap**

```
public ServerListenerStreamDemoPublisher.VHostPublishersMap(Object lock)
```


Methods

getDemoPublishers

```
public java.util.List getDemoPublishers(String appKey)
```

addDemoPublishers

```
public void addDemoPublishers(String appKey,  
    ServerListenerStreamDemoPublisher.DemoPublisher demoPublisher)
```

clearDemoPublishers

```
public void clearDemoPublishers()
```

remove

```
public java.util.List remove(String appKey)
```

keySet

```
public java.util.Set keySet()
```

getPublishers

```
public java.util.List getPublishers(String key)
```

addEvent

```
public void addEvent(ServerListenerStreamDemoPublisher.CycleEvent event)
```

removeTriggeredEvents

```
public java.util.List removeTriggeredEvents(long currTime)
```

processEvents

```
public void processEvents(long currTime)
```

com.wowza.wms.module

Class ServerListenerStreamDemoPublisher.ServerPublisherMap

java.lang.Object

└-com.wowza.wms.module.ServerListenerStreamDemoPublisher.ServerPublisherMap

```
public class ServerListenerStreamDemoPublisher.ServerPublisherMap
extends Object
```

Constructor Summary

public	ServerListenerStreamDemoPublisher.ServerPublisherMap()
--------	--

Method Summary

void	addEntry (String vhostName, String mapKey, ServerListenerStreamDemoPublisher.DemoPublisher demoPublisher, ServerListenerStreamDemoPublisher.CycleEvent event)
ServerListenerStreamDemoPublisher.VHostPublishersMap	get (String key)
java.util.Set	keySet ()
void	processEvents (long currTime)
void	put (String key, ServerListenerStreamDemoPublisher.VHostPublishersMap entry)
ServerListenerStreamDemoPublisher.VHostPublishersMap	remove (String key)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ServerListenerStreamDemoPublisher.ServerPublisherMap

```
public ServerListenerStreamDemoPublisher.ServerPublisherMap()
```

Methods

(continued from last page)

get

```
public ServerListenerStreamDemoPublisher.VHostPublishersMap get(String key)
```

remove

```
public ServerListenerStreamDemoPublisher.VHostPublishersMap remove(String key)
```

put

```
public void put(String key,  
    ServerListenerStreamDemoPublisher.VHostPublishersMap entry)
```

keySet

```
public java.util.Set keySet()
```

addEntry

```
public void addEntry(String vhostName,  
    String mapKey,  
    ServerListenerStreamDemoPublisher.DemoPublisher demoPublisher,  
    ServerListenerStreamDemoPublisher.CycleEvent event)
```

processEvents

```
public void processEvents(long currTime)
```

com.wowza.wms.module**Class ServerListenerStreamDemoPublisher.DemoPublisherConfig**

java.lang.Object

└-com.wowza.wms.module.ServerListenerStreamDemoPublisher.DemoPublisherConfig

```
public class ServerListenerStreamDemoPublisher.DemoPublisherConfig
extends Object
```

Field Summary

public	appInstName
public	appName
public	dstStream
public	playlistRepeat
public	publishDuration
public	publishPauseTime
public	publishRepeat
public	random
public	sendOnMetadata
public	speed
public	srcExt
public	srcStream
public	timeBetweenItems
public	vhostName

Constructor Summary

public	ServerListenerStreamDemoPublisher.DemoPublisherConfig()
--------	---

Method Summary

String	toString()
--------	----------------------------

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

vhostName

```
public java.lang.String vhostName
```

appName

```
public java.lang.String appName
```

appInstName

```
public java.lang.String appInstName
```

dstStream

```
public java.lang.String dstStream
```

srcStream

```
public java.lang.String srcStream
```

srcExt

```
public java.lang.String srcExt
```

random

```
public boolean random
```

timeBetweenItems

```
public int timeBetweenItems
```

(continued from last page)

sendOnMetadata

```
public boolean sendOnMetadata
```

playlistRepeat

```
public boolean playlistRepeat
```

speed

```
public double speed
```

publishDuration

```
public long publishDuration
```

publishPauseTime

```
public long publishPauseTime
```

publishRepeat

```
public boolean publishRepeat
```

Constructors

ServerListenerStreamDemoPublisher.DemoPublisherConfig

```
public ServerListenerStreamDemoPublisher.DemoPublisherConfig()
```

Methods

toString

```
public String toString()
```

Package

com.wowza.wms.netconnection

com.wowza.wms.netconnection Interface INetConnection

public interface **INetConnection**
extends

Method Summary

void	addPartialFunction (Integer amfNumber, com.wowza.wms.request.RequestFunction funct)
void	addPublishStreams (IMediaStream stream)
void	call (String handlerName, IMediaStream stream, INetConnectionCallResult resultObj, Object[] params)
void	call (String handlerName, INetConnectionCallResult resultObj, Object[] params)
void	callConnect (INetConnectionCallResult resultObj, AMFDataObj metaData, Object[] params)
void	checkLastIdlePing ()
void	checkPingTimeout ()
void	clearLeftOverData ()
void	clearPartialFunctions ()
void	close ()
void	connect (String hostname, int port, int timeout, INetConnectionCallResult handshakeResult)
void	doIdle ()
IApplicationInstance	getAppInstance ()
NetConnectionCallResults	getCallResults ()
int	getClientId ()
int	getHandshake ()
INetConnectionCallResult	getHandshakeResult ()

int	getIdleFrequency()
INetConnectionIdle	getIdleHandler()
long	getLastIdlePingTime()
long	getLastValidateTime()
int	getLeftOverCID()
byte[]	getLeftOverData()
int	getLiveRepeaterCapabilities()
IOPerformanceCounter	getMediaIOPerformanceCounter()
int	getNetConnectionId()
long	getNextConfirmBytesReceived()
int	getObjectEncoding()
java.util.Map	getPartialFunctions()
int	getProtocol()
INetConnectionPublisher	getPublishHandler()
java.util.List	getPublishStreams()
int	getReceiveChunkSize()
java.util.List	getReqAMFObjs()
int	getRespAFMIndex(IMediaStream stream)
AMFObj	getRespAMFAudioObj(IMediaStream stream)
AMFObj	getRespAMFDataObj(IMediaStream stream)
AMFObj	getRespAMFVideoObj(IMediaStream stream)
ResponseFunctions	getRespFunctions()
AMFObj	getResponseAMFObj(int index)
int	getSendChunkSize()

MediaStreamMap	getStreams()
String	getStreamType()
long	getTotalInBytes()
IOPerformanceCounter	getTotalIOPerformanceCounter()
com.wowza.wms.protocol.wowz.WOWZSession	getWowzSession()
void	handleCallback (com.wowza.wms.request.RequestFunction function)
void	handlePingResult (int pingId, boolean result)
long	incrementNextConfirmBytesReceived()
boolean	isLeftOverData()
boolean	isObjectEncodingAMF0()
boolean	isObjectEncodingAMF3()
boolean	isSSL()
boolean	isValidatingConnection()
void	packetComplete()
int	ping (INetConnectionPingResult pingResult)
void	registerCallback (String handlerName, INetConnectionCallback callback)
void	registerStream (IMediaStream stream)
void	removePublishStreams (IMediaStream stream)
void	sendMediaStreamBufferTime (IMediaStream stream, int bufferTime)
void	setClientId (int clientId)
void	setHandshake (int handshake)
void	setHandshakeResult (INetConnectionCallResult handshakeResult)
void	setIdleFrequency (int idleFrequency)
void	setIdleHandler (INetConnectionIdle idleHandler)

void	setLastIdlePingTime (long lastIdlePingTime)
void	setLastValidateTime (long lastValidateTime)
void	setLeftOverData (byte[] data, int offset, int size)
void	setLeftOverData (byte[] data, int offset, int size, int cid)
void	setLiveRepeaterCapabilities (int liveRepeaterCapabilities)
void	setNextConfirmBytesReceived (long nextConfirmBytesReceived)
void	setObjectEncoding (int objectEncoding)
void	setPartialFunctions (java.util.Map partialFunctions)
void	setProtocol (int protocol)
void	setPublishHandler (INetConnectionPublisher publishHandler)
void	setReceiveChunkSize (int baseChunkSize)
void	setSendChunkSize (int baseChunkSize)
void	setSSL (boolean isSSL)
void	setStreams (MediaStreamMap streams)
void	setStreamType (String streamType)
void	setValidatingConnection (boolean isValidatingConnection)
void	setWowzSession (com.wowza.wms.protocol.wowz.WOWZSession wowzSession)
void	unregisterCallback (String handlerName)
void	unregisterStream (IMediaStream stream)

Methods

getRespFunctions

```
public ResponseFunctions getRespFunctions()
```

(continued from last page)

connect

```
public void connect(String hostname,
    int port,
    int timeout,
    INetConnectionCallResult handshakeResult)
```

callConnect

```
public void callConnect(INetConnectionCallResult resultObj,
    AMFDataObj metaData,
    Object[] params)
```

call

```
public void call(String handlerName,
    INetConnectionCallResult resultObj,
    Object[] params)
```

call

```
public void call(String handlerName,
    IMediaStream stream,
    INetConnectionCallResult resultObj,
    Object[] params)
```

getStreams

```
public MediaStreamMap getStreams()
```

setStreams

```
public void setStreams(MediaStreamMap streams)
```

getHandshake

```
public int getHandshake()
```

setHandshake

```
public void setHandshake(int handshake)
```

(continued from last page)

getHandshakeResult

```
public INetConnectionCallResult getHandshakeResult()
```

setHandshakeResult

```
public void setHandshakeResult(INetConnectionCallResult handshakeResult)
```

getLeftOverData

```
public byte[] getLeftOverData()
```

getLeftOverCID

```
public int getLeftOverCID()
```

setLeftOverData

```
public void setLeftOverData(byte[] data,  
    int offset,  
    int size,  
    int cid)
```

setLeftOverData

```
public void setLeftOverData(byte[] data,  
    int offset,  
    int size)
```

clearLeftOverData

```
public void clearLeftOverData()
```

isLeftOverData

```
public boolean isLeftOverData()
```

getPartialFunctions

```
public java.util.Map getPartialFunctions()
```

setPartialFunctions

```
public void setPartialFunctions(java.util.Map partialFunctions)
```

clearPartialFunctions

```
public void clearPartialFunctions()
```

addPartialFunction

```
public void addPartialFunction(Integer amfNumber,  
    com.wowza.wms.request.RequestFunction funct)
```

getReqAMFObjs

```
public java.util.List getReqAMFObjs()
```

getReceiveChunkSize

```
public int getReceiveChunkSize()
```

setReceiveChunkSize

```
public void setReceiveChunkSize(int baseChunkSize)
```

getSendChunkSize

```
public int getSendChunkSize()
```

setSendChunkSize

```
public void setSendChunkSize(int baseChunkSize)
```

getStreamType

```
public String getStreamType()
```

(continued from last page)

setStreamType

```
public void setStreamType(String streamType)
```

registerStream

```
public void registerStream(IMediaStream stream)
```

unregisterStream

```
public void unregisterStream(IMediaStream stream)
```

getCallResults

```
public NetConnectionCallResults getCallResults()
```

handleCallback

```
public void handleCallback(com.wowza.wms.request.RequestFunction function)
```

unregisterCallback

```
public void unregisterCallback(String handlerName)
```

registerCallback

```
public void registerCallback(String handlerName,  
    INetConnectionCallback callback)
```

close

```
public void close()
```

getAppInstance

```
public IApplicationInstance getAppInstance()
```

getNetConnectionId

```
public int getNetConnectionId()
```

(continued from last page)

getClientId

```
public int getClientId()
```

setClientId

```
public void setClientId(int clientId)
```

packetComplete

```
public void packetComplete()
```

getResponseAMFObj

```
public AMFObj getResponseAMFObj(int index)
```

getIdleHandler

```
public INetConnectionIdle getIdleHandler()
```

setIdleHandler

```
public void setIdleHandler(INetConnectionIdle idleHandler)
```

getIdleFrequency

```
public int getIdleFrequency()
```

setIdleFrequency

```
public void setIdleFrequency(int idleFrequency)
```

ping

```
public int ping(INetConnectionPingResult pingResult)
```

(continued from last page)

handlePingResult

```
public void handlePingResult(int pingId,  
    boolean result)
```

checkPingTimeout

```
public void checkPingTimeout()
```

doIdle

```
public void doIdle()
```

getLastIdlePingTime

```
public long getLastIdlePingTime()
```

setLastIdlePingTime

```
public void setLastIdlePingTime(long lastIdlePingTime)
```

checkLastIdlePing

```
public void checkLastIdlePing()
```

getTotalInBytes

```
public long getTotalInBytes()
```

getNextConfirmBytesReceived

```
public long getNextConfirmBytesReceived()
```

setNextConfirmBytesReceived

```
public void setNextConfirmBytesReceived(long nextConfirmBytesReceived)
```

incrementNextConfirmBytesReceived

```
public long incrementNextConfirmBytesReceived()
```

(continued from last page)

isObjectEncodingAMF3

```
public boolean isObjectEncodingAMF3()
```

isObjectEncodingAMF0

```
public boolean isObjectEncodingAMF0()
```

setObjectEncoding

```
public void setObjectEncoding(int objectEncoding)
```

getObjectEncoding

```
public int getObjectEncoding()
```

getRespAFMIndex

```
public int getRespAFMIndex(IMediaStream stream)
```

getRespAMFAudioObj

```
public AMFObj getRespAMFAudioObj(IMediaStream stream)
```

getRespAMFVideoObj

```
public AMFObj getRespAMFVideoObj(IMediaStream stream)
```

getRespAMFDataObj

```
public AMFObj getRespAMFDataObj(IMediaStream stream)
```

removePublishStreams

```
public void removePublishStreams(IMediaStream stream)
```

(continued from last page)

getPublishStreams

```
public java.util.List getPublishStreams()
```

addPublishStreams

```
public void addPublishStreams(IMediaStream stream)
```

getPublishHandler

```
public INetConnectionPublisher getPublishHandler()
```

setPublishHandler

```
public void setPublishHandler(INetConnectionPublisher publishHandler)
```

getLastValidateTime

```
public long getLastValidateTime()
```

setLastValidateTime

```
public void setLastValidateTime(long lastValidateTime)
```

isValidatingConnection

```
public boolean isValidatingConnection()
```

setValidatingConnection

```
public void setValidatingConnection(boolean isValidatingConnection)
```

getTotalIOPerformanceCounter

```
public IOPerformanceCounter getTotalIOPerformanceCounter()
```

getMediaIOPerformanceCounter

```
public IOPerformanceCounter getMediaIOPerformanceCounter()
```

(continued from last page)

sendMediaStreamBufferTime

```
public void sendMediaStreamBufferTime(IMediaStream stream,  
    int bufferTime)
```

getLiveRepeaterCapabilities

```
public int getLiveRepeaterCapabilities()
```

setLiveRepeaterCapabilities

```
public void setLiveRepeaterCapabilities(int liveRepeaterCapabilities)
```

getProtocol

```
public int getProtocol()
```

setProtocol

```
public void setProtocol(int protocol)
```

getWowzSession

```
public com.wowza.wms.protocol.wowz.WOWZSession getWowzSession()
```

setWowzSession

```
public void setWowzSession(com.wowza.wms.protocol.wowz.WOWZSession wowzSession)
```

isSSL

```
public boolean isSSL()
```

setSSL

```
public void setSSL(boolean isSSL)
```

com.wowza.wms.netconnection Interface INetConnectionCallback

public interface **INetConnectionCallback**
extends

Method Summary

void	onCallback (INetConnection netconnection, com.wowza.wms.request.RequestFunction function, AMFDataList params)
------	---

Methods

onCallback

public void **onCallback**([INetConnection](#) netconnection,
[com.wowza.wms.request.RequestFunction](#) function,
[AMFDataList](#) params)

com.wowza.wms.netconnection Interface INetConnectionCallResult

public interface **INetConnectionCallResult**
extends

Method Summary

void	<code>onResult(INetConnection netconnection, com.wowza.wms.request.RequestFunction function, AMFDataList params)</code>
------	---

Methods

onResult

public void **onResult**([INetConnection](#) netconnection,
com.wowza.wms.request.RequestFunction function,
[AMFDataList](#) params)

com.wowza.wms.netconnection Interface INetConnectionIdle

public interface **INetConnectionIdle**
extends

Method Summary

void	onIdle (INetConnection netconnection, org.apache.mina.common.IoSession session)
void	onSessionClosed (INetConnection netconnection, org.apache.mina.common.IoSession session)
void	onSessionOpened (INetConnection netconnection, org.apache.mina.common.IoSession session)

Methods

onIdle

```
public void onIdle(INetConnection netconnection,  
    org.apache.mina.common.IoSession session)
```

onSessionOpened

```
public void onSessionOpened(INetConnection netconnection,  
    org.apache.mina.common.IoSession session)
```

onSessionClosed

```
public void onSessionClosed(INetConnection netconnection,  
    org.apache.mina.common.IoSession session)
```

com.wowza.wms.netconnection Interface INetConnectionPingResult

public interface **INetConnectionPingResult**
extends

INetConnectionPingResult: callback interface used by INetConnection ping.

Method Summary

void	onResult (INetConnection netConnection, long pingTime, int pingId, boolean result) Triggered on server to server result from call to INetConnection.ping.
------	---

Methods

onResult

```
public void onResult(INetConnection netConnection,  
    long pingTime,  
    int pingId,  
    boolean result)
```

Triggered on server to server result from call to INetConnection.ping. This method will be called on a success or failure (ping timeout) of a ping.

Parameters:

netConnection - net connection
pingTime - time in server time (milliseconds) when the ping was initiated
pingId - internal server id for the ping request
result - true is ping was successful false if failure (timeout)

com.wowza.wms.netconnection Interface INetConnectionPublisher

public interface **INetConnectionPublisher**
extends

Method Summary

int	play (INetConnection netConnection, java.io.OutputStream out, long[] playSizes)
-----	--

Methods

play

```
public int play(INetConnection netConnection,  
                java.io.OutputStream out,  
                long[] playSizes)
```

Package

com.wowza.wms.pushpublish.model

com.wowza.wms.pushpublish.model Interface IPushPublish

All Known Implementing Classes:
[PushPublishBase](#)

public interface **IPushPublish**
extends

The Interface IPushPublish.

Field Summary	
public static final	CONNECTED_STATE_CONNECTED Value: 3
public static final	CONNECTED_STATE_CONNECTING Value: 2
public static final	CONNECTED_STATE_NOT_CONNECTED Value: 0
public static final	CONNECTED_STATE_WAITING Value: 1
public static final	PUSHPUBLISH_TYPE_CUPERTINO Value: 3
public static final	PUSHPUBLISH_TYPE_MPEGDASH Value: 5
public static final	PUSHPUBLISH_TYPE_RTMP Value: 1
public static final	PUSHPUBLISH_TYPE_RTP Value: 2
public static final	PUSHPUBLISH_TYPE_RTP_BUFFERED Value: 7
public static final	PUSHPUBLISH_TYPE_SANJOSE Value: 4
public static final	PUSHPUBLISH_TYPE_SRT Value: 6

public static final	PUSHPUBLISH_TYPE_UNKNOWN Value: 0
---------------------	--

Method Summary

void	connect()
IPushPublishSession	createPushPublishSession()
void	disconnect(boolean hard)
int	getConnectedState()
String	getContextStr()
int	getDestinationID()
String	getDestinationName()
String	getDstStreamName()
String	getEntryName()
String	getHostname()
java.util.Map	getMap()
long	getMessagesAttemptedCount()
long	getMessagesFailedCount()
long	getMessagesRetriedCount()
int	getPort()
String	getProfile()
IPushPublishProfileUtil	getProfileUtil()
WMSProperties	getProperties()
int	getPushPublishType()
int	getReconnectWaitTime()
IMediaStream	getSrcStream()

String	getSrcStreamName()
boolean	handleParentStreamDisconnect(IPushPublishSession pushPublishSession, boolean isReset)
void	init(IApplicationInstance appInstance2, String streamName, IMediaStream stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean debug)
boolean	isParent()
boolean	isTargetedStream(String streamName)
void	resetConnection()
void	setDebugLog(boolean debugLog)
void	setDestinationName(String destinationName)
void	setDstStreamName(String dstStreamNameIn)
void	setEntryName(String entryName)
void	setHost(String hostname)
void	setHostname(String hostname)
void	setPort(int port)
void	setPort(String port)
void	setProfile(String profile)
void	setReconnectWaitTime(int reconnectWaitTime)
void	setSrcStream(IMediaStream srcStream)
void	setSrcStreamName(String srcStreamName)
void	setStreamName(String streamName)
void	updateUsageTracker()

Fields

(continued from last page)

PUSHPUBLISH_TYPE_UNKNOWN

```
public static final int PUSHPUBLISH_TYPE_UNKNOWN
```

Constant value: **0**

PUSHPUBLISH_TYPE_RTMP

```
public static final int PUSHPUBLISH_TYPE_RTMP
```

Constant value: **1**

PUSHPUBLISH_TYPE_RTP

```
public static final int PUSHPUBLISH_TYPE_RTP
```

Constant value: **2**

PUSHPUBLISH_TYPE_CUPERTINO

```
public static final int PUSHPUBLISH_TYPE_CUPERTINO
```

Constant value: **3**

PUSHPUBLISH_TYPE_SANJOSE

```
public static final int PUSHPUBLISH_TYPE_SANJOSE
```

Constant value: **4**

PUSHPUBLISH_TYPE_MPEGDASH

```
public static final int PUSHPUBLISH_TYPE_MPEGDASH
```

Constant value: **5**

PUSHPUBLISH_TYPE_SRT

```
public static final int PUSHPUBLISH_TYPE_SRT
```

Constant value: **6**

PUSHPUBLISH_TYPE_RTP_BUFFERED

```
public static final int PUSHPUBLISH_TYPE_RTP_BUFFERED
```

Constant value: **7**

(continued from last page)

CONNECTED_STATE_NOT_CONNECTED

```
public static final int CONNECTED_STATE_NOT_CONNECTED
```

Constant value: **0**

CONNECTED_STATE_WAITING

```
public static final int CONNECTED_STATE_WAITING
```

Constant value: **1**

CONNECTED_STATE_CONNECTING

```
public static final int CONNECTED_STATE_CONNECTING
```

Constant value: **2**

CONNECTED_STATE_CONNECTED

```
public static final int CONNECTED_STATE_CONNECTED
```

Constant value: **3**

Methods

connect

```
public void connect()
```

disconnect

```
public void disconnect(boolean hard)
```

resetConnection

```
public void resetConnection()
```

getProperties

```
public WMSProperties getProperties()
```

getEntryName

```
public String getEntryName()
```

setEntryName

```
public void setEntryName(String entryName)
```

getSrcStreamName

```
public String getSrcStreamName()
```

setSrcStreamName

```
public void setSrcStreamName(String srcStreamName)
```

getProfile

```
public String getProfile()
```

setProfile

```
public void setProfile(String profile)
```

getDestinationName

```
public String getDestinationName()
```

setDestinationName

```
public void setDestinationName(String destinationName)
```

getDstStreamName

```
public String getDstStreamName()
```

setDstStreamName

```
public void setDstStreamName(String dstStreamNameIn)
```

setStreamName

```
public void setStreamName(String streamName)
```

(continued from last page)

getHostname

```
public String getHostname()
```

setHost

```
public void setHost(String hostname)
```

setHostname

```
public void setHostname(String hostname)
```

setDebugLog

```
public void setDebugLog(boolean debugLog)
```

getPort

```
public int getPort()
```

setPort

```
public void setPort(int port)
```

setPort

```
public void setPort(String port)
```

getReconnectWaitTime

```
public int getReconnectWaitTime()
```

setReconnectWaitTime

```
public void setReconnectWaitTime(int reconnectWaitTime)
```

(continued from last page)

init

```
public void init(IApplicationInstance appInstance2,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean debug)
```

getPushPublishType

```
public int getPushPublishType()
```

createPushPublishSession

```
public IPushPublishSession createPushPublishSession()
```

getSrcStream

```
public IMediaStream getSrcStream()
```

setSrcStream

```
public void setSrcStream(IMediaStream srcStream)
```

getMap

```
public java.util.Map getMap()
```

getContextStr

```
public String getContextStr()
```

getConnectedState

```
public int getConnectedState()
```

getProfileUtil

```
public IPushPublishProfileUtil getProfileUtil()
```

getMessagesAttemptedCount

public long **getMessagesAttemptedCount**()

getMessagesRetriedCount

public long **getMessagesRetriedCount**()

getMessagesFailedCount

public long **getMessagesFailedCount**()

getDestinationID

public int **getDestinationID**()

updateUsageTracker

public void **updateUsageTracker**()

isParent

public boolean **isParent**()

isTargetedStream

public boolean **isTargetedStream**(String streamName)

handleParentStreamDisconnect

public boolean **handleParentStreamDisconnect**([IPushPublishSession](#) pushPublishSession, boolean isReset)

com.wowza.wms.pushpublish.model Interface IPushPublishCrossSession

All Known Implementing Classes:

[PushPublishHTTPPlaylistMap](#)

public interface **IPushPublishCrossSession**
extends

Method Summary

boolean	isSessionValid()
---------	----------------------------------

Methods

isSessionValid

public boolean **isSessionValid()**

com.wowza.wms.pushpublish.model Interface IPushPublishHTTPGroupMember

All Known Implementing Classes:

[PushPublishHTTPSanJoseAkamaiHandler](#), [PushPublishHTTPCupertino](#)

public interface **IPushPublishHTTPGroupMember**
extends

Method Summary

Boolean	adaptiveGroupPlaylistNeedsUpdating (long lastUpdateTime, java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups)
void	addAdaptiveGroupName (String adaptiveGroupName)
java.util.List	getAdaptiveGroupNames ()
String	getGroupPlaylistRenditionDescription ()
WMSProperties	getPlaylistProperties ()
Boolean	isGroupReady (java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups)
boolean	isInAdaptiveGroup ()
boolean	isInRedundancyPair ()
boolean	isLogDebugManifest ()
boolean	isSendToBackupServer ()
void	sendGroupPlaylist (String groupName, ManifestModel manifest)

Methods

sendGroupPlaylist

```
public void sendGroupPlaylist(String groupName,
    ManifestModel manifest)
```

getGroupPlaylistRenditionDescription

```
public String getGroupPlaylistRenditionDescription()
```

(continued from last page)

isInAdaptiveGroup

```
public boolean isInAdaptiveGroup()
```

adaptiveGroupPlaylistNeedsUpdating

```
public Boolean adaptiveGroupPlaylistNeedsUpdating(long lastUpdateTime,  
    java.util.List groupingsByRedundantPairs,  
    java.util.List groupingsByAbrGroups)
```

isGroupReady

```
public Boolean isGroupReady(java.util.List groupingsByRedundantPairs,  
    java.util.List groupingsByAbrGroups)
```

addAdaptiveGroupName

```
public void addAdaptiveGroupName(String adaptiveGroupName)
```

getAdaptiveGroupNames

```
public java.util.List getAdaptiveGroupNames()
```

getPlaylistProperties

```
public WMSProperties getPlaylistProperties()
```

isInRedundancyPair

```
public boolean isInRedundancyPair()
```

isSendToBackupServer

```
public boolean isSendToBackupServer()
```

isLogDebugManifest

```
public boolean isLogDebugManifest()
```

com.wowza.wms.pushpublish.model Interface IPushPublishHTTPOutputBuilder

All Known Implementing Classes:

[PushPublishHTTPSanJoseAkamaiHandler](#), [PushPublishHTTPCupertino](#)

public interface **IPushPublishHTTPOutputBuilder**
extends

Field Summary

public static final	PUSHER_ERROR_LIVEPACKETIZER_NOT_CONFIGURED Value: 1
---------------------	---

Method Summary

PushPublishHTTPOutputItem	createOutputItem (ILiveStreamPacketizer liveStreamPacketizer, int lastChunkIndex)
void	error (int errorCode)
IApplicationInstance	getAppInstance ()
int	getChunkDurationTarget (ILiveStreamPacketizer liveStreamPacketizer)
String	getDstStreamName ()
int	getLastChunkId (ILiveStreamPacketizer liveStreamPacketizer)
String	getLiveStreamPacketizerName ()
Object	getPacketizerLock (ILiveStreamPacketizer liveStreamPacketizer)
String	getSrcStreamName ()
boolean	isDebugLog ()
boolean	outputClose ()
boolean	outputOpen ()
void	outputSend (PushPublishHTTPOutputItem outputItem, int maxItemsInDir)
void	resetNewPacketizer (ILiveStreamPacketizer liveStreamPacketizer)

(continued from last page)

Fields

PUSHER_ERROR_LIVEPACKETIZER_NOT_CONFIGURED

```
public static final int PUSHER_ERROR_LIVEPACKETIZER_NOT_CONFIGURED
```

Constant value: **1**

Methods

getAppInstance

```
public IApplicationInstance getAppInstance()
```

isDebugLog

```
public boolean isDebugLog()
```

getSrcStreamName

```
public String getSrcStreamName()
```

getDstStreamName

```
public String getDstStreamName()
```

getLiveStreamPacketizerName

```
public String getLiveStreamPacketizerName()
```

getPacketizerLock

```
public Object getPacketizerLock(ILiveStreamPacketizer liveStreamPacketizer)
```

getLastChunkId

```
public int getLastChunkId(ILiveStreamPacketizer liveStreamPacketizer)
```

getChunkDurationTarget

```
public int getChunkDurationTarget(ILiveStreamPacketizer liveStreamPacketizer)
```

(continued from last page)

resetNewPacketizer

```
public void resetNewPacketizer(ILiveStreamPacketizer liveStreamPacketizer)
```

createOutputItem

```
public PushPublishHTTPOutputItem createOutputItem(ILiveStreamPacketizer  
liveStreamPacketizer,  
int lastChunkIndex)
```

outputOpen

```
public boolean outputOpen()
```

outputClose

```
public boolean outputClose()
```

outputSend

```
public void outputSend(PushPublishHTTPOutputItem outputItem,  
int maxItemsInDir)
```

error

```
public void error(int errorCode)
```

com.wowza.wms.pushpublish.model Interface IPushPublishProfileUtil

All Known Implementing Classes:

[PushPublishHTTPSanJoseAkamaiHandler](#), [PushPublishHTTPCupertinoUtil](#)

public interface **IPushPublishProfileUtil**

extends

The Interface IPushPublishProfileUtil

Field Summary

public static final	PROPERTY_LOG_DEBUG_MANIFEST Value: logDebugManifest
---------------------	---

Method Summary

ManifestModel	createGroupPlaylist (String id, java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups, IApplicationInstance appInstance, String context, WMSProperties properties) Allows creation of a group playlist.
boolean	isParent (java.util.Map entry) Is this a parent profile?
boolean	isTargetedStream (java.util.Map entry, String streamName) Is this a stream targeted by this entry?
void	onDeleteEntry (java.util.Map entry) Allows processing of a map file entry prior to being deleted.
void	onReadEntry (java.util.Map entry) Allows modification of a map file entry after prior to being returned through a Push Publishing api.
void	onWriteEntry (java.util.Map oldEntry, java.util.Map newEntry) Allows modification of a map file entry prior to being written to the map file.
void	setApplicationName (String appName) Set the application name associated with this Util class
void	setVHost (IVHost vhost) Set the VHost associated with this Util class
boolean	validateEntry (java.util.Map entry) Allows validation of a map file entry.

Fields

(continued from last page)

PROPERTY_LOG_DEBUG_MANIFEST

```
public static final java.lang.String PROPERTY_LOG_DEBUG_MANIFEST
```

Constant value: **logDebugManifest**

Methods

setVHost

```
public void setVHost(IVHost vhost)
```

Set the VHost associated with this Util class

Parameters:

vhost

setApplicationName

```
public void setApplicationName(String appName)
```

Set the application name associated with this Util class

Parameters:

appName

onWriteEntry

```
public void onWriteEntry(java.util.Map oldEntry,  
java.util.Map newEntry)
```

Allows modification of a map file entry prior to being written to the map file.

Parameters:

oldEntry - the old version of the entry (null for new entries)

newEntry - the new version of the entry to be written

onReadEntry

```
public void onReadEntry(java.util.Map entry)
```

Allows modification of a map file entry after prior to being returned through a Push Publishing api.

Parameters:

entry - the map file entry as read from disk

onDeleteEntry

```
public void onDeleteEntry(java.util.Map entry)
```

Allows processing of a map file entry prior to being deleted.

Parameters:

entry - the map file entry as read from disk

(continued from last page)

validateEntry

```
public boolean validateEntry(java.util.Map entry)
```

Allows validation of a map file entry.

Parameters:

entry - the map file entry as read from disk

Returns:

true if entry is valid

isParent

```
public boolean isParent(java.util.Map entry)
```

Is this a parent profile?

Parameters:

entry - the map file entry as read from disk

Returns:

true if entry is a parent profile, false if child profile or standalone

isTargetedStream

```
public boolean isTargetedStream(java.util.Map entry,  
String streamName)
```

Is this a stream targeted by this entry?

Parameters:

entry - the map file entry as read from disk
streamName - the name of the stream

Returns:

true if this is a stream targeted by this entry

createGroupPlaylist

```
public ManifestModel createGroupPlaylist(String id,  
java.util.List groupingsByRedundantPairs,  
java.util.List groupingsByAbrGroups,  
IApplicationInstance appInstance,  
String context,  
WMSProperties properties)
```

Allows creation of a group playlist. (This is a placeholder for future features)

Parameters:

id - the id
groupingsByRedundantPairs - the renditions grouped by redundant pairs
groupingsByAbrGroups - the renditions grouped by redundant ABR group
properties - the properties

Returns:

the manifest model

com.wowza.wms.pushpublish.model Interface IPushPublishSession

All Known Implementing Classes:
[PushPublishSessionBase](#)

public interface **IPushPublishSession**
 extends

The Interface IPushPublishSession.

Field Summary

public static final	PUSHPUBLISHSESSION_TYPE_RTMP Value: 1
public static final	PUSHPUBLISHSESSION_TYPE_RTP Value: 2
public static final	PUSHPUBLISHSESSION_TYPE_UNKNOWN Value: 0

Method Summary

String	getContextStr()
int	getDestinationID()
String	getProfile()
IPushPublish	getPushPublishImpl()
IMediaStream	getStream()
int	getType()
void	setProfile (String profile)
void	setPushPublishImpl (IPushPublish pushPublishImpl)
void	setStream (IMediaStream stream)

Fields

(continued from last page)

PUSHPUBLISHSESSION_TYPE_UNKNOWN

```
public static final int PUSHPUBLISHSESSION_TYPE_UNKNOWN
```

Constant value: **0**

PUSHPUBLISHSESSION_TYPE_RTMP

```
public static final int PUSHPUBLISHSESSION_TYPE_RTMP
```

Constant value: **1**

PUSHPUBLISHSESSION_TYPE_RTP

```
public static final int PUSHPUBLISHSESSION_TYPE_RTP
```

Constant value: **2**

Methods

getType

```
public int getType()
```

getPushPublishImpl

```
public IPushPublish getPushPublishImpl()
```

setPushPublishImpl

```
public void setPushPublishImpl(IPushPublish pushPublishImpl)
```

getStream

```
public IMediaStream getStream()
```

setStream

```
public void setStream(IMediaStream stream)
```

getProfile

```
public String getProfile()
```

setProfile

```
public void setProfile(String profile)
```

getContextStr

```
public String getContextStr()
```

getDestinationID

```
public int getDestinationID()
```

com.wowza.wms.pushpublish.model Interface IPushPublishSessionNotify

All Known Implementing Classes:

[PushPublishSessionNotifyBase](#)

public interface **IPushPublishSessionNotify**

extends

Method Summary

void	onPushPublishSessionCreate (String streamName, IMediaStream stream, IPushPublishSession pushPublishSession) Invoked when push publish session is created
void	onPushPublishSessionDestroy (String streamName, IMediaStream stream, IPushPublishSession pushPublishSession) Invoked when push publish session is destroyed

Methods

onPushPublishSessionCreate

```
public void onPushPublishSessionCreate(String streamName,  
    IMediaStream stream,  
    IPushPublishSession pushPublishSession)
```

Invoked when push publish session is created

Parameters:

streamName - stream name
stream - stream
pushPublishSession - push publish session

onPushPublishSessionDestroy

```
public void onPushPublishSessionDestroy(String streamName,  
    IMediaStream stream,  
    IPushPublishSession pushPublishSession)
```

Invoked when push publish session is destroyed

Parameters:

streamName - stream name
stream - stream
pushPublishSession - push publish session

com.wowza.wms.pushpublish.model Class PushPublishBase

java.lang.Object

└-com.wowza.wms.pushpublish.model.PushPublishBase

All Implemented Interfaces:

[IPushPublish](#)

Direct Known Subclasses:

[PushPublishShoutcast](#), [PushPublishRTP](#), [PushPublishRTMP](#), [PushPublishHTTPBase](#)

public abstract class **PushPublishBase**

extends Object

implements [IPushPublish](#)

The Class PushPublishBase.

Field Summary	
protected	appInstance The app instance within-which the module is running.
protected	className
public static final	DESTINATION_BAK Value: 1
public static final	DESTINATION_PRI Value: 0
public static final	DESTINATION_RED Value: 2
protected	destinationName Name of the target destination; e.g.
protected	destinationServer Destination server for Stream Target destinations; can be primary, backup, or redundant.
protected	dstStreamName The destination stream name.
protected	entryName The map file entry name.
protected	hostname The destination host.
protected	inetAddr The destination inet address.

protected	isAdaptiveStreaming The is adaptive streaming.
protected	isExternalRedundancy Stream Target has a redundant stream being pushed by another WSE instance
protected	logger
protected	mImplementation The profile implementation.
protected	myMap
protected	password The password.
protected	port The destination port.
protected	profile The map file entry profile.
protected	properties The properties.
protected	pushPublishSession
protected	pushPublishStreamDebug Enables stream debug.
protected	pushPublishType The type of stream to be published.
protected	reconnectWaitTime The time between reconnect attempts (only applies to some profiles).
protected	srcStream
protected	srcStreamName The src stream name.
protected	totalIOPerformance2Last
protected	totalIOPerformanceLast
protected	userName The user name.

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishBase() Instantiates a new push publisher base.
--------	--

Method Summary

void	add(IOPerformanceCounter totalValue)
void	addIOPerformance2(IOPerformanceCounter totalIOPerformanceResult)
IPushPublishSession	createPushPublishSession()
IApplicationInstance	getAppInstance() Get appInstance interface.
double	getBandwidth()
abstract String	getContextStr()
int	getDestinationID() Get destination ID.
String	getDestinationName() Get destination name.
int	getDestinationServer() Get destination server.
String	getDstStreamName() Get destination stream name.
String	getEntryName() Get map file entry name.
String	getHostname() Get destination server host name.
String	getImplementation() Gets the implementation.
java.net.InetAddress	getInetAddr()
java.util.Map	getMap()
long	getMessagesOutBytes()
long	getMessagesOutCount()
String	getPassword() Get password.
int	getPort() Get destination server port.
String	getProfile() Get entry profile.

WMSProperties	getProperties() Get properties.
int	getPushPublishType()
static String	getPushPublishVersionStr() Deprecated. Gets the push publish version str.
int	getReconnectWaitTime() Get the reconnect wait time (milliseconds).
IMediaStream	getSrcStream() Get source IMediaStream.
String	getSrcStreamName() Get source stream name.
String	getUserName() Gets the user name.
static String	getWowzaStreamingEngineVersionStr() Gets the server version str.
boolean	handleParentStreamDisconnect(IPushPublishSession pushPublishSession, boolean isReset)
void	incrementMessagesOut(long bytes)
void	init(IApplicationInstance appInstance, String streamName, IMediaStream stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean streamDebug) Inits the instance.
boolean	isAdaptiveStreaming() Checks if is adaptive streaming.
boolean	isDebugLog()
boolean	isExternalRedundancy() Is there an redundant stream being pushed by an external WSE instance? return true or false
boolean	isParent()
boolean	isTargetedStream(String streamName)
void	load(java.util.HashMap dataMap) Loads map and profile parameters
void	logDebug(String methodName, String log)
void	logError(String methodName, String log)
void	logError(String methodName, String log, Throwable e)
void	logError(String methodName, Throwable e)

void	logInfo (String methodName, String log)
void	logWarn (String methodName, String log)
void	setAdaptiveStreaming (boolean isAdaptiveStreaming) Sets the adaptive streaming.
void	setAdaptiveStreaming (String adaptiveStreamingStr)
void	setAppInstance (IApplicationInstance appInstance) Set appInstance interface.
void	setDebugLog (boolean debugLog) Set debug logging.
void	setDestinationName (String destinationName) Set destination name.
void	setDestinationServer (int destinationServer) Set destination server.
void	setDestinationServer (String destinationServer) Set destination server.
void	setDstStreamName (String dstStreamName) Set destination stream name.
void	setEntryName (String entryName) Set map file entry name.
void	setExternalRedundancy (boolean isExternalRedundancy) Set whether there is an external redundant stream.
void	setExternalRedundancy (String externalRedundancy)
void	setHost (String hostname) Set destination server host name.
void	setHostname (String hostname)
void	setImplementation (String implementation) Sets the implementation.
void	setInetAddr (java.net.InetAddress inetAddr)
void	setPassword (String password) Set password.
void	setPort (int port) Set destination server port.
void	setPort (String port) Set destination server port.
void	setProfile (String profile) Set map file entry profile.

void	setReconnectWaitTime (int reconnectWaitTime) Set the reconnect wait time (milliseconds).
void	setSrcStream (IMediaStream srcStream) Sets the source IMediaStream.
void	setSrcStreamName (String srcStreamName) Set source stream name.
void	setStreamName (String streamName) Sets the stream name.
void	setUserName (String userName) Set user name.
void	updateUsageTracker ()

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProfileUtil](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [handleParentStreamDisconnect](#), [init](#), [isParent](#), [isTargetedStream](#), [resetConnection](#), [setDebugLog](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Fields

logger

protected `com.wowza.wms.logging.WMSLogger` **logger**

className

protected `java.lang.String` **className**

pushPublishType

protected `int` **pushPublishType**

The type of stream to be published.

(continued from last page)

pushPublishStreamDebug

protected boolean **pushPublishStreamDebug**

Enables stream debug.

reconnectWaitTime

protected int **reconnectWaitTime**

The time between reconnect attempts (only applies to some profiles).

totalIOPerformanceLast

protected com.wowza.util.IOPerformanceCounter **totalIOPerformanceLast**

totalIOPerformance2Last

protected com.wowza.util.IOPerformanceCounter **totalIOPerformance2Last**

properties

protected com.wowza.wms.application.WMSProperties **properties**

The properties.

profile

protected java.lang.String **profile**

The map file entry profile.

entryName

protected java.lang.String **entryName**

The map file entry name.

isAdaptiveStreaming

protected boolean **isAdaptiveStreaming**

The is adaptive streaming.

userName

protected java.lang.String **userName**

The user name.

password

protected java.lang.String **password**

(continued from last page)

The password.

appInstance

protected com.wowza.wms.application.IApplicationInstance **appInstance**

The app instance within-which the module is running.

srcStreamName

protected java.lang.String **srcStreamName**

The src stream name.

srcStream

protected com.wowza.wms.stream.IMediaStream **srcStream**

dstStreamName

protected java.lang.String **dstStreamName**

The destination stream name.

hostname

protected java.lang.String **hostname**

The destination host.

inetAddr

protected java.net.InetAddress **inetAddr**

The destination inet address.

port

protected int **port**

The destination port.

mImplementation

protected java.lang.String **mImplementation**

The profile implementation.

DESTINATION_PRI

public static final int **DESTINATION_PRI**

Constant value: **0**

(continued from last page)

DESTINATION_BAK

```
public static final int DESTINATION_BAK
```

Constant value: **1**

DESTINATION_RED

```
public static final int DESTINATION_RED
```

Constant value: **2**

destinationServer

```
protected int destinationServer
```

Destination server for Stream Target destinations; can be primary, backup, or redundant.

isExternalRedundancy

```
protected boolean isExternalRedundancy
```

Stream Target has a redundant stream being pushed by another WSE instance

destinationName

```
protected java.lang.String destinationName
```

Name of the target destination; e.g. "wowzastreamingcloud", "akamai", "rtmp" (generic).

pushPublishSession

```
protected com.wowza.wms.pushpublish.model.IPushPublishSession pushPublishSession
```

myMap

```
protected java.util.Map myMap
```

Constructors

PushPublishBase

```
public PushPublishBase()
```

Instantiates a new push publisher base.

Methods

(continued from last page)

init

```
public void init(IApplicationInstance appInstance,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean streamDebug)
```

Initializes the instance.

Parameters:

appInstance - the app instance
streamName - the source stream name
maps - the map entry params
profileData - the profile params
streamDebug - stream debug flag

updateUsageTracker

```
public void updateUsageTracker()
```

getImplementation

```
public String getImplementation()
```

Gets the implementation.

Returns:

the implementation

setImplementation

```
public void setImplementation(String implementation)
```

Sets the implementation.

Parameters:

implementation - the new implementation

getProperties

```
public WMSProperties getProperties()
```

Get properties.

Returns:

properties

getProfile

```
public String getProfile()
```

Get entry profile.

Returns:

(continued from last page)

map entry profile

setProfile

```
public void setProfile(String profile)
```

Set map file entry profile.

Parameters:

profile - map entry profile

getEntryName

```
public String getEntryName()
```

Get map file entry name.

Returns:

map file entry name

setEntryName

```
public void setEntryName(String entryName)
```

Set map file entry name.

Parameters:

entryName - map file entry name

isAdaptiveStreaming

```
public boolean isAdaptiveStreaming()
```

Checks if is adaptive streaming.

Returns:

true, if is adaptive streaming

setAdaptiveStreaming

```
public void setAdaptiveStreaming(boolean isAdaptiveStreaming)
```

Sets the adaptive streaming.

Parameters:

isAdaptiveStreaming - the new adaptive streaming

setAdaptiveStreaming

```
public void setAdaptiveStreaming(String adaptiveStreamingStr)
```

getUserName

```
public String getUserName()
```

Gets the user name.

(continued from last page)

Returns:

the user name

setUserName

```
public void setUserName(String userName)
```

Set user name.

Parameters:

userName - user name

getPassword

```
public String getPassword()
```

Get password.

Returns:

password

setPassword

```
public void setPassword(String password)
```

Set password.

Parameters:

password - password

getAppInstance

```
public IApplicationInstance getAppInstance()
```

Get appInstance interface.

Returns:

appInstance interface

setAppInstance

```
public void setAppInstance(IApplicationInstance appInstance)
```

Set appInstance interface.

Parameters:

appInstance - appInstance interface

getSrcStreamName

```
public String getSrcStreamName()
```

Get source stream name.

Returns:

source stream name

setSrcStreamName

```
public void setSrcStreamName(String srcStreamName)
```

Set source stream name.

Parameters:

srcStreamName - source stream name

getDstStreamName

```
public String getDstStreamName()
```

Get destination stream name.

Returns:

destination stream name

setDstStreamName

```
public void setDstStreamName(String dstStreamName)
```

Set destination stream name.

Parameters:

dstStreamName - destination stream name

setStreamName

```
public void setStreamName(String streamName)
```

Sets the stream name.

Parameters:

streamName - the new stream name

getHostname

```
public String getHostname()
```

Get destination server host name.

Returns:

destination server host name

setHost

```
public void setHost(String hostname)
```

Set destination server host name.

Parameters:

hostname - destination server host name

setHostname

```
public void setHostname(String hostname)
```

(continued from last page)

getPort

```
public int getPort()
```

Get destination server port.

Returns:

destination server port

setPort

```
public void setPort(int port)
```

Set destination server port.

Parameters:

port - destination server port

setPort

```
public void setPort(String port)
```

Set destination server port.

Parameters:

port - destination server port

setDestinationServer

```
public void setDestinationServer(String destinationServer)
```

Set destination server.

Parameters:

destinationServer - destination server

getDestinationServer

```
public int getDestinationServer()
```

Get destination server. return destination server

setDestinationServer

```
public void setDestinationServer(int destinationServer)
```

Set destination server.

Parameters:

destinationServer - destination server

isExternalRedundancy

```
public boolean isExternalRedundancy()
```

Is there an redundant stream being pushed by an external WSE instance? return true or false

setExternalRedundancy

```
public void setExternalRedundancy(boolean isExternalRedundancy)
```

Set whether there is an external redundant stream.

Parameters:

isExternalRedundancy

setExternalRedundancy

```
public void setExternalRedundancy(String externalRedundancy)
```

getDestinationName

```
public String getDestinationName()
```

Get destination name.

Returns:

destination name

setDestinationName

```
public void setDestinationName(String destinationName)
```

Set destination name.

Parameters:

destinationName - destination name

isParent

```
public boolean isParent()
```

isTargetedStream

```
public boolean isTargetedStream(String streamName)
```

handleParentStreamDisconnect

```
public boolean handleParentStreamDisconnect(IPushPublishSession pushPublishSession,  
boolean isReset)
```

getPushPublishVersionStr

```
public static String getPushPublishVersionStr()
```

Deprecated. Gets the push publish version str.

(continued from last page)

Returns:

the push publish version str

getWowzaStreamingEngineVersionStr

```
public static String getWowzaStreamingEngineVersionStr()
```

Gets the server version str.

Returns:

the server version str

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

Parameters:

dataMap - the data map

getReconnectWaitTime

```
public int getReconnectWaitTime()
```

Get the reconnect wait time (milliseconds). Shortest time between connection attempts.

Returns:

reconnect wait time (milliseconds)

setReconnectWaitTime

```
public void setReconnectWaitTime(int reconnectWaitTime)
```

Set the reconnect wait time (milliseconds). Shortest time between connection attempts.

Parameters:

reconnectWaitTime - reconnect wait time (milliseconds)

getBandwidth

```
public double getBandwidth()
```

getInetAddr

```
public java.net.InetAddress getInetAddr()
```

Returns:

the inetAddr

(continued from last page)

setInetAddr

```
public void setInetAddr(java.net.InetAddress inetAddr)
```

Parameters:

inetAddr - the inetAddr to set

getPushPublishType

```
public int getPushPublishType()
```

createPushPublishSession

```
public IPushPublishSession createPushPublishSession()
```

getSrcStream

```
public IMediaStream getSrcStream()
```

Get source IMediaStream.

Returns:

source IMediaStream

setSrcStream

```
public void setSrcStream(IMediaStream srcStream)
```

Sets the source IMediaStream.

Parameters:

srcStream - the source IMediaStream

getMap

```
public java.util.Map getMap()
```

incrementMessagesOut

```
public void incrementMessagesOut(long bytes)
```

getMessagesOutBytes

```
public long getMessagesOutBytes()
```

(continued from last page)

getMessagesOutCount

```
public long getMessagesOutCount()
```

add

```
public void add(IOPerformanceCounter totalValue)
```

addIOPerformance2

```
public void addIOPerformance2(IOPerformanceCounter totalIOPerformanceResult)
```

getDestinationID

```
public int getDestinationID()
```

Get destination ID. A return value of 0 means the destination ID cannot be determined.

Returns:

destination ID

getContextStr

```
public abstract String getContextStr()
```

isDebugLog

```
public boolean isDebugLog()
```

setDebugLog

```
public void setDebugLog(boolean debugLog)
```

Set debug logging.

Parameters:

debugLog - debug logging

logDebug

```
public void logDebug(String methodName,  
String log)
```

(continued from last page)

logInfo

```
public void logInfo(String methodName,  
                    String log)
```

logWarn

```
public void logWarn(String methodName,  
                    String log)
```

logError

```
public void logError(String methodName,  
                    String log)
```

logError

```
public void logError(String methodName,  
                    String log,  
                    Throwable e)
```

logError

```
public void logError(String methodName,  
                    Throwable e)
```

com.wowza.wms.pushpublish.model Class PushPublishCloudStorageProvider

java.lang.Object

└-com.wowza.wms.pushpublish.model.PushPublishCloudStorageProvider

```
public class PushPublishCloudStorageProvider
extends Object
```

Constructor Summary

public	PushPublishCloudStorageProvider (String name, String controllerClass)
--------	---

Method Summary

String	getControllerClass ()
String	getName ()
void	setControllerClass (String controllerClass)
void	setName (String name)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

PushPublishCloudStorageProvider

```
public PushPublishCloudStorageProvider(String name,
                                       String controllerClass)
```

Methods

getName

```
public String getName()
```

(continued from last page)

setName

```
public void setName(String name)
```

getControllerClass

```
public String getControllerClass()
```

setControllerClass

```
public void setControllerClass(String controllerClass)
```

com.wowza.wms.pushpublish.model Class PushPublishContext

java.lang.Object

└-com.wowza.wms.pushpublish.model.PushPublishContext

public class **PushPublishContext**
extends Object

Field Summary

public static final	CLASS
public static final	CLASSNAME Value: PushPublishContext

Constructor Summary

public	PushPublishContext (IVHost vhost)
--------	--

Method Summary

boolean	containsProfileData (String profileName)
void	doWatchdog ()
IPushPublishCrossSession	getCrossSession (String contextStr)
Object	getCrossSessionLock ()
java.util.Map	getProfileCloudStorageProviders (String profileName)
java.util.HashMap	getProfileData (String profileName)
void	putCrossSession (String contextStr, IPushPublishCrossSession crossSession)
void	putProfileData (String profileName, java.util.HashMap profileData)
IPushPublishCrossSession	removeCrossSession (String contextStr)
void	setProfileCloudStorageProviders (String profileName, java.util.Map cloudStorageProviders)

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Fields

CLASS

```
public static final java.lang.Class CLASS
```

CLASSNAME

```
public static final java.lang.String CLASSNAME
```

Constant value: **PushPublishContext**

Constructors

PushPublishContext

```
public PushPublishContext(IVHost vhost)
```

Methods

getProfileData

```
public java.util.HashMap getProfileData(String profileName)
```

putProfileData

```
public void putProfileData(String profileName,  
    java.util.HashMap profileData)
```

containsProfileData

```
public boolean containsProfileData(String profileName)
```

putCrossSession

```
public void putCrossSession(String contextStr,  
    IPushPublishCrossSession crossSession)
```

(continued from last page)

getCrossSession

```
public IPushPublishCrossSession getCrossSession(String contextStr)
```

removeCrossSession

```
public IPushPublishCrossSession removeCrossSession(String contextStr)
```

getProfileCloudStorageProviders

```
public java.util.Map getProfileCloudStorageProviders(String profileName)
```

setProfileCloudStorageProviders

```
public void setProfileCloudStorageProviders(String profileName,  
                                             java.util.Map cloudStorageProviders)
```

doWatchdog

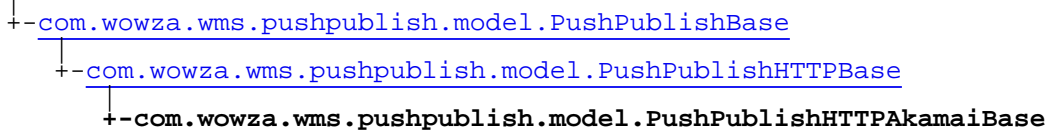
```
public void doWatchdog()
```

getCrossSessionLock

```
public Object getCrossSessionLock()
```

com.wowza.wms.pushpublish.model Class PushPublishHTTPAkamaiBase

java.lang.Object



All Implemented Interfaces:

[IPushPublish](#)

Direct Known Subclasses:

[PushPublishHTTPSanJoseAkamaiHandler](#)

public abstract class **PushPublishHTTPAkamaiBase**
extends [PushPublishHTTPBase](#)

Field Summary	
public static final	AKAMAI_DEFAULT_HOSTID Value: example-i
protected	akamaiEventName
protected	akamaiHostId
protected	akamaiProtocolName
protected	akamaiStreamId
public static final	CLASS
public static final	CLASSNAME Value: PushPublishHTTPAkamaiBase
protected	connectionTimeout
protected	fakePosts
protected	httpIngressDomainOverride
protected	httpIngressDomainSuffix
protected	httpPlaybackDomainOverride
protected	httpPlaybackDomainSuffix

protected	httpWriterDebug
protected	isPlaybackSSL
protected	isSendSSL
protected	maxRetries
protected	protocol
protected	queryParams
protected	readWriteTimeout
protected	resolvedHostname
protected	reuseSockets
protected	sendToBackupServer
protected	userAgent

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[httpLogManifests](#), [httpManifestDebug](#), [INDETERMINATE_PLAYLIST_COUNT](#), [MIN_PLAYLIST_COUNT](#), [playlistAcrossSessions](#), [playlistCountFromMap](#), [playlistCountFromPacketizer](#), [playlistCrossName](#), [playlistDurationFromMap](#), [playlistMap](#), [playlistName](#), [playlistTimeout](#), [relativePlaylists](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishHTTPAkamaiBase()
--------	---

Method Summary

String	getAkamaiEventName()
--------	--------------------------------------

String	getAkamaiHostId()
String	getAkamaiPlaybackDomain()
String	getAkamaiPlaybackURL()
String	getAkamaiStreamId()
int	getConnectionTimeout()
String	getDestinationAdaptiveGroupPath(String groupName)
String	getDestinationAdaptiveGroupURL(String groupName)
String	getDestinationDomain()
String	getDestinationPath()
int	getDestinationPort()
String	getDestinationURL()
int	getMaxRetries()
int	getReadWriteTimeout()
String	getResolvedAkamaiStreamId()
String	getUserAgent()
void	init(IApplicationInstance appInstance, String streamName, IMediaStream stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean streamDebug)
boolean	isDeleteSentChunks()
boolean	isFakePosts()
boolean	isHttpDebug()
boolean	isInRedundancyPair()
boolean	isReuseSockets()
boolean	isSendToBackupServer()
void	load(java.util.HashMap dataMap)

void	resetConnection()
String	resolveAkamaiStreamId (Boolean sendToBackup)
void	setAkamaiEventName (String akamaiEventName)
void	setAkamaiHostId (String akamaiHostId)
void	setAkamaiStreamId (String akamaiStreamId)
void	setConnectionTimeout (int connectionTimeout)
void	setDeleteSentChunks (boolean deleteSentChunks)
void	setFakePosts (boolean fakePosts)
void	setHttpWriterDebug (boolean httpWriterDebug)
void	setMaxRetries (int maxRetries)
void	setReadWriteTimeout (int readTimeout)
void	setReuseSockets (boolean reuseSockets)
void	setSendToBackupServer (boolean sendToBackupServer)
void	setUserAgent (String userAgent)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[addAdaptiveGroupName](#), [getAdaptiveGroupNames](#), [getPlaylistCount](#), [getPlaylistMap](#), [getPlaylistTimeout](#), [init](#), [isInAdaptiveGroup](#), [isLogDebugManifest](#), [isPlaylistAcrossSessions](#), [isRelativePlaylists](#), [load](#), [logDebugManifest](#), [setPlaylistAcrossSessions](#), [setPlaylistCountFromMap](#), [setPlaylistCountFromPacketizer](#), [setPlaylistTimeout](#), [setRelativePlaylists](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [handleParentStreamDisconnect](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugEnabled](#), [isExternalRedundancy](#), [isParent](#), [isTargetedStream](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugEnabled](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateUsageTracker](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface `com.wowza.wms.pushpublish.model.IPushPublish`

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProfileUtil](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [handleParentStreamDisconnect](#), [init](#), [isParent](#), [isTargetedStream](#), [resetConnection](#), [setDebugEnabled](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Fields

CLASS

`public static final java.lang.Class CLASS`

CLASSNAME

`public static final java.lang.String CLASSNAME`

Constant value: **PushPublishHTTPAkamaiBase**

AKAMAI_DEFAULT_HOSTID

`public static final java.lang.String AKAMAI_DEFAULT_HOSTID`

Constant value: **example-i**

httpIngressDomainSuffix

protected java.lang.String **httpIngressDomainSuffix**

httpPlaybackDomainSuffix

protected java.lang.String **httpPlaybackDomainSuffix**

akamaiProtocolName

protected java.lang.String **akamaiProtocolName**

resolvedHostname

protected java.lang.String **resolvedHostname**

httpIngressDomainOverride

protected java.lang.String **httpIngressDomainOverride**

httpPlaybackDomainOverride

protected java.lang.String **httpPlaybackDomainOverride**

maxRetries

protected int **maxRetries**

connectionTimeout

protected int **connectionTimeout**

readWriteTimeout

protected int **readWriteTimeout**

httpWriterDebug

protected boolean **httpWriterDebug**

(continued from last page)

protocol

protected java.lang.String **protocol**

akamaiStreamId

protected java.lang.String **akamaiStreamId**

akamaiEventName

protected java.lang.String **akamaiEventName**

sendToBackupServer

protected boolean **sendToBackupServer**

fakePosts

protected boolean **fakePosts**

reuseSockets

protected boolean **reuseSockets**

akamaiHostId

protected java.lang.String **akamaiHostId**

userAgent

protected java.lang.String **userAgent**

isSendSSL

protected boolean **isSendSSL**

(continued from last page)

isPlaybackSSL

protected boolean **isPlaybackSSL**

queryParams

protected java.lang.String **queryParams**

Constructors

PushPublishHTTPAkamaiBase

```
public PushPublishHTTPAkamaiBase()
```

Methods

init

```
public void init(IApplicationInstance appInstance,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean streamDebug)
```

Inits the instance.

getResolvedAkamaiStreamId

```
public String getResolvedAkamaiStreamId()
```

resolveAkamaiStreamId

```
public String resolveAkamaiStreamId(Boolean sendToBackup)
```

getDestinationDomain

```
public String getDestinationDomain()
```

isSendToBackupServer

```
public boolean isSendToBackupServer()
```

(continued from last page)

setSendToBackupServer

```
public void setSendToBackupServer(boolean sendToBackupServer)
```

isInRedundancyPair

```
public boolean isInRedundancyPair()
```

getAkamaiStreamId

```
public String getAkamaiStreamId()
```

setAkamaiStreamId

```
public void setAkamaiStreamId(String akamaiStreamId)
```

getAkamaiPlaybackDomain

```
public String getAkamaiPlaybackDomain()
```

getDestinationPath

```
public String getDestinationPath()
```

getDestinationURL

```
public String getDestinationURL()
```

getDestinationAdaptiveGroupPath

```
public String getDestinationAdaptiveGroupPath(String groupName)
```

getDestinationAdaptiveGroupURL

```
public String getDestinationAdaptiveGroupURL(String groupName)
```

getAkamaiPlaybackURL

```
public String getAkamaiPlaybackURL()
```

(continued from last page)

resetConnection

```
public void resetConnection()
```

getAkamaiHostId

```
public String getAkamaiHostId()
```

setAkamaiHostId

```
public void setAkamaiHostId(String akamaiHostId)
```

getAkamaiEventName

```
public String getAkamaiEventName()
```

setAkamaiEventName

```
public void setAkamaiEventName(String akamaiEventName)
```

isDeleteSentChunks

```
public boolean isDeleteSentChunks()
```

setDeleteSentChunks

```
public void setDeleteSentChunks(boolean deleteSentChunks)
```

isFakePosts

```
public boolean isFakePosts()
```

setFakePosts

```
public void setFakePosts(boolean fakePosts)
```

(continued from last page)

isReuseSockets

```
public boolean isReuseSockets()
```

setReuseSockets

```
public void setReuseSockets(boolean reuseSockets)
```

isHttpDebug

```
public boolean isHttpDebug()
```

setHttpWriterDebug

```
public void setHttpWriterDebug(boolean httpWriterDebug)
```

getConnectionTimeout

```
public int getConnectionTimeout()
```

setConnectionTimeout

```
public void setConnectionTimeout(int connectionTimeout)
```

getReadWriteTimeout

```
public int getReadWriteTimeout()
```

setReadWriteTimeout

```
public void setReadWriteTimeout(int readTimeout)
```

getMaxRetries

```
public int getMaxRetries()
```

setMaxRetries

```
public void setMaxRetries(int maxRetries)
```

(continued from last page)

getUserAgent

```
public String getUserAgent()
```

setUserAgent

```
public void setUserAgent(String userAgent)
```

getDestinationPort

```
public int getDestinationPort()
```

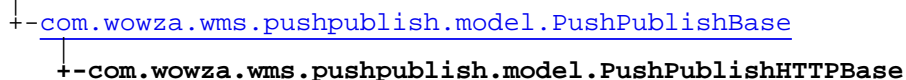
load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

com.wowza.wms.pushpublish.model Class PushPublishHTTPBase

java.lang.Object



All Implemented Interfaces:

[IPushPublish](#)

Direct Known Subclasses:

[PushPublishHTTPCupertino](#), [PushPublishHTTPYouTubeBase](#), [PushPublishHTTPAkamaiBase](#)

public abstract class **PushPublishHTTPBase**

extends [PushPublishBase](#)

Field Summary

protected	httpLogManifests Enables logging of the manifest itself.
protected	httpManifestDebug Enables manifest playlist debug logging.
protected static final	INDETERMINATE_PLAYLIST_COUNT Value: -1
protected static final	MIN_PLAYLIST_COUNT The minimum allowable playlist size. Value: 3
protected	playlistAcrossSessions Indicates whether instance-specific playlists should be maintained across source stream interruptions and app restarts.
protected	playlistCountFromMap The playlist size from the map entry.
protected	playlistCountFromPacketizer The playlist size used by the associated live stream packetizer.
protected	playlistCrossName The instance-specific name for the playlist, allowing the playlist to be maintained across session restarts.
protected	playlistDurationFromMap The playlist duration from the map entry.
protected	playlistMap The playlist map.
protected	playlistName The actual name of playlist file that is to be pushed to the destination (e.g.

protected	playlistTimeout The timeout value used to delete orphaned playlists from the vhost.
protected	relativePlaylists use only relative URL references in the playlist/manifest

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishHTTPBase()
--------	---------------------------------------

Method Summary

void	addAdaptiveGroupName(String adaptiveGroupName) Add a new adaptive group.
java.util.List	getAdaptiveGroupNames() Get the adaptive groups.
int	getPlaylistCount() Get the playlist count.
PushPublishHTTPPlaylistMap	getPlaylistMap() Get the playlist map.
int	getPlaylistTimeout() Get the playlist timeout value.
void	init(IApplicationInstance appInstance, String streamName, IMediaStream stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean streamDebug) Inits the instance.
boolean	isInAdaptiveGroup() Is the entry in an adaptive group.
boolean	isLogDebugManifest() Get the current setting of the HTTP Manifest debug logging This is controlled by the pushPublishHTTPPlaylistDebug boolean property in the application.xml and by the http.manifestDebug setting in the pushpublish map file
boolean	isPlaylistAcrossSessions() Is the playlist maintained across recurring pushpublish sessions.

boolean	isRelativePlaylists()
void	load (java.util.HashMap dataMap) Loads map and profile parameters
void	logDebugManifest (String methodName, String log) Log the provided log str if the HTTP Manifest logging is enabled
void	setPlaylistAcrossSessions (boolean playlistAcrossSessions) Set whether the playlist is maintained across recurring pushpublish sessions.
void	setPlaylistCountFromMap (int playlistCountFromMap) Set the playlist count value from the map file.
void	setPlaylistCountFromPacketizer (int playlistCountFromPacketizer) Set the playlist count value from the live stream packetizer.
void	setPlaylistTimeout (int playlistTimeout) Set the playlist timeout value.
void	setRelativePlaylists (boolean relativePlaylists)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [handleParentStreamDisconnect](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugLog](#), [isExternalRedundancy](#), [isParent](#), [isTargetedStream](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugLog](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateUsageTracker](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProfileUtil](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [handleParentStreamDisconnect](#), [init](#), [isParent](#), [isTargetedStream](#), [resetConnection](#), [setDebugLog](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Fields

MIN_PLAYLIST_COUNT

protected static final int **MIN_PLAYLIST_COUNT**

The minimum allowable playlist size.
Constant value: **3**

playlistCountFromPacketizer

protected int **playlistCountFromPacketizer**

The playlist size used by the associated live stream packetizer.

playlistMap

protected com.wowza.wms.pushpublish.model.PushPublishHTTPPlaylistMap **playlistMap**

The playlist map.

playlistCrossName

protected java.lang.String **playlistCrossName**

The instance-specific name for the playlist, allowing the playlist to be maintained across session restarts.

playlistName

protected java.lang.String **playlistName**

The actual name of playlist file that is to be pushed to the destination (e.g. "playlist.m3u8").

relativePlaylists

protected boolean **relativePlaylists**

use only relative URL references in the playlist/manifest

httpManifestDebug

protected boolean **httpManifestDebug**

Enables manifest playlist debug logging.

httpLogManifests

protected boolean **httpLogManifests**

Enables logging of the manifest itself.

INDETERMINATE_PLAYLIST_COUNT

protected static final int **INDETERMINATE_PLAYLIST_COUNT**

(continued from last page)

Constant value: **-1**

playlistCountFromMap

protected int **playlistCountFromMap**

The playlist size from the map entry.

playlistDurationFromMap

protected long **playlistDurationFromMap**

The playlist duration from the map entry. This value is in seconds. http.playlistDuration

playlistTimeout

protected int **playlistTimeout**

The timeout value used to delete orphaned playlists from the vhost.

playlistAcrossSessions

protected boolean **playlistAcrossSessions**

Indicates whether instance-specific playlists should be maintained across source stream interruptions and app restarts.

Constructors

PushPublishHTTPBase

public **PushPublishHTTPBase**()

Methods

init

```
public void init(IApplicationInstance appInstance,
    String streamName,
    IMediaStream stream,
    java.util.Map profileData,
    java.util.Map maps,
    com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,
    boolean streamDebug)
```

Inits the instance.

Parameters:

appInstance - the app instance
 streamName - the source stream name
 maps - the map entry params
 profileData - the profile params
 streamDebug - stream debug flag

setPlaylistCountFromMap

public void **setPlaylistCountFromMap**(int playlistCountFromMap)

(continued from last page)

Set the playlist count value from the map file.

Parameters:

playlistCountFromMap - the playlist count

setPlaylistCountFromPacketizer

```
public void setPlaylistCountFromPacketizer(int playlistCountFromPacketizer)
```

Set the playlist count value from the live stream packetizer.

Parameters:

playlistCountFromPacketizer - the playlist count

getPlaylistCount

```
public int getPlaylistCount()
```

Get the playlist count. The value from the map file is returned if defined, else the packetizer value is returned return the playlist count

getPlaylistTimeout

```
public int getPlaylistTimeout()
```

Get the playlist timeout value. return the playlist timeout value

setPlaylistTimeout

```
public void setPlaylistTimeout(int playlistTimeout)
```

Set the playlist timeout value.

Parameters:

playlistTimeout - the playlist timeout

isPlaylistAcrossSessions

```
public boolean isPlaylistAcrossSessions()
```

Is the playlist maintained across recurring pushpublish sessions. return true if the playlist is maintained across recurring pushpublish sessions

setPlaylistAcrossSessions

```
public void setPlaylistAcrossSessions(boolean playlistAcrossSessions)
```

Set whether the playlist is maintained across recurring pushpublish sessions.

Parameters:

playlistAcrossSessions - is the playlist maintained across recurring pushpublish sessions

getPlaylistMap

```
public PushPublishHTTPPlaylistMap getPlaylistMap()
```

Get the playlist map. return the playlist map

(continued from last page)

addAdaptiveGroupName

```
public void addAdaptiveGroupName(String adaptiveGroupName)
```

Add a new adaptive group.

Parameters:

adaptiveGroupName - adaptive group name

getAdaptiveGroupNames

```
public java.util.List getAdaptiveGroupNames()
```

Get the adaptive groups. return the adaptive groups

isRelativePlaylists

```
public boolean isRelativePlaylists()
```

setRelativePlaylists

```
public void setRelativePlaylists(boolean relativePlaylists)
```

isInAdaptiveGroup

```
public boolean isInAdaptiveGroup()
```

Is the entry in an adaptive group. return true if the entry is in an adaptive group

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

Parameters:

dataMap - the data map

isLogDebugManifest

```
public boolean isLogDebugManifest()
```

Get the current setting of the HTTP Manifest debug logging This is controlled by the pushPublishHTTPPlayListDebug boolean property in the application.xml and by the http.manifestDebug setting in the pushpublish map file

Returns:

true if HTTP Manifest debug logging is enabled

logDebugManifest

```
public void logDebugManifest(String methodName,  
String log)
```

Log the provided log str if the HTTP Manifest logging is enabled

(continued from last page)

Parameters:

methodName - name of the class method using the log

log - string to log if enabled

com.wowza.wms.pushpublish.model Class PushPublishHTTPOutputItem

java.lang.Object

└-com.wowza.wms.pushpublish.model.PushPublishHTTPOutputItem

Direct Known Subclasses:

[PushPublishHTTPCupertinoOutputItem](#)

```
public class PushPublishHTTPOutputItem
extends Object
```

Field Summary

public	chunkLists
public	chunks
public	liveStreamPacketizer
public	playlistStrA
public	playlistStrB

Constructor Summary

public	PushPublishHTTPOutputItem (String[] chunkLists)
--------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

playlistStrA

public java.lang.String **playlistStrA**

playlistStrB

public java.lang.String **playlistStrB**

(continued from last page)

chunkLists

```
public java.lang.String chunkLists
```

liveStreamPacketizer

```
public com.wowza.wms.stream.livepacketizer.ILiveStreamPacketizer liveStreamPacketizer
```

chunks

```
public java.util.List chunks
```

Constructors

PushPublishHTTPOutputItem

```
public PushPublishHTTPOutputItem(String[] chunkLists)
```

com.wowza.wms.pushpublish.model Class PushPublishHTTPOutputItemChunk

java.lang.Object

└-com.wowza.wms.pushpublish.model.PushPublishHTTPOutputItemChunk

Direct Known Subclasses:

[PushPublishHTTPSanJoseOutputItemChunk](#), [PushPublishHTTPCupertinoOutputItemChunk](#)

```
public class PushPublishHTTPOutputItemChunk
extends Object
```

Field Summary

public	chunk
public	isCustomChunkId
public	playlistEntry
public	renditionIndex

Constructor Summary

public	PushPublishHTTPOutputItemChunk (int renditionIndex, PushPublishHTTPPlaylistEntry playlistEntry)
--------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

renditionIndex

public int **renditionIndex**

chunk

public java.lang.Object **chunk**

(continued from last page)

isCustomChunkId

```
public boolean isCustomChunkId
```

playlistEntry

```
public com.wowza.wms.pushpublish.model.PushPublishHTTPPlaylistEntry playlistEntry
```

Constructors

PushPublishHTTPOutputItemChunk

```
public PushPublishHTTPOutputItemChunk(int renditionIndex,  
                                     PushPublishHTTPPlaylistEntry playlistEntry)
```


com.wowza.wms.pushpublish.model Class PushPublishHTTPPlaylistEntry

java.lang.Object

└-com.wowza.wms.pushpublish.model.PushPublishHTTPPlaylistEntry

Direct Known Subclasses:

[PushPublishHTTPSanJosePlaylistEntry](#), [PushPublishHTTPCupertinoPlaylistEntry](#)

public abstract class **PushPublishHTTPPlaylistEntry**
extends Object

Field Summary

public	delete
--------	------------------------

Constructor Summary

public	PushPublishHTTPPlaylistEntry()
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

delete

public boolean **delete**

Constructors

PushPublishHTTPPlaylistEntry

public **PushPublishHTTPPlaylistEntry**()

com.wowza.wms.pushpublish.model Class PushPublishHTTPPlaylistList

java.lang.Object

└-com.wowza.wms.pushpublish.model.PushPublishHTTPPlaylistList

```
public class PushPublishHTTPPlaylistList
extends Object
```

Field Summary

public	bitrate
public static final	CHUNKIDDATEOFFSET Value: 1404253012
public	entries
public	markEntryAsDiscontinuity
public	nextChunkId

Constructor Summary

public	PushPublishHTTPPlaylistList()
--------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

CHUNKIDDATEOFFSET

```
public static final long CHUNKIDDATEOFFSET
```

Constant value: **1404253012**

entries

```
public java.util.List entries
```

(continued from last page)

nextChunkId`public long nextChunkId`

markEntryAsDiscontinuity`public boolean markEntryAsDiscontinuity`

bitrate`public long bitrate`

Constructors

PushPublishHTTPPlaylistList`public PushPublishHTTPPlaylistList()`

com.wowza.wms.pushpublish.model Class PushPublishHTTPPlaylistMap

java.lang.Object

└-com.wowza.wms.pushpublish.model.PushPublishHTTPPlaylistMap

All Implemented Interfaces:

[IPushPublishCrossSession](#)

public class **PushPublishHTTPPlaylistMap**
extends Object
implements [IPushPublishCrossSession](#)

Field Summary

public	lastUpdate
public	manifest
public	manifestOld
public	map
public	playlistTimeout

Constructor Summary

public	PushPublishHTTPPlaylistMap (PushPublishHTTPBase builder)
--------	---

Method Summary

PushPublishHTTPBase	getBuilder ()
boolean	isSessionValid ()
void	markAllAsDiscontinuity ()
void	setBuilder (PushPublishHTTPBase builder)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishCrossSession](#)

[isSessionValid](#)

Fields

map

```
public java.util.Map map
```

manifest

```
public com.wowza.wms.manifest.model.ManifestModel manifest
```

manifestOld

```
public com.wowza.wms.manifest.model.ManifestModel manifestOld
```

lastUpdate

```
public long lastUpdate
```

playlistTimeout

```
public long playlistTimeout
```

Constructors

PushPublishHTTPPlaylistMap

```
public PushPublishHTTPPlaylistMap(PushPublishHTTPBase builder)
```

Methods

isSessionValid

```
public boolean isSessionValid()
```

getBuilder

```
public PushPublishHTTPBase getBuilder()
```

(continued from last page)

setBuilder

```
public void setBuilder(PushPublishHTTPBase builder)
```

markAllAsDiscontinuity

```
public void markAllAsDiscontinuity()
```

com.wowza.wms.pushpublish.model Class PushPublishHTTTPusher

java.lang.Object

└-com.wowza.wms.pushpublish.model.PushPublishHTTTPusher

```
public class PushPublishHTTTPusher
extends Object
```

Nested Class Summary

class	PushPublishHTTTPusher.HTTPPoller PushPublishHTTTPusher.HTTPPoller
-------	--

Field Summary

public static final	CLASS
public static final	CLASSNAME Value: PushPublishHTTTPusher

Constructor Summary

public	PushPublishHTTTPusher (IPushPublishHTTPOutputBuilder builder, String name)
public	PushPublishHTTTPusher (IPushPublishHTTPOutputBuilder builder, String name, int maxQueueSize)

Method Summary

void	addOutput (PushPublishHTTPOutputItem outputItem)
void	clearOutput ()
void	disconnect ()
String	getContextStr ()
ILiveStreamPacketizer	getLastPacketizer ()
void	resetNewPacketizer (IPushPublishHTTPOutputBuilder builder, ILiveStreamPacketizer liveStreamPacketizer)
void	startOutputRunner ()

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Fields

CLASS

```
public static final java.lang.Class CLASS
```

CLASSNAME

```
public static final java.lang.String CLASSNAME
```

Constant value: **PushPublishHTTPPusher**

Constructors

PushPublishHTTPPusher

```
public PushPublishHTTPPusher(IPushPublishHTTPOutputBuilder builder,  
String name)
```

PushPublishHTTPPusher

```
public PushPublishHTTPPusher(IPushPublishHTTPOutputBuilder builder,  
String name,  
int maxQueueSize)
```

Methods

getContextStr

```
public String getContextStr()
```

disconnect

```
public void disconnect()
```

getLastPacketizer

```
public ILiveStreamPacketizer getLastPacketizer()
```

resetNewPacketizer

```
public void resetNewPacketizer(IPushPublishHTTPOutputBuilder builder,  
    ILiveStreamPacketizer liveStreamPacketizer)
```

startOutputRunner

```
public void startOutputRunner()
```

clearOutput

```
public void clearOutput()
```

addOutput

```
public void addOutput(PushPublishHTTPOutputItem outputItem)
```

com.wowza.wms.pushpublish.model Class PushPublishHTTTPusher.HTTPPoller

java.lang.Object

└- java.lang.Thread

└- com.wowza.wms.pushpublish.model.PushPublishHTTTPusher.HTTPPoller

All Implemented Interfaces:

Runnable

```
public class PushPublishHTTTPusher.HTTPPoller
extends Thread
```

Field Summary

protected	didIt
protected	lastPacketizerLogTime
protected	lastUpdateTime
protected	packetizerLogInterval
protected	pollInterval
protected	sendPacketizerWarning

Fields inherited from class java.lang.Thread

MAX_PRIORITY, MIN_PRIORITY, NORM_PRIORITY

Constructor Summary

public	PushPublishHTTTPusher.HTTPPoller()
--------	--

Method Summary

void	run()
------	-----------------------

Methods inherited from class java.lang.Thread

activeCount, checkAccess, clone, countStackFrames, currentThread, destroy, dumpStack, enumerate, getAllStackTraces, getContextClassLoader, getDefaultUncaughtExceptionHandler, getId, getName, getPriority, getStackTrace, getState, getThreadGroup, getUncaughtExceptionHandler, holdsLock, interrupt, interrupted, isAlive, isDaemon, isInterrupted, join, join, join, resume, run, setContextClassLoader, setDaemon, setDefaultUncaughtExceptionHandler, setName, setPriority, setUncaughtExceptionHandler, sleep, sleep, start, stop, stop, suspend, toString, yield

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.lang.Runnable

run

Fields

lastUpdateTime

protected long **lastUpdateTime**

lastPacketizerLogTime

protected long **lastPacketizerLogTime**

didIt

protected boolean **didIt**

pollInterval

protected int **pollInterval**

packetizerLogInterval

protected int **packetizerLogInterval**

sendPacketizerWarning

protected int **sendPacketizerWarning**

Constructors

PushPublishHTTTPusher.HTTPPoller

```
public PushPublishHTTTPusher.HTTPPoller()
```

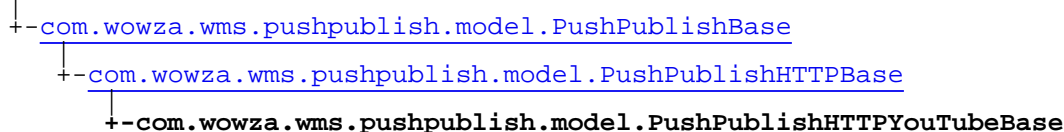
Methods

run

```
public void run()
```

com.wowza.wms.pushpublish.model Class PushPublishHTTPYouTubeBase

java.lang.Object



All Implemented Interfaces:

[IPushPublish](#)

public abstract class **PushPublishHTTPYouTubeBase**

extends [PushPublishHTTPBase](#)

Field Summary

public static final	CLASS
public static final	CLASSNAME Value: PushPublishHTTPYouTubeBase
protected	connectionTimeout
protected	fakePosts
protected	httpIngressDomainOverride
protected	httpIngressDomainSuffix
protected	httpPlaybackDomainOverride
protected	httpPlaybackDomainSuffix
protected	httpWriterDebug
protected	maxRetries
protected	protocol
protected	readWriteTimeout
protected	reuseSockets
protected	sendToBackupServer

protected	userAgent
public static final	YOUTUBE_DEFAULT_HOSTID Value: upload.youtube.com
protected	youtubeEventName
protected	youtubeHostId
protected	youtubePlaybackURLPrefix
protected	youtubeProtocolName
protected	youtubeStreamId

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[httpLogManifests](#), [httpManifestDebug](#), [INDETERMINATE_PLAYLIST_COUNT](#), [MIN_PLAYLIST_COUNT](#), [playlistAcrossSessions](#), [playlistCountFromMap](#), [playlistCountFromPacketizer](#), [playlistCrossName](#), [playlistDurationFromMap](#), [playlistMap](#), [playlistName](#), [playlistTimeout](#), [relativePlaylists](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishHTTPYouTubeBase()
--------	--

Method Summary

int	getConnectionTimeout()
String	getDestinationAdaptiveGroupPath(String groupName)
String	getDestinationAdaptiveGroupURL(String groupName)
String	getDestinationDomain()

String	getDestinationPath()
int	getDestinationPort()
String	getDestinationURL()
int	getMaxRetries()
int	getReadWriteTimeout()
String	getResolvedYouTubeStreamId()
String	getUserAgent()
String	getYouTubeEventName()
String	getYouTubeHostId()
String	getYouTubePlaybackAdaptiveGroupURL() (String groupName)
String	getYouTubePlaybackDomain()
String	getYouTubePlaybackURL()
String	getYouTubePlaybackURLPrefix()
String	getYouTubeStreamId()
void	init() (IApplicationInstance appInstance, String streamName, IMediaStream stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean streamDebug)
boolean	isDeleteSentChunks()
boolean	isDestinationSecure()
boolean	isFakePosts()
boolean	isHttpDebug()
boolean	isInRedundancyPair()
boolean	isReuseSockets()
boolean	isSendToBackupServer()
void	load() (java.util.HashMap dataMap)

void	resetConnection()
void	setConnectionTimeout(int connectionTimeout)
void	setDeleteSentChunks(boolean deleteSentChunks)
void	setFakePosts(boolean fakePosts)
void	setHttpWriterDebug(boolean httpWriterDebug)
void	setMaxRetries(int maxRetries)
void	setReadWriteTimeout(int readTimeout)
void	setReuseSockets(boolean reuseSockets)
void	setSendToBackupServer(boolean sendToBackupServer)
void	setUserAgent(String userAgent)
void	setYouTubeEventName(String youtubeEventName)
void	setYouTubeHostId(String youtubeHostId)
void	setYouTubePlaybackURLPrefix(String youtubePlaybackURLPrefix)
void	setYouTubeStreamId(String youtubeStreamId)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[addAdaptiveGroupName](#), [getAdaptiveGroupNames](#), [getPlaylistCount](#), [getPlaylistMap](#), [getPlaylistTimeout](#), [init](#), [isInAdaptiveGroup](#), [isLogDebugManifest](#), [isPlaylistAcrossSessions](#), [isRelativePlaylists](#), [load](#), [logDebugManifest](#), [setPlaylistAcrossSessions](#), [setPlaylistCountFromMap](#), [setPlaylistCountFromPacketizer](#), [setPlaylistTimeout](#), [setRelativePlaylists](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [handleParentStreamDisconnect](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugEnabled](#), [isExternalRedundancy](#), [isParent](#), [isTargetedStream](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugEnabled](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateUsageTracker](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface `com.wowza.wms.pushpublish.model.IPushPublish`

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProfileUtil](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [handleParentStreamDisconnect](#), [init](#), [isParent](#), [isTargetedStream](#), [resetConnection](#), [setDebugEnabled](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Fields

CLASS

public static final `java.lang.Class` **CLASS**

CLASSNAME

public static final `java.lang.String` **CLASSNAME**

Constant value: **PushPublishHTTPYouTubeBase**

YOUTUBE_DEFAULT_HOSTID

public static final `java.lang.String` **YOUTUBE_DEFAULT_HOSTID**

Constant value: **upload.youtube.com**

httpIngressDomainSuffix

protected java.lang.String **httpIngressDomainSuffix**

httpPlaybackDomainSuffix

protected java.lang.String **httpPlaybackDomainSuffix**

youtubePlaybackURLPrefix

protected java.lang.String **youtubePlaybackURLPrefix**

youtubeProtocolName

protected java.lang.String **youtubeProtocolName**

httpIngressDomainOverride

protected java.lang.String **httpIngressDomainOverride**

httpPlaybackDomainOverride

protected java.lang.String **httpPlaybackDomainOverride**

maxRetries

protected int **maxRetries**

connectionTimeout

protected int **connectionTimeout**

readWriteTimeout

protected int **readWriteTimeout**

httpWriterDebug

protected boolean **httpWriterDebug**

(continued from last page)

protocol`protected java.lang.String protocol`

youtubeStreamId`protected java.lang.String youtubeStreamId`

youtubeEventName`protected java.lang.String youtubeEventName`

sendToBackupServer`protected boolean sendToBackupServer`

fakePosts`protected boolean fakePosts`

reuseSockets`protected boolean reuseSockets`

youtubeHostId`protected java.lang.String youtubeHostId`

userAgent`protected java.lang.String userAgent`

Constructors

PushPublishHTTPYouTubeBase`public PushPublishHTTPYouTubeBase()`

Methods

init

```
public void init(IApplicationInstance appInstance,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean streamDebug)
```

Inits the instance.

getResolvedYouTubeStreamId

```
protected String getResolvedYouTubeStreamId()
```

getDestinationDomain

```
public String getDestinationDomain()
```

isSendToBackupServer

```
public boolean isSendToBackupServer()
```

setSendToBackupServer

```
public void setSendToBackupServer(boolean sendToBackupServer)
```

isInRedundancyPair

```
public boolean isInRedundancyPair()
```

getYouTubeStreamId

```
public String getYouTubeStreamId()
```

setYouTubeStreamId

```
public void setYouTubeStreamId(String youtubeStreamId)
```

(continued from last page)

getYouTubePlaybackDomain

```
public String getYouTubePlaybackDomain()
```

getDestinationPath

```
public String getDestinationPath()
```

getDestinationURL

```
public String getDestinationURL()
```

getDestinationAdaptiveGroupPath

```
public String getDestinationAdaptiveGroupPath(String groupName)
```

getDestinationAdaptiveGroupURL

```
public String getDestinationAdaptiveGroupURL(String groupName)
```

getYouTubePlaybackAdaptiveGroupURL

```
public String getYouTubePlaybackAdaptiveGroupURL(String groupName)
```

getYouTubePlaybackURL

```
public String getYouTubePlaybackURL()
```

resetConnection

```
public void resetConnection()
```

getYouTubeHostId

```
public String getYouTubeHostId()
```

setYouTubeHostId

```
public void setYouTubeHostId(String youtubeHostId)
```

(continued from last page)

getYouTubeEventName

```
public String getYouTubeEventName()
```

setYouTubeEventName

```
public void setYouTubeEventName(String youtubeEventName)
```

isDeleteSentChunks

```
public boolean isDeleteSentChunks()
```

setDeleteSentChunks

```
public void setDeleteSentChunks(boolean deleteSentChunks)
```

getYouTubePlaybackURLPrefix

```
public String getYouTubePlaybackURLPrefix()
```

setYouTubePlaybackURLPrefix

```
public void setYouTubePlaybackURLPrefix(String youtubePlaybackURLPrefix)
```

isFakePosts

```
public boolean isFakePosts()
```

setFakePosts

```
public void setFakePosts(boolean fakePosts)
```

isReuseSockets

```
public boolean isReuseSockets()
```

(continued from last page)

setReuseSockets

```
public void setReuseSockets(boolean reuseSockets)
```

isHttpDebug

```
public boolean isHttpDebug()
```

setHttpWriterDebug

```
public void setHttpWriterDebug(boolean httpWriterDebug)
```

getConnectionTimeout

```
public int getConnectionTimeout()
```

setConnectionTimeout

```
public void setConnectionTimeout(int connectionTimeout)
```

getReadWriteTimeout

```
public int getReadWriteTimeout()
```

setReadWriteTimeout

```
public void setReadWriteTimeout(int readTimeout)
```

getMaxRetries

```
public int getMaxRetries()
```

setMaxRetries

```
public void setMaxRetries(int maxRetries)
```

getUserAgent

```
public String getUserAgent()
```

(continued from last page)

setUserAgent

```
public void setUserAgent(String userAgent)
```

getDestinationPort

```
public int getDestinationPort()
```

isDestinationSecure

```
public boolean isDestinationSecure()
```

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

com.wowza.wms.pushpublish.model Class PushPublishSessionBase

java.lang.Object

└-com.wowza.wms.pushpublish.model.PushPublishSessionBase

All Implemented Interfaces:

[IPushPublishSession](#)

Direct Known Subclasses:

[PushPublishSessionRTP](#), [PushPublishSessionRTMP](#), [PushPublishSessionHTTPBase](#)

public class **PushPublishSessionBase**

extends Object

implements [IPushPublishSession](#)

Field Summary

protected	profile
protected	pushPublishImpl
protected	stream
protected	type

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishSession](#)

[PUSHPUBLISHSESSION_TYPE_RTMP](#), [PUSHPUBLISHSESSION_TYPE_RTP](#),
[PUSHPUBLISHSESSION_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishSessionBase()
--------	--

Method Summary

String	getContextStr()
int	getDestinationID()
String	getProfile()
IPublish	getPushPublishImpl()
IMediaStream	getStream()

int	getType()
void	setProfile (String profile)
void	setPushPublishImpl (IPushPublish pushPublishImpl)
void	setStream (IMediaStream stream)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishSession](#)

[getContextStr](#), [getDestinationID](#), [getProfile](#), [getPushPublishImpl](#), [getStream](#), [getType](#), [setProfile](#), [setPushPublishImpl](#), [setStream](#)

Fields

type

protected int **type**

pushPublishImpl

protected com.wowza.wms.pushpublish.model.IPushPublish **pushPublishImpl**

stream

protected com.wowza.wms.stream.IMediaStream **stream**

profile

protected java.lang.String **profile**

Constructors

PushPublishSessionBase

public **PushPublishSessionBase**()

Methods

(continued from last page)

getType

```
public int getType()
```

getPushPublishImpl

```
public IPushPublish getPushPublishImpl()
```

setPushPublishImpl

```
public void setPushPublishImpl(IPushPublish pushPublishImpl)
```

getStream

```
public IMediaStream getStream()
```

setStream

```
public void setStream(IMediaStream stream)
```

getProfile

```
public String getProfile()
```

setProfile

```
public void setProfile(String profile)
```

getContextStr

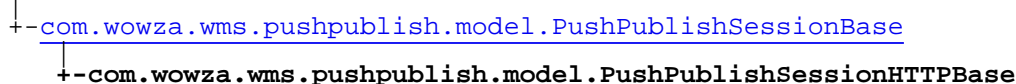
```
public String getContextStr()
```

getDestinationID

```
public int getDestinationID()
```

com.wowza.wms.pushpublish.model Class PushPublishSessionHTTPBase

java.lang.Object



All Implemented Interfaces:
[IPushPublishSession](#)

public abstract class **PushPublishSessionHTTPBase**
extends [PushPublishSessionBase](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishSessionBase](#)

[profile](#), [pushPublishImpl](#), [stream](#), [type](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishSession](#)

[PUSHPUBLISHSESSION_TYPE_RTMP](#), [PUSHPUBLISHSESSION_TYPE_RTP](#),
[PUSHPUBLISHSESSION_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishSessionHTTPBase()
--------	--

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishSessionBase](#)

[getContextStr](#), [getDestinationID](#), [getProfile](#), [getPushPublishImpl](#), [getStream](#), [getType](#),
[setProfile](#), [setPushPublishImpl](#), [setStream](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishSession](#)

[getContextStr](#), [getDestinationID](#), [getProfile](#), [getPushPublishImpl](#), [getStream](#), [getType](#),
[setProfile](#), [setPushPublishImpl](#), [setStream](#)

Constructors

PushPublishSessionHTTPBase

public **PushPublishSessionHTTPBase**()

com.wowza.wms.pushpublish.model Class PushPublishSessionNotifyBase

java.lang.Object

└-com.wowza.wms.pushpublish.model.PushPublishSessionNotifyBase

All Implemented Interfaces:

[IPushPublishSessionNotify](#)

public abstract class **PushPublishSessionNotifyBase**
extends Object
implements [IPushPublishSessionNotify](#)

Abstract base class for [IPushPublishSessionNotify](#) interface

See Also:

[ApplicationInstance.addPushPublishSessionListener\(IPushPublishSessionNotify\)](#)

Constructor Summary

public	PushPublishSessionNotifyBase()
--------	--

Method Summary

void	onPushPublishSessionCreate (String streamName, IMediaStream stream, IPushPublishSession pushPublishSession)
void	onPushPublishSessionDestroy (String streamName, IMediaStream stream, IPushPublishSession pushPublishSession)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishSessionNotify](#)

[onPushPublishSessionCreate](#), [onPushPublishSessionDestroy](#)

Constructors

PushPublishSessionNotifyBase

public **PushPublishSessionNotifyBase**()

Methods

(continued from last page)

onPushPublishSessionCreate

```
public void onPushPublishSessionCreate(String streamName,  
    IMediaStream stream,  
    IPushPublishSession pushPublishSession)
```

onPushPublishSessionDestroy

```
public void onPushPublishSessionDestroy(String streamName,  
    IMediaStream stream,  
    IPushPublishSession pushPublishSession)
```

com.wowza.wms.pushpublish.model Class PushPublishUsageTracker

java.lang.Object

└-com.wowza.wms.pushpublish.model.PushPublishUsageTracker

public class **PushPublishUsageTracker**
extends Object

Constructor Summary

public	PushPublishUsageTracker()
--------	---

Method Summary

long	getAndClearDestinationIDCount()
------	---

void	incDestinationIDCount(int destinationID)
------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

PushPublishUsageTracker

public **PushPublishUsageTracker**()

Methods

incDestinationIDCount

public void **incDestinationIDCount**(int destinationID)

getAndClearDestinationIDCount

public long **getAndClearDestinationIDCount**()

Package

com.wowza.wms.pushpublish.protocol.cupertino

com.wowza.wms.pushpublish.protocol.cupertino Interface IPushPublishHTTTCupertino

All Known Implementing Classes:

[PushPublishHTTTCupertino](#)

public interface **IPushPublishHTTTCupertino**
extends

Method Summary

int	deleteMediaSegment (MediaSegmentModel mediaSegment) Deletes the media (chunk) at the destination URI.
String	getDestionationLogData () JSON formatted string containing information unique to the instance.
boolean	isSendToBackupServer () Is this implementation sending to a backup server
boolean	outputClose () Close the destination (if needed).
boolean	outputOpen () Open the destination (if needed) in preparation of having one or more items (playlists/media segments) pushed to it
int	sendGroupMasterPlaylist (String groupName, PlaylistModel playlist) Sends a group master playlist to the destination.
int	sendMasterPlaylist (PlaylistModel playlist) Sends the master playlist to the destination.
int	sendMediaPlaylist (PlaylistModel playlist) Sends the media playlist to the destination.
int	sendMediaSegment (MediaSegmentModel mediaSegment) Sends the media (chunk) to the destination; media provided as a fragment list.
void	setSendToBackupServer (boolean backup) Setup to send to a backup destination
boolean	updateGroupMasterPlaylistPlaybackURI (String groupName, PlaylistModel masterPlaylist) Get the group master playlist URI for the given group master playlist file that a player would use to consume the content from the CDN Example: "http://myHost.com/myPath/myGroup/playlist.m3u8"
boolean	updateMasterPlaylistPlaybackURI (PlaylistModel playlist) update the master playlist URI for the provided playlist model that a player would use to consume the content from the CDN Example: "http://myHost.com/myPath/myStream/playlist.m3u8" where "playlist.m3u8" is the value given for masterPlaylistFilename

boolean	updateMediaPlaylistPlaybackURI(PlaylistModel playlist) update/set the media playlist (chunklist) URI for the provided media playlist file that a player would use to consume the content from the CDN Example: "http://myHost.com/myPath/myStream/chunklist.m3u8" where "chunklist.m3u8" is the value given for mediaPlaylistFilename
boolean	updateMediaSegmentPlaybackURI(MediaSegmentModel mediaSegment) set the media URI for the given media (chunk) file that a player would use to consume the content from the CDN Example: "http://myHost.com/myPath/myStream/media_1.ts" where "media_1.ts" is the value given for mediaFilename

Methods

updateMasterPlaylistPlaybackURI

```
public boolean updateMasterPlaylistPlaybackURI(PlaylistModel playlist)
```

update the master playlist URI for the provided playlist model that a player would use to consume the content from the CDN Example: "http://myHost.com/myPath/myStream/playlist.m3u8" where "playlist.m3u8" is the value given for masterPlaylistFilename

Parameters:

playlist - the master playlist model to update the URI in

Returns:

true if the URI was updated

sendMasterPlaylist

```
public int sendMasterPlaylist(PlaylistModel playlist)
```

Sends the master playlist to the destination.

Parameters:

playlist - the master playlist model

Returns:

number of bytes sent to output (less than zero implies the implementation does not support, 0 is a failure, > 0 is success)

updateMediaPlaylistPlaybackURI

```
public boolean updateMediaPlaylistPlaybackURI(PlaylistModel playlist)
```

update/set the media playlist (chunklist) URI for the provided media playlist file that a player would use to consume the content from the CDN Example: "http://myHost.com/myPath/myStream/chunklist.m3u8" where "chunklist.m3u8" is the value given for mediaPlaylistFilename

Parameters:

playlist - to update the uri in

Returns:

true if the playlist uri was updated

sendMediaPlaylist

```
public int sendMediaPlaylist(PlaylistModel playlist)
```

(continued from last page)

Sends the media playlist to the destination.

Parameters:

`playlist` - the media playlist model

Returns:

number of bytes sent to output (less than zero implies the implementation does not support, 0 is a failure, > 0 is success)

updateMediaSegmentPlaybackURI

```
public boolean updateMediaSegmentPlaybackURI(MediaSegmentModel mediaSegment)
```

set the media URI for the given media (chunk) file that a player would use to consume the content from the CDN Example: "http://myHost.com/myPath/myStream/media_1.ts" where "media_1.ts" is the value given for `mediaFilename`

Parameters:

`mediaSegment` - to update the uri of

Returns:

true if the uri was updated

sendMediaSegment

```
public int sendMediaSegment(MediaSegmentModel mediaSegment)
```

Sends the media (chunk) to the destination; media provided as a fragment list.

Parameters:

`mediaSegment` - the media file in fragment list form

Returns:

number of bytes sent to output (less than zero implies the implementation does not support, 0 is a failure, > 0 is success)

deleteMediaSegment

```
public int deleteMediaSegment(MediaSegmentModel mediaSegment)
```

Deletes the media (chunk) at the destination URI. Default implementation assumes the URI uses the HTTP schema and deletes the media using the WSE HTTPByteWriter. Implementations not using the HTTP schema or not wanting to use the default HTTPByteWriter should override the default method.

Parameters:

`mediaSegment` - the media destination URI

Returns:

number of bytes sent if successful (less than zero implies the implementation does not support, 0 is a failure, > 0 is success)

updateGroupMasterPlaylistPlaybackURI

```
public boolean updateGroupMasterPlaylistPlaybackURI(String groupName,  
PlaylistModel masterPlaylist)
```

Get the group master playlist URI for the given group master playlist file that a player would use to consume the content from the CDN Example: "http://myHost.com/myPath/myGroup/playlist.m3u8"

Parameters:

`groupName` - group name

`masterPlaylist` - master group playlist

(continued from last page)

Returns:

true if the uri was updated

sendGroupMasterPlaylist

```
public int sendGroupMasterPlaylist(String groupName,  
    PlaylistModel playlist)
```

Sends a group master playlist to the destination.

Parameters:

groupName - the group name
playlist - the group master playlist model

Returns:

number of bytes sent to output

setSendToBackupServer

```
public void setSendToBackupServer(boolean backup)
```

Setup to send to a backup destination

isSendToBackupServer

```
public boolean isSendToBackupServer()
```

Is this implementation sending to a backup server

Returns:

true if sending to a backup server

outputOpen

```
public boolean outputOpen()
```

Open the destination (if needed) in preparation of having one or more items (playlists/media segments) pushed to it

Returns:

true if the destination was opened

outputClose

```
public boolean outputClose()
```

Close the destination (if needed). All items (playlist/media segments) have been pushed to bring the destination up to date with the current state

Returns:

true if the destination was closed

getDestinationLogData

```
public String getDestinationLogData()
```

JSON formatted string containing information unique to the instance. This information is added to the log entry when starting and stopping the push publish session.

Returns:

(continued from last page)

string in JSON format (including outer braces)

com.wowza.wms.pushpublish.protocol.cupertino Class MediaSegmentModelTracker

java.lang.Object

└-com.wowza.wms.pushpublish.protocol.cupertino.MediaSegmentModelTracker

```
public class MediaSegmentModelTracker
extends Object
```

Field Summary

protected	delete
protected	lock
protected	programDateTime
protected	segmentIndex
protected	segmentSize
protected	sent

Constructor Summary

public	MediaSegmentModelTracker()
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

lock

protected java.lang.Object **lock**

delete

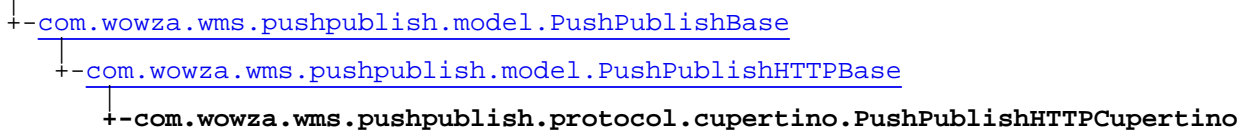
protected boolean **delete**

(continued from last page)

sentprotected boolean **sent****segmentIndex**protected long **segmentIndex****segmentSize**protected long **segmentSize****programDateTime**protected java.lang.String **programDateTime****Constructors****MediaSegmentModelTracker**public **MediaSegmentModelTracker()**

com.wowza.wms.pushpublish.protocol.cupertino Class PushPublishHTTPCupertino

java.lang.Object



All Implemented Interfaces:

[IPushPublishHTTPOutputBuilder](#), [IPushPublishHTTTPGroupMember](#), [IPushPublishHTTPCupertino](#), [IPushPublish](#)

Direct Known Subclasses:

[PushPublishHTTPCupertinoGoogleHandler](#), [PushPublishHTTPCupertinoAkamaiHandler](#)

public abstract class **PushPublishHTTPCupertino**

extends [PushPublishHTTPTBase](#)

implements [IPushPublish](#), [IPushPublishHTTPCupertino](#), [IPushPublishHTTTPGroupMember](#), [IPushPublishHTTPOutputBuilder](#)

Field Summary	
protected	addEndListOnDisconnect
public static final	CHUNKLISTNAME_AUDIOONLY Value: chunklist_ao.m3u8
public static final	CHUNKLISTNAME_AUDIOVIDEO Value: chunklist.m3u8
public static final	CHUNKLISTNAME_KEYFRAMEONLY Value: chunklist_ko.m3u8
public static final	CHUNKLISTNAME_VIDEOONLY Value: chunklist_vo.m3u8
public static final	CHUNKLISTNAMES
protected	keepMediaSegmentDataAfterSending
public static final	LIVESTREAMPACKETIZER_NAME Value: cupertinostreamingpacketizer
public static final	PLAYLISTNAME Value: playlist.m3u8

public static final	RENDITION_AUDIOONLY Value: 2
public static final	RENDITION_AUDIOVIDEO Value: 1
public static final	RENDITION_KEYFRAMEONLY Value: 8
public static final	RENDITION_VIDEOONLY Value: 4
public static final	RENDITIONINDEX_AUDIOONLY Value: 1
public static final	RENDITIONINDEX_AUDIOVIDEO Value: 0
public static final	RENDITIONINDEX_COUNT Value: 4
public static final	RENDITIONINDEX_KEYFRAMEONLY Value: 3
public static final	RENDITIONINDEX_VIDEOONLY Value: 2

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[httpLogManifests](#), [httpManifestDebug](#), [INDETERMINATE_PLAYLIST_COUNT](#), [MIN_PLAYLIST_COUNT](#), [playlistAcrossSessions](#), [playlistCountFromMap](#), [playlistCountFromPacketizer](#), [playlistCrossName](#), [playlistDurationFromMap](#), [playlistMap](#), [playlistName](#), [playlistTimeout](#), [relativePlaylists](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPOutputBuilder](#)

[PUSHER_ERROR_LIVEPACKETIZER_NOT_CONFIGURED](#)

Constructor Summary

public	PushPublishHTTTCupertino()
--------	--

Method Summary

Boolean	adaptiveGroupPlaylistNeedsUpdating (long lastUpdateTime, java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups)
void	addTagToPlaylist (PlaylistModel playlist, int idx, TagModel tag) Adds the provided TagModel to the list of TagModels at the idx for the provided Playlist Model
void	addTagToPlaylist (PlaylistModel playlist, TagModel tag) Adds the provided TagModel to the end of the list of TagModels for the provided Playlist Model
void	connect ()
PlaylistModel	createMasterPlaylist () Creates a master playlist and propagates the context string from this implementation to the returned playlist model
PlaylistModel	createMediaPlaylist (int renditionIdx) Creates a empty media playlist and propagates the context from this implementation to the returned playlist
MediaSegmentModel	createMediaSegmentModel () Creates an empty media segment model and propagates the context from the implementation to the returned media segment model
PushPublishHTTPOutputItem	createOutputItem (ILiveStreamPacketizer liveStreamPacketizer, int lastChunkIndex)
TagModel	createTag (Class clazz) Create a TagModel of the provided TagModel
void	disconnect ()
void	disconnect (boolean hard)
void	error (int errorCode)
int	getChunkDurationTarget (ILiveStreamPacketizer liveStreamPacketizer)
int	getConnectedState ()
String	getContextStr ()
abstract String	getDestinationLogData () Get a JSON formatted string of data that represents the destination to include with the connect/disconnect logging
String	getGroupPlaylistRenditionDescription ()

int	getLastChunkId(ILiveStreamPacketizer liveStreamPacketizer)
String	getLiveStreamPacketizerName()
String	getMediaPlaylistPlaybackURL(int rendition)
long	getMessagesAttemptedCount()
long	getMessagesFailedCount()
long	getMessagesRetriedCount()
Object	getPacketizerLock(ILiveStreamPacketizer liveStreamPacketizer)
int	getPlaylistCount()
WMSProperties	getPlaylistProperties()
IPushPublishProfileUtil	getProfileUtil()
String	getRandomSessionStr() Gets a random session string that lives for the life time of the currently published stream.
String	getRenditionsStr()
void	init(IApplicationInstance appInstance, String streamName, IMediaStream stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean streamDebug)
Boolean	isGroupReady(java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups)
boolean	isInRedundancyPair()
void	load(java.util.HashMap dataMap)
void	outputSend(PushPublishHTTPOutputItem outputItem, int maxItemsInDir)
String	printPlaylist(PlaylistModel playlist) Will print the provided playlist to a String.
void	resetConnection()
void	resetNewPacketizer(ILiveStreamPacketizer liveStreamPacketizer)
void	sendGroupPlaylist(String groupName, ManifestModel manifest)
void	setRenditionsStr(String renditionsStr)

String

[writeTagToString\(TagModel tag\)](#)

Writes the tag contents out to a string in UTF-8 encoding to a String

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[addAdaptiveGroupName](#), [getAdaptiveGroupNames](#), [getPlaylistCount](#), [getPlaylistMap](#), [getPlaylistTimeout](#), [init](#), [isInAdaptiveGroup](#), [isLogDebugManifest](#), [isPlaylistAcrossSessions](#), [isRelativePlaylists](#), [load](#), [logDebugManifest](#), [setPlaylistAcrossSessions](#), [setPlaylistCountFromMap](#), [setPlaylistCountFromPacketizer](#), [setPlaylistTimeout](#), [setRelativePlaylists](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [handleParentStreamDisconnect](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugLog](#), [isExternalRedundancy](#), [isParent](#), [isTargetedStream](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugLog](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateUsageTracker](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProfileUtil](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [handleParentStreamDisconnect](#), [init](#), [isParent](#), [isTargetedStream](#), [resetConnection](#), [setDebugLog](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Methods inherited from interface[com.wowza.wms.pushpublish.protocol.cupertino.IPushPublishHTTPCupertino](#)

[deleteMediaSegment](#), [getDestinationLogData](#), [isSendToBackupServer](#), [outputClose](#), [outputOpen](#), [sendGroupMasterPlaylist](#), [sendMasterPlaylist](#), [sendMediaPlaylist](#), [sendMediaSegment](#), [setSendToBackupServer](#), [updateGroupMasterPlaylistPlaybackURI](#), [updateMasterPlaylistPlaybackURI](#), [updateMediaPlaylistPlaybackURI](#), [updateMediaSegmentPlaybackURI](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPGroupMember](#)

[adaptiveGroupPlaylistNeedsUpdating](#), [addAdaptiveGroupName](#), [getAdaptiveGroupNames](#), [getGroupPlaylistRenditionDescription](#), [getPlaylistProperties](#), [isGroupReady](#), [isInAdaptiveGroup](#), [isInRedundancyPair](#), [isLogDebugManifest](#), [isSendToBackupServer](#), [sendGroupPlaylist](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPOutputBuilder](#)

[createOutputItem](#), [error](#), [getAppInstance](#), [getChunkDurationTarget](#), [getDstStreamName](#), [getLastChunkId](#), [getLiveStreamPacketizerName](#), [getPacketizerLock](#), [getSrcStreamName](#), [isDebugLog](#), [outputClose](#), [outputOpen](#), [outputSend](#), [resetNewPacketizer](#)

Fields

LIVESTREAMPACKETIZER_NAME

```
public static final java.lang.String LIVESTREAMPACKETIZER_NAME
```

Constant value: **cupertinostreamingpacketizer**

PLAYLISTNAME

```
public static final java.lang.String PLAYLISTNAME
```

Constant value: **playlist.m3u8**

CHUNKLISTNAME_AUDIOVIDEO

```
public static final java.lang.String CHUNKLISTNAME_AUDIOVIDEO
```

Constant value: **chunklist.m3u8**

CHUNKLISTNAME_AUDIOONLY

```
public static final java.lang.String CHUNKLISTNAME_AUDIOONLY
```

Constant value: **chunklist_ao.m3u8**

CHUNKLISTNAME_VIDEOONLY

```
public static final java.lang.String CHUNKLISTNAME_VIDEOONLY
```

Constant value: **chunklist_vo.m3u8**

CHUNKLISTNAME_KEYFRAMEONLY

```
public static final java.lang.String CHUNKLISTNAME_KEYFRAMEONLY
```

Constant value: **chunklist_ko.m3u8**

(continued from last page)

CHUNKLISTNAMES

```
public static final java.lang.String CHUNKLISTNAMES
```

RENDITIONINDEX_AUDIOVIDEO

```
public static final int RENDITIONINDEX_AUDIOVIDEO
```

Constant value: **0**

RENDITIONINDEX_AUDIOONLY

```
public static final int RENDITIONINDEX_AUDIOONLY
```

Constant value: **1**

RENDITIONINDEX_VIDEOONLY

```
public static final int RENDITIONINDEX_VIDEOONLY
```

Constant value: **2**

RENDITIONINDEX_KEYFRAMEONLY

```
public static final int RENDITIONINDEX_KEYFRAMEONLY
```

Constant value: **3**

RENDITIONINDEX_COUNT

```
public static final int RENDITIONINDEX_COUNT
```

Constant value: **4**

RENDITION_AUDIOVIDEO

```
public static final int RENDITION_AUDIOVIDEO
```

Constant value: **1**

RENDITION_AUDIOONLY

```
public static final int RENDITION_AUDIOONLY
```

Constant value: **2**

RENDITION_VIDEOONLY

```
public static final int RENDITION_VIDEOONLY
```

(continued from last page)

Constant value: **4**

RENDITION_KEYFRAMEONLY

```
public static final int RENDITION_KEYFRAMEONLY
```

Constant value: **8**

addEndListOnDisconnect

```
protected boolean addEndListOnDisconnect
```

keepMediaSegmentDataAfterSending

```
protected boolean keepMediaSegmentDataAfterSending
```

Constructors

PushPublishHTTPCupertino

```
public PushPublishHTTPCupertino()
```

Methods

init

```
public void init(IApplicationInstance appInstance,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean streamDebug)
```

Inits the instance.

getPlaylistCount

```
public int getPlaylistCount()
```

Get the playlist count. The value from the map file is returned if defined, else the packetizer value is returned return the playlist count

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

(continued from last page)

createOutputItem

```
public final PushPublishHTTPOutputItem createOutputItem(ILiveStreamPacketizer
liveStreamPacketizer,
    int lastChunkIndex)
```

outputSend

```
public final void outputSend(PushPublishHTTPOutputItem outputItem,
    int maxItemsInDir)
```

getContextStr

```
public String getContextStr()
```

resetNewPacketizer

```
public void resetNewPacketizer(ILiveStreamPacketizer liveStreamPacketizer)
```

error

```
public void error(int errorCode)
```

isInRedundancyPair

```
public boolean isInRedundancyPair()
```

sendGroupPlaylist

```
public void sendGroupPlaylist(String groupName,
    ManifestModel manifest)
```

getGroupPlaylistRenditionDescription

```
public String getGroupPlaylistRenditionDescription()
```

isGroupReady

```
public Boolean isGroupReady(java.util.List groupingsByRedundantPairs,
    java.util.List groupingsByAbrGroups)
```

adaptiveGroupPlaylistNeedsUpdating

```
public Boolean adaptiveGroupPlaylistNeedsUpdating(long lastUpdateTime,  
    java.util.List groupingsByRedundantPairs,  
    java.util.List groupingsByAbrGroups)
```

getPlaylistProperties

```
public WMSProperties getPlaylistProperties()
```

getRenditionsStr

```
public String getRenditionsStr()
```

setRenditionsStr

```
public void setRenditionsStr(String renditionsStr)
```

getLiveStreamPacketizerName

```
public String getLiveStreamPacketizerName()
```

getPacketizerLock

```
public Object getPacketizerLock(ILiveStreamPacketizer liveStreamPacketizer)
```

getLastChunkId

```
public int getLastChunkId(ILiveStreamPacketizer liveStreamPacketizer)
```

getChunkDurationTarget

```
public int getChunkDurationTarget(ILiveStreamPacketizer liveStreamPacketizer)
```

connect

```
public void connect()
```

(continued from last page)

disconnect

```
public void disconnect()
```

disconnect

```
public void disconnect(boolean hard)
```

getMessagesAttemptedCount

```
public long getMessagesAttemptedCount()
```

getMessagesRetriedCount

```
public long getMessagesRetriedCount()
```

getMessagesFailedCount

```
public long getMessagesFailedCount()
```

resetConnection

```
public void resetConnection()
```

getConnectedState

```
public int getConnectedState()
```

getProfileUtil

```
public IPushPublishProfileUtil getProfileUtil()
```

getRandomSessionStr

```
public String getRandomSessionStr()
```

Gets a random session string that lives for the life time of the currently published stream. If the stream times out or drops for one reason or another, this will return a new session string.

Returns:

String containing a unique string to the incoming stream

getDestinationLogData

```
public abstract String getDestinationLogData()
```

Get a JSON formatted string of data that represents the destination to include with the connect/disconnect logging

Returns:

JSON formatted string representation

printPlaylist

```
public String printPlaylist(PlaylistModel playlist)
```

Will print the provided playlist to a String. Intended as a debug tool

Parameters:

playlist - to print to a String

Returns:

String containing the text based representation of the playlist (not UTF-8 encoded)

createTag

```
protected TagModel createTag(Class clazz)
```

Create a TagModel of the provided TagModel

Parameters:

clazz - Class of the TagModel to create

Returns:

a new instance of the TagModel requested

addTagToPlaylist

```
protected void addTagToPlaylist(PlaylistModel playlist,  
    TagModel tag)
```

Adds the provided TagModel to the end of the list of TagModels for the provided Playlist Model

Parameters:

playlist - to add the TagModel to

tag - to add to the playlist

addTagToPlaylist

```
protected void addTagToPlaylist(PlaylistModel playlist,  
    int idx,  
    TagModel tag)
```

Adds the provided TagModel to the list of TagModels at the idx for the provided Playlist Model

Parameters:

playlist - to add the TagModel to

idx - index where to insert the TagModel at

tag - Model to insert into the list of TagModels

(continued from last page)

createMasterPlaylist

```
protected PlaylistModel createMasterPlaylist()
```

Creates a master playlist and propagates the context string from this implementation to the returned playlist model

Returns:

a new master playlist

createMediaPlaylist

```
protected PlaylistModel createMediaPlaylist(int renditionIdx)
```

Creates a empty media playlist and propagates the context from this implementation to the returned playlist

Returns:

a new media playlist

createMediaSegmentModel

```
protected MediaSegmentModel createMediaSegmentModel()
```

Creates an empty media segment model and propagates the context from the implementation to the returned media segment model

Returns:

media segment model

writeTagToString

```
protected String writeTagToString(TagModel tag)
```

Writes the tag contents out to a string in UTF-8 encoding to a String

Parameters:

tag - to be encoded

Returns:

String containing the tag contents for use in a playlist

getMediaPlaylistPlaybackURL

```
public String getMediaPlaylistPlaybackURL(int rendition)
```

com.wowza.wms.pushpublish.protocol.cupertino Class PushPublishHTTPCupertinoAkamaiHandler

java.lang.Object

+-- [com.wowza.wms.pushpublish.model.PushPublishBase](#)

+-- [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

+-- [com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertino](#)

+-- **com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertinoAkamaiHandler**

All Implemented Interfaces:

[IPushPublish](#), [IPushPublishHTTPOutputBuilder](#), [IPushPublishHTTPGroupMember](#), [IPushPublishHTTPCupertino](#)

```
public class PushPublishHTTPCupertinoAkamaiHandler
```

```
extends PushPublishHTTPCupertino
```

Field Summary

protected	resolvedHostname
-----------	----------------------------------

Fields inherited from class [com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertino](#)

[addEndListOnDisconnect](#), [CHUNKLISTNAME_AUDIOONLY](#), [CHUNKLISTNAME_AUDIOVIDEO](#), [CHUNKLISTNAME_KEYFRAMEONLY](#), [CHUNKLISTNAME_VIDEOONLY](#), [CHUNKLISTNAMES](#), [keepMediaSegmentDataAfterSending](#), [LIVESTREAMPACKETIZER_NAME](#), [PLAYLISTNAME](#), [RENDITION_AUDIOONLY](#), [RENDITION_AUDIOVIDEO](#), [RENDITION_KEYFRAMEONLY](#), [RENDITION_VIDEOONLY](#), [RENDITIONINDEX_AUDIOONLY](#), [RENDITIONINDEX_AUDIOVIDEO](#), [RENDITIONINDEX_COUNT](#), [RENDITIONINDEX_KEYFRAMEONLY](#), [RENDITIONINDEX_VIDEOONLY](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[httpLogManifests](#), [httpManifestDebug](#), [INDETERMINATE_PLAYLIST_COUNT](#), [MIN_PLAYLIST_COUNT](#), [playlistAcrossSessions](#), [playlistCountFromMap](#), [playlistCountFromPacketizer](#), [playlistCrossName](#), [playlistDurationFromMap](#), [playlistMap](#), [playlistName](#), [playlistTimeout](#), [relativePlaylists](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPOutputBuilder](#)[PUSHER_ERROR_LIVEPACKETIZER_NOT_CONFIGURED](#)

Constructor Summary

public	PushPublishHTTPCupertinoAkamaiHandler()
--------	---

Method Summary

void	connect()
HTTPByteWriter	createByteWriter (java.net.URI uri, int port)
int	deleteMediaSegment (MediaSegmentModel mediaSegment)
boolean	destroyByteWriter ()
int	getChunkDurationTarget (ILiveStreamPacketizer liveStreamPacketizer)
String	getDestinationLogData ()
WMSProperties	getPlaylistProperties ()
void	init (IApplicationInstance appInstance, String streamName, IMediaStream stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean streamDebug)
boolean	isSendToBackupServer ()
void	load (java.util.HashMap dataMap)
boolean	outputClose ()
boolean	outputOpen ()
void	resetConnection ()
int	sendGroupMasterPlaylist (String groupName, PlaylistModel playlist)
int	sendMasterPlaylist (PlaylistModel playlist)
int	sendMediaPlaylist (PlaylistModel playlist)
int	sendMediaSegment (MediaSegmentModel mediaSegment)
void	setSendToBackupServer (boolean backup)

boolean	updateGroupMasterPlaylistPlaybackURI (String groupName, PlaylistModel masterPlaylist)
boolean	updateMasterPlaylistPlaybackURI (PlaylistModel playlist)
boolean	updateMediaPlaylistPlaybackURI (PlaylistModel playlist)
boolean	updateMediaSegmentPlaybackURI (MediaSegmentModel mediaSegment)

Methods inherited from class[com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertino](#)

[adaptiveGroupPlaylistNeedsUpdating](#), [addTagToPlaylist](#), [addTagToPlaylist](#), [connect](#), [createMasterPlaylist](#), [createMediaPlaylist](#), [createMediaSegmentModel](#), [createOutputItem](#), [createTag](#), [disconnect](#), [disconnect](#), [error](#), [getChunkDurationTarget](#), [getConnectedState](#), [getContextStr](#), [getDestinationLogData](#), [getGroupPlaylistRenditionDescription](#), [getLastChunkId](#), [getLiveStreamPacketizerName](#), [getMediaPlaylistPlaybackURL](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPacketizerLock](#), [getPlaylistCount](#), [getPlaylistProperties](#), [getProfileUtil](#), [getRandomSessionStr](#), [getRenditionsStr](#), [init](#), [isGroupReady](#), [isInRedundancyPair](#), [load](#), [outputSend](#), [printPlaylist](#), [resetConnection](#), [resetNewPacketizer](#), [sendGroupPlaylist](#), [setRenditionsStr](#), [writeTagToString](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[addAdaptiveGroupName](#), [getAdaptiveGroupNames](#), [getPlaylistCount](#), [getPlaylistMap](#), [getPlaylistTimeout](#), [init](#), [isInAdaptiveGroup](#), [isLogDebugManifest](#), [isplaylistAcrossSessions](#), [isRelativePlaylists](#), [load](#), [logDebugManifest](#), [setPlaylistAcrossSessions](#), [setPlaylistCountFromMap](#), [setPlaylistCountFromPacketizer](#), [setPlaylistTimeout](#), [setRelativePlaylists](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [handleParentStreamDisconnect](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugLog](#), [isExternalRedundancy](#), [isParent](#), [isTargetedStream](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugLog](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateUsageTracker](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProfileUtil](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [handleParentStreamDisconnect](#), [init](#), [isParent](#), [isTargetedStream](#), [resetConnection](#), [setDebugLog](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Methods inherited from interface

[com.wowza.wms.pushpublish.protocol.cupertino.IPushPublishHTTPCupertino](#)

[deleteMediaSegment](#), [getDestinationLogData](#), [isSendToBackupServer](#), [outputClose](#), [outputOpen](#), [sendGroupMasterPlaylist](#), [sendMasterPlaylist](#), [sendMediaPlaylist](#), [sendMediaSegment](#), [setSendToBackupServer](#), [updateGroupMasterPlaylistPlaybackURI](#), [updateMasterPlaylistPlaybackURI](#), [updateMediaPlaylistPlaybackURI](#), [updateMediaSegmentPlaybackURI](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPGroupMember](#)

[adaptiveGroupPlaylistNeedsUpdating](#), [addAdaptiveGroupName](#), [getAdaptiveGroupNames](#), [getGroupPlaylistRenditionDescription](#), [getPlaylistProperties](#), [isGroupReady](#), [isInAdaptiveGroup](#), [isInRedundancyPair](#), [isLogDebugManifest](#), [isSendToBackupServer](#), [sendGroupPlaylist](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPOutputBuilder](#)

[createOutputItem](#), [error](#), [getAppInstance](#), [getChunkDurationTarget](#), [getDstStreamName](#), [getLastChunkId](#), [getLiveStreamPacketizerName](#), [getPacketizerLock](#), [getSrcStreamName](#), [isDebugLog](#), [outputClose](#), [outputOpen](#), [outputSend](#), [resetNewPacketizer](#)

Fields

resolvedHostname

protected java.lang.String **resolvedHostname**

Constructors

PushPublishHTTPCupertinoAkamaiHandler

public **PushPublishHTTPCupertinoAkamaiHandler**()

Methods

(continued from last page)

init

```
public void init(IApplicationInstance appInstance,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean streamDebug)
```

Initializes the instance.

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

outputOpen

```
public boolean outputOpen()
```

outputClose

```
public boolean outputClose()
```

connect

```
public void connect()
```

resetConnection

```
public void resetConnection()
```

getChunkDurationTarget

```
public int getChunkDurationTarget(ILiveStreamPacketizer liveStreamPacketizer)
```

isSendToBackupServer

```
public boolean isSendToBackupServer()
```

setSendToBackupServer

```
public void setSendToBackupServer(boolean backup)
```

(continued from last page)

getPlaylistProperties

```
public WMSProperties getPlaylistProperties()
```

updateGroupMasterPlaylistPlaybackURI

```
public boolean updateGroupMasterPlaylistPlaybackURI(String groupName,  
    PlaylistModel masterPlaylist)
```

updateMasterPlaylistPlaybackURI

```
public boolean updateMasterPlaylistPlaybackURI(PlaylistModel playlist)
```

updateMediaPlaylistPlaybackURI

```
public boolean updateMediaPlaylistPlaybackURI(PlaylistModel playlist)
```

updateMediaSegmentPlaybackURI

```
public boolean updateMediaSegmentPlaybackURI(MediaSegmentModel mediaSegment)
```

sendGroupMasterPlaylist

```
public int sendGroupMasterPlaylist(String groupName,  
    PlaylistModel playlist)
```

sendMasterPlaylist

```
public int sendMasterPlaylist(PlaylistModel playlist)
```

sendMediaPlaylist

```
public int sendMediaPlaylist(PlaylistModel playlist)
```

sendMediaSegment

```
public int sendMediaSegment(MediaSegmentModel mediaSegment)
```

deleteMediaSegment

```
public int deleteMediaSegment(MediaSegmentModel mediaSegment)
```

getDestinationLogData

```
public String getDestinationLogData()
```

Get a JSON formatted string of data that represents the destination to include with the connect/disconnect logging

createByteWriter

```
public HTTPByteWriter createByteWriter(java.net.URI uri,  
int port)
```

destroyByteWriter

```
public boolean destroyByteWriter()
```

com.wowza.wms.pushpublish.protocol.cupertino Class PushPublishHTTPCupertinoGoogleHandler

java.lang.Object

└- [com.wowza.wms.pushpublish.model.PushPublishBase](#)

└- [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

└- [com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertino](#)

└- **com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertinoGoogleHandler**

All Implemented Interfaces:

[IPushPublish](#), [IPushPublishHTTPOutputBuilder](#), [IPushPublishHTTPGroupMember](#), [IPushPublishHTTPCupertino](#)

public class **PushPublishHTTPCupertinoGoogleHandler**
extends [PushPublishHTTPCupertino](#)

Field Summary	
protected	bucketName
public static final	BUCKETVAR Value: {BUCKET}
public static final	COMMANDPATHDEL Value: /storage/v1/b/{BUCKET}/o
public static final	COMMANDPATHPOST Value: /upload/storage/v1/b/{BUCKET}/o
protected	connectionTimeout
public static final	DEFAULTGCEHOST Value: www.googleapis.com
public static final	DEFAULTGCEPORT Value: 443
protected	deleteSentChunks
protected static final	destinationPath Value: storageDir
protected static final	destinationURLPrefix Value: https://
protected	fakePosts

public static final	FILENAMEVAR Value: { FILENAME }
protected	httpWriterDebug
protected	isplaybackSSL
protected	isSendSSL
protected static final	LINE_FEED Value:
protected static final	playbackDomain Value: storage.googleapis.com
protected static final	playbackURLPrefix Value: http://
protected	project
public static final	PROJECTQP Value: &project={PROJECT}
public static final	PROJECTQPVAR Value: { PROJECTQP }
public static final	PROJECTVAR Value: { PROJECT }
public static final	QUERYPARAMS Value: ?uploadType=multipart&name={FILENAME}{PROJECTQP}
protected	readWriteTimeout
protected	sendToBackupServer

Fields inherited from class [com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertino](#)

[addEndListOnDisconnect](#), [CHUNKLISTNAME_AUDIOONLY](#), [CHUNKLISTNAME_AUDIOVIDEO](#), [CHUNKLISTNAME_KEYFRAMEONLY](#), [CHUNKLISTNAME_VIDEOONLY](#), [CHUNKLISTNAMES](#), [keepMediaSegmentDataAfterSending](#), [LIVESTREAMPACKETIZER_NAME](#), [PLAYLISTNAME](#), [RENDITION_AUDIOONLY](#), [RENDITION_AUDIOVIDEO](#), [RENDITION_KEYFRAMEONLY](#), [RENDITION_VIDEOONLY](#), [RENDITIONINDEX_AUDIOONLY](#), [RENDITIONINDEX_AUDIOVIDEO](#), [RENDITIONINDEX_COUNT](#), [RENDITIONINDEX_KEYFRAMEONLY](#), [RENDITIONINDEX_VIDEOONLY](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[httpLogManifests](#), [httpManifestDebug](#), [INDETERMINATE_PLAYLIST_COUNT](#), [MIN_PLAYLIST_COUNT](#), [playlistAcrossSessions](#), [playlistCountFromMap](#), [playlistCountFromPacketizer](#), [playlistCrossName](#), [playlistDurationFromMap](#), [playlistMap](#), [playlistName](#), [playlistTimeout](#), [relativePlaylists](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPOutputBuilder](#)

[PUSHER_ERROR_LIVEPACKETIZER_NOT_CONFIGURED](#)

Constructor Summary

public	PushPublishHTTPCupertinoGoogleHandler()
--------	---

Method Summary

void	connect()
int	deleteMediaSegment(MediaSegmentModel mediaSegment)
int	getChunkDurationTarget(ILiveStreamPacketizer liveStreamPacketizer)
String	getContextStr()
String	getDestinationDomain()
String	getDestinationPath()
String	getDestinationLogData()
String	getIngressURL()
String	getPlaybackDomain()
String	getPlaybackPath()
String	getPlaybackURL()
void	init(IApplicationInstance appInstance, String streamName, IMediaStream stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean streamDebug)

boolean	isSendToBackupServer()
void	load (java.util.HashMap dataMap)
boolean	outputClose()
boolean	outputOpen()
void	resetConnection()
int	sendGroupMasterPlaylist (String groupName, PlaylistModel masterPlaylist)
int	sendMasterPlaylist (PlaylistModel playlist)
int	sendMediaPlaylist (PlaylistModel playlist)
int	sendMediaSegment (MediaSegmentModel mediaSegment)
void	setSendToBackupServer (boolean backup)
boolean	updateGroupMasterPlaylistPlaybackURI (String groupName, PlaylistModel masterPlaylist)
boolean	updateMasterPlaylistPlaybackURI (PlaylistModel playlist)
boolean	updateMediaPlaylistPlaybackURI (PlaylistModel playlist)
boolean	updateMediaSegmentPlaybackURI (MediaSegmentModel mediaSegment)

Methods inherited from class[com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTTCupertino](#)

[adaptiveGroupPlaylistNeedsUpdating](#), [addTagToPlaylist](#), [addTagToPlaylist](#), [connect](#), [createMasterPlaylist](#), [createMediaPlaylist](#), [createMediaSegmentModel](#), [createOutputItem](#), [createTag](#), [disconnect](#), [disconnect](#), [error](#), [getChunkDurationTarget](#), [getConnectedState](#), [getContextStr](#), [getDestinationLogData](#), [getGroupPlaylistRenditionDescription](#), [getLastChunkId](#), [getLiveStreamPacketizerName](#), [getMediaPlaylistPlaybackURL](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPacketizerLock](#), [getPlaylistCount](#), [getPlaylistProperties](#), [getProfileUtil](#), [getRandomSessionStr](#), [getRenditionsStr](#), [init](#), [isGroupReady](#), [isInRedundancyPair](#), [load](#), [outputSend](#), [printPlaylist](#), [resetConnection](#), [resetNewPacketizer](#), [sendGroupPlaylist](#), [setRenditionsStr](#), [writeTagToString](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[addAdaptiveGroupName](#), [getAdaptiveGroupNames](#), [getPlaylistCount](#), [getPlaylistMap](#), [getPlaylistTimeout](#), [init](#), [isInAdaptiveGroup](#), [isLogDebugManifest](#), [isPlaylistAcrossSessions](#), [isRelativePlaylists](#), [load](#), [logDebugManifest](#), [setPlaylistAcrossSessions](#), [setPlaylistCountFromMap](#), [setPlaylistCountFromPacketizer](#), [setPlaylistTimeout](#), [setRelativePlaylists](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [handleParentStreamDisconnect](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugEnabled](#), [isExternalRedundancy](#), [isParent](#), [isTargetedStream](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugEnabled](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateUsageTracker](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProfileUtil](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [handleParentStreamDisconnect](#), [init](#), [isParent](#), [isTargetedStream](#), [resetConnection](#), [setDebugEnabled](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Methods inherited from interface [com.wowza.wms.pushpublish.protocol.cupertino.IPushPublishHTTPCupertino](#)

[deleteMediaSegment](#), [getDestinationLogData](#), [isSendToBackupServer](#), [outputClose](#), [outputOpen](#), [sendGroupMasterPlaylist](#), [sendMasterPlaylist](#), [sendMediaPlaylist](#), [sendMediaSegment](#), [setSendToBackupServer](#), [updateGroupMasterPlaylistPlaybackURI](#), [updateMasterPlaylistPlaybackURI](#), [updateMediaPlaylistPlaybackURI](#), [updateMediaSegmentPlaybackURI](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPGroupMember](#)

[adaptiveGroupPlaylistNeedsUpdating](#), [addAdaptiveGroupName](#), [getAdaptiveGroupNames](#), [getGroupPlaylistRenditionDescription](#), [getPlaylistProperties](#), [isGroupReady](#), [isInAdaptiveGroup](#), [isInRedundancyPair](#), [isLogDebugManifest](#), [isSendToBackupServer](#), [sendGroupPlaylist](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPOutputBuilder](#)

[createOutputItem](#), [error](#), [getAppInstance](#), [getChunkDurationTarget](#), [getDstStreamName](#), [getLastChunkId](#), [getLiveStreamPacketizerName](#), [getPacketizerLock](#), [getSrcStreamName](#), [isDebugEnabled](#), [outputClose](#), [outputOpen](#), [outputSend](#), [resetNewPacketizer](#)

(continued from last page)

Fields

destinationURLPrefix

```
protected static final java.lang.String destinationURLPrefix
```

Constant value: **https://**

playbackURLPrefix

```
protected static final java.lang.String playbackURLPrefix
```

Constant value: **http://**

playbackDomain

```
protected static final java.lang.String playbackDomain
```

Constant value: **storage.googleapis.com**

destinationPath

```
protected static final java.lang.String destinationPath
```

Constant value: **storageDir**

DEFAULTGCEHOST

```
public static final java.lang.String DEFAULTGCEHOST
```

Constant value: **www.googleapis.com**

DEFAULTGCEPORT

```
public static final int DEFAULTGCEPORT
```

Constant value: **443**

BUCKETVAR

```
public static final java.lang.String BUCKETVAR
```

Constant value: **{BUCKET}**

COMMANDPATHPOST

```
public static final java.lang.String COMMANDPATHPOST
```

Constant value: **/upload/storage/v1/b/{BUCKET}/o**

(continued from last page)

COMMANDPATHDEL

```
public static final java.lang.String COMMANDPATHDEL
```

Constant value: `/storage/v1/b/{BUCKET}/o`

FILENAMEVAR

```
public static final java.lang.String FILENAMEVAR
```

Constant value: `{FILENAME}`

PROJECTVAR

```
public static final java.lang.String PROJECTVAR
```

Constant value: `{PROJECT}`

PROJECTQPVAR

```
public static final java.lang.String PROJECTQPVAR
```

Constant value: `{PROJECTQP}`

PROJECTQP

```
public static final java.lang.String PROJECTQP
```

Constant value: `&project={PROJECT}`

QUERYPARAMS

```
public static final java.lang.String QUERYPARAMS
```

Constant value: `?uploadType=multipart&name={FILENAME}{PROJECTQP}`

project

```
protected java.lang.String project
```

bucketName

```
protected java.lang.String bucketName
```

LINE_FEED

```
protected static final java.lang.String LINE_FEED
```

(continued from last page)

Constant value:

sendToBackupServerprotected boolean **sendToBackupServer**

httpWriterDebugprotected boolean **httpWriterDebug**

deleteSentChunksprotected boolean **deleteSentChunks**

fakePostsprotected boolean **fakePosts**

isSendSSLprotected boolean **isSendSSL**

isPlaybackSSLprotected boolean **isPlaybackSSL**

connectionTimeoutprotected int **connectionTimeout**

readWriteTimeoutprotected int **readWriteTimeout**

Constructors**PushPublishHTTPCupertinoGoogleHandler**public **PushPublishHTTPCupertinoGoogleHandler()**

(continued from last page)

Methods

init

```
public void init(IApplicationInstance appInstance,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean streamDebug)
```

Initiates the instance.

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

outputOpen

```
public boolean outputOpen()
```

outputClose

```
public boolean outputClose()
```

connect

```
public void connect()
```

resetConnection

```
public void resetConnection()
```

getChunkDurationTarget

```
public int getChunkDurationTarget(ILiveStreamPacketizer liveStreamPacketizer)
```

isSendToBackupServer

```
public boolean isSendToBackupServer()
```

(continued from last page)

setSendToBackupServer

```
public void setSendToBackupServer(boolean backup)
```

updateGroupMasterPlaylistPlaybackURI

```
public boolean updateGroupMasterPlaylistPlaybackURI(String groupName,  
    PlaylistModel masterPlaylist)
```

updateMasterPlaylistPlaybackURI

```
public boolean updateMasterPlaylistPlaybackURI(PlaylistModel playlist)
```

updateMediaPlaylistPlaybackURI

```
public boolean updateMediaPlaylistPlaybackURI(PlaylistModel playlist)
```

updateMediaSegmentPlaybackURI

```
public boolean updateMediaSegmentPlaybackURI(MediaSegmentModel mediaSegment)
```

sendGroupMasterPlaylist

```
public int sendGroupMasterPlaylist(String groupName,  
    PlaylistModel masterPlaylist)
```

sendMasterPlaylist

```
public int sendMasterPlaylist(PlaylistModel playlist)
```

sendMediaPlaylist

```
public int sendMediaPlaylist(PlaylistModel playlist)
```

sendMediaSegment

```
public int sendMediaSegment(MediaSegmentModel mediaSegment)
```

(continued from last page)

deleteMediaSegment

```
public int deleteMediaSegment(MediaSegmentModel mediaSegment)
```

getDestinationLogData

```
public String getDestinationLogData()
```

Get a JSON formatted string of data that represents the destination to include with the connect/disconnect logging

getDestinationDomain

```
public String getDestinationDomain()
```

getDestinationPath

```
public String getDestinationPath()
```

getContextStr

```
public String getContextStr()
```

getIngressURL

```
public String getIngressURL()
```

getPlaybackURL

```
public String getPlaybackURL()
```

getPlaybackDomain

```
public String getPlaybackDomain()
```

getPlaybackPath

```
public String getPlaybackPath()
```

com.wowza.wms.pushpublish.protocol.cupertino Class PushPublishHTTPCupertinoOutputItem

java.lang.Object

└- [com.wowza.wms.pushpublish.model.PushPublishHTTPOutputItem](#)

└- **com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertinoOutputItem**

public class **PushPublishHTTPCupertinoOutputItem**

extends [PushPublishHTTPOutputItem](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPOutputItem](#)

[chunkLists](#), [chunks](#), [liveStreamPacketizer](#), [playlistStrA](#), [playlistStrB](#)

Constructor Summary

public	PushPublishHTTPCupertinoOutputItem (String[] chunkLists)
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

PushPublishHTTPCupertinoOutputItem

public **PushPublishHTTPCupertinoOutputItem**(String[] chunkLists)

com.wowza.wms.pushpublish.protocol.cupertino Class PushPublishHTTPCupertinoOutputItemChunk

java.lang.Object

└─ [com.wowza.wms.pushpublish.model.PushPublishHTTPOutputItemChunk](#)

└─

com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertinoOutputItemChunk

public class **PushPublishHTTPCupertinoOutputItemChunk**
extends [PushPublishHTTPOutputItemChunk](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPOutputItemChunk](#)

[chunk](#), [isCustomChunkId](#), [playlistEntry](#), [renditionIndex](#)

Constructor Summary

public	PushPublishHTTPCupertinoOutputItemChunk (int renditionIndex)
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

PushPublishHTTPCupertinoOutputItemChunk

public **PushPublishHTTPCupertinoOutputItemChunk**(int renditionIndex)

com.wowza.wms.pushpublish.protocol.cupertino Class PushPublishHTTPCupertinoPlaylistEntry

java.lang.Object

├─ [com.wowza.wms.pushpublish.model.PushPublishHTTPPlaylistEntry](#)

└─

com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertinoPlaylistEntry

public class **PushPublishHTTPCupertinoPlaylistEntry**
extends [PushPublishHTTPPlaylistEntry](#)

Field Summary

public	chunkListId
public	isCustomChunkId
public	playlistChunkByteRange
public	playlistChunkDescription
public	playlistChunkDiscontinuity
public	playlistChunkKey
public	playlistChunkMap
public	playlistChunkMediaName
public	playlistDuration
public	playlistHeader

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPPlaylistEntry](#)

[delete](#)

Constructor Summary

public	PushPublishHTTPCupertinoPlaylistEntry()
--------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

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Fields

playlistHeader

```
public java.lang.String playlistHeader
```

playlistChunkKey

```
public java.lang.String playlistChunkKey
```

playlistChunkDiscontinuity

```
public java.lang.String playlistChunkDiscontinuity
```

playlistChunkDescription

```
public java.lang.String playlistChunkDescription
```

playlistChunkMap

```
public java.lang.String playlistChunkMap
```

playlistChunkByteRange

```
public java.lang.String playlistChunkByteRange
```

playlistDuration

```
public double playlistDuration
```

playlistChunkMediaName

```
public java.lang.String playlistChunkMediaName
```

chunkListId

```
public long chunkListId
```

(continued from last page)

isCustomChunkId

```
public boolean isCustomChunkId
```

Constructors

PushPublishHTTPCupertinoPlaylistEntry

```
public PushPublishHTTPCupertinoPlaylistEntry()
```

com.wowza.wms.pushpublish.protocol.cupertino Class PushPublishHTTPCupertinoUtil

java.lang.Object

└-com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertinoUtil

All Implemented Interfaces:

[IPushPublishProfileUtil](#)

```
public class PushPublishHTTPCupertinoUtil
extends Object
implements IPushPublishProfileUtil
```

Field Summary

public static final	CLASS
public static final	CLASSNAME Value: PushPublishHTTPCupertinoUtil
public static final	HTTPADAPTER_NAME Value: cupertinostreaming
public static final	PROPERTYNAME_TRACKER Value: PushPublishHTTPCupertinoTracker

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishProfileUtil](#)

[PROPERTY_LOG_DEBUG_MANIFEST](#)

Constructor Summary

public	PushPublishHTTPCupertinoUtil()
--------	--

Method Summary

void	addTagToPlaylist (PlaylistModel playlist, int idx, TagModel tag) Adds the provided TagModel to the list of TagModels at the idx for the provided Playlist Model
void	addTagToPlaylist (PlaylistModel playlist, TagModel tag) Adds the provided TagModel to the end of the list of TagModels for the provided Playlist Model
ManifestModel	createGroupPlaylist (String id, java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups, IApplicationInstance appInstance, String context, WMSProperties properties)

PlaylistModel	createMasterPlaylist (String context, boolean logDebugManifest) Creates a master playlist and propagates the context string from this implementation to the returned playlist model
PlaylistModel	createMediaPlaylist (int renditionIdx, PushPublishHTTPCupertino hisEntry, String context, boolean logDebugManifest) Creates a empty media playlist and propagates the context from this implementation to the returned playlist
MediaSegmentModel	createMediaSegmentModel (boolean debugLog) Creates an empty media segment model and propagates the context from the implementation to the returned media segment model
TagModel	createTag (Class clazz, String context) Create a TagModel of the provided TagModel
PlaylistModel	getMediaPlaylistForRendtion (PlaylistModel masterPlaylist, int renditionIndex)
int	getMediaPlaylistRenditionIndex (PlaylistModel mediaPlaylist)
String	getMediaSegementProgramDateTime (MediaSegmentModel mediaSegment)
long	getMediaSegementSize (MediaSegmentModel mediaSegment)
long	getMediaSegmentIndex (MediaSegmentModel mediaSegment)
boolean	isMediaSegmentDelete (MediaSegmentModel mediaSegment)
boolean	isMediaSegmentSent (MediaSegmentModel mediaSegment)
boolean	isParent (java.util.Map entry)
boolean	isTargetedStream (java.util.Map entry, String streamName)
void	onDeleteEntry (java.util.Map entry)
void	onReadEntry (java.util.Map entry)
void	onWriteEntry (java.util.Map oldEntry, java.util.Map newEntry)
void	setApplicationName (String appName)
void	setMediaPlaylistRenditionIndex (PlaylistModel mediaPlaylist, int index)
void	setMediaSegementProgramDateTime (MediaSegmentModel mediaSegment, String progDateTime)
void	setMediaSegementSize (MediaSegmentModel mediaSegment)
void	setMediaSegmentDelete (MediaSegmentModel mediaSegment, boolean delete)

void	setMediaSegmentIndex (MediaSegmentModel mediaSegment, long index)
void	setMediaSegmentSent (MediaSegmentModel mediaSegment, boolean sent)
void	setVHost (IVHost vhost)
boolean	validateEntry (java.util.Map entry)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishProfileUtil](#)

[createGroupPlaylist](#), [isParent](#), [isTargetedStream](#), [onDeleteEntry](#), [onReadEntry](#), [onWriteEntry](#), [setApplicationName](#), [setVHost](#), [validateEntry](#)

Fields

CLASS

```
public static final java.lang.Class CLASS
```

CLASSNAME

```
public static final java.lang.String CLASSNAME
```

Constant value: **PushPublishHTTPCupertinoUtil**

PROPERTYNAME_TRACKER

```
public static final java.lang.String PROPERTYNAME_TRACKER
```

Constant value: **PushPublishHTTPCupertinoTracker**

HTTPADAPTER_NAME

```
public static final java.lang.String HTTPADAPTER_NAME
```

Constant value: **cupertinostreaming**

Constructors

PushPublishHTTPCupertinoUtil

```
public PushPublishHTTPCupertinoUtil()
```

Methods

onWriteEntry

```
public void onWriteEntry(java.util.Map oldEntry,  
    java.util.Map newEntry)
```

onReadEntry

```
public void onReadEntry(java.util.Map entry)
```

onDeleteEntry

```
public void onDeleteEntry(java.util.Map entry)
```

validateEntry

```
public boolean validateEntry(java.util.Map entry)
```

isParent

```
public boolean isParent(java.util.Map entry)
```

isTargetedStream

```
public boolean isTargetedStream(java.util.Map entry,  
    String streamName)
```

createGroupPlaylist

```
public ManifestModel createGroupPlaylist(String id,  
    java.util.List groupingsByRedundantPairs,  
    java.util.List groupingsByAbrGroups,  
    IApplicationInstance appInstance,  
    String context,  
    WMSProperties properties)
```

createTag

```
public TagModel createTag(Class clazz,  
    String context)
```

Create a TagModel of the provided TagModel

(continued from last page)

Parameters:

clazz - Class of the TagModel to create

Returns:

a new instance of the TagModel requested

addTagToPlaylist

```
public void addTagToPlaylist(PlaylistModel playlist,  
    TagModel tag)
```

Adds the provided TagModel to the end of the list of TagModels for the provided Playlist Model

Parameters:

playlist - to add the TagModel to

tag - to add to the playlist

addTagToPlaylist

```
public void addTagToPlaylist(PlaylistModel playlist,  
    int idx,  
    TagModel tag)
```

Adds the provided TagModel to the list of TagModels at the idx for the provided Playlist Model

Parameters:

playlist - to add the TagModel to

idx - index where to insert the TagModel at

tag - Model to insert into the list of TagModels

createMasterPlaylist

```
public PlaylistModel createMasterPlaylist(String context,  
    boolean logDebugManifest)
```

Creates a master playlist and propagates the context string from this implementation to the returned playlist model

Returns:

a new master playlist

createMediaPlaylist

```
public PlaylistModel createMediaPlaylist(int renditionIdx,  
    PushPublishHTTTCupertino hlsEntry,  
    String context,  
    boolean logDebugManifest)
```

Creates a empty media playlist and propagates the context from this implementation to the returned playlist

Returns:

a new media playlist

createMediaSegmentModel

```
public MediaSegmentModel createMediaSegmentModel(boolean debugLog)
```

Creates an empty media segment model and propagates the context from the implementation to the returned media segment model

Returns:

(continued from last page)

media segment model

setMediaPlaylistRenditionIndex

```
public void setMediaPlaylistRenditionIndex(PlaylistModel mediaPlaylist,  
int index)
```

getMediaPlaylistRenditionIndex

```
public int getMediaPlaylistRenditionIndex(PlaylistModel mediaPlaylist)
```

getMediaPlaylistForRendtion

```
public PlaylistModel getMediaPlaylistForRendtion(PlaylistModel masterPlaylist,  
int renditionIndex)
```

setMediaSegmentIndex

```
public void setMediaSegmentIndex(MediaSegmentModel mediaSegment,  
long index)
```

getMediaSegmentIndex

```
public long getMediaSegmentIndex(MediaSegmentModel mediaSegment)
```

setMediaSegmentDelete

```
public void setMediaSegmentDelete(MediaSegmentModel mediaSegment,  
boolean delete)
```

isMediaSegmentDelete

```
public boolean isMediaSegmentDelete(MediaSegmentModel mediaSegment)
```

setMediaSegmentSent

```
public void setMediaSegmentSent(MediaSegmentModel mediaSegment,  
boolean sent)
```

isMediaSegmentSent

```
public boolean isMediaSegmentSent(MediaSegmentModel mediaSegment)
```

(continued from last page)

setMediaSegementSize

```
public void setMediaSegementSize(MediaSegmentModel mediaSegment)
```

getMediaSegementSize

```
public long getMediaSegementSize(MediaSegmentModel mediaSegment)
```

setMediaSegementProgramDateTime

```
public void setMediaSegementProgramDateTime(MediaSegmentModel mediaSegment,  
String progDateTime)
```

getMediaSegementProgramDateTime

```
public String getMediaSegementProgramDateTime(MediaSegmentModel mediaSegment)
```

setVHost

```
public void setVHost(IVHost vhost)
```

setApplicationName

```
public void setApplicationName(String appName)
```

Package

com.wowza.wms.pushpublish.protocol.rtmp

com.wowza.wms.pushpublish.protocol.rtmp Interface IPushPublishRTMPAuthProvider

All Known Implementing Classes:

[PushPublishRTMPAuthProviderBase](#)

public interface **IPushPublishRTMPAuthProvider**
extends

Method Summary

String	addAuthQueryString (String queryString)
String	getPassword ()
PushPublishRTMP	getPublisher ()
String	getUserName ()
void	handleConnectResponse (com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	init (PushPublishRTMP publisher)
void	setPassword (String password)
void	setUserName (String userName)

Methods

init

public void **init**([PushPublishRTMP](#) publisher)

addAuthQueryString

public String **addAuthQueryString**(String queryString)

handleConnectResponse

public void **handleConnectResponse**(com.wowza.wms.request.RequestFunction function, [AMFDataList](#) params)

getUserName

```
public String getUserName()
```

setUserName

```
public void setUserName(String userName)
```

getPassword

```
public String getPassword()
```

setPassword

```
public void setPassword(String password)
```

getPublisher

```
public PushPublishRTMP getPublisher()
```

com.wowza.wms.pushpublish.protocol.rtmp Interface IPushPublishRTMPNotify

All Known Implementing Classes:

[PushPublishRTMPNotifyBase](#)

public interface **IPushPublishRTMPNotify**
extends

Method Summary

void	onAkamaiClientLogin (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onAkamaiSetChallenge (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onAkamaiSetOriginConnectionInfo (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onConnect (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onConnectFailure (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onConnectStart (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onConnectSuccess (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onFCAnnounce (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onFCPublish (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onHandshakeResult (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onPublishHandlerPlay (PushPublishRTMPNetConnectionSession pushPublisherSession, java.io.OutputStream out, long[] playSizes)
void	onPushPublisherSessionCreate (PushPublishRTMPNetConnectionSession pushPublisherSession)

void	onPushPublisherSessionDestroy (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onReleaseStream (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onSessionClosed (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onSessionIdle (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onSessionOpened (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onStreamCreate (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onStreamOnPlayStatus (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onStreamOnStatus (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onValidateSession (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onValidateSessionResult (PushPublishRTMPNetConnectionSession pushPublisherSession, boolean result)

Methods

onConnectStart

```
public void onConnectStart(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

onConnectSuccess

```
public void onConnectSuccess(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

onConnectFailure

```
public void onConnectFailure(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

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onHandshakeResult

```
public void onHandshakeResult(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onAkamaiSetChallenge

```
public void onAkamaiSetChallenge(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onAkamaiSetOriginConnectionInfo

```
public void onAkamaiSetOriginConnectionInfo(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onAkamaiClientLogin

```
public void onAkamaiClientLogin(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onFCPublish

```
public void onFCPublish(PushPublishRTMPNetConnectionSession pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onFCAnnounce

```
public void onFCAnnounce(PushPublishRTMPNetConnectionSession pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onReleaseStream

```
public void onReleaseStream(PushPublishRTMPNetConnectionSession pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

(continued from last page)

onConnect

```
public void onConnect(PushPublishRTMPNetConnectionSession pushPublisherSession,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

onStreamCreate

```
public void onStreamCreate(PushPublishRTMPNetConnectionSession pushPublisherSession,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

onStreamOnPlayStatus

```
public void onStreamOnPlayStatus(PushPublishRTMPNetConnectionSession  
pushPublisherSession,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

onStreamOnStatus

```
public void onStreamOnStatus(PushPublishRTMPNetConnectionSession pushPublisherSession,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

onPublishHandlerPlay

```
public void onPublishHandlerPlay(PushPublishRTMPNetConnectionSession  
pushPublisherSession,  
    java.io.OutputStream out,  
    long[] playSizes)
```

onSessionIdle

```
public void onSessionIdle(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

onSessionOpened

```
public void onSessionOpened(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

onSessionClosed

```
public void onSessionClosed(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

onValidateSession

```
public void onValidateSession(PushPublishRTMPNetConnectionSession
pushPublisherSession)
```

onValidateSessionResult

```
public void onValidateSessionResult(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    boolean result)
```

onPushPublisherSessionCreate

```
public void onPushPublisherSessionCreate(PushPublishRTMPNetConnectionSession
pushPublisherSession)
```

onPushPublisherSessionDestroy

```
public void onPushPublisherSessionDestroy(PushPublishRTMPNetConnectionSession
pushPublisherSession)
```

com.wowza.wms.pushpublish.protocol.rtmp Class PushPublishRTMP

java.lang.Object

└─ [com.wowza.wms.pushpublish.model.PushPublishBase](#)

└─ **com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP**

All Implemented Interfaces:

[IPushPublish](#)

Direct Known Subclasses:

[PushPublishRTMPProfileHandler](#)

```
public class PushPublishRTMP  
extends PushPublishBase
```

PushPublish

Sample Code to push to Wowza Server or Adobe Media Server (no authentication)

This method should work with **Level 3** as well as long as the publishing application on not authenticated.

```
try
{
    PushPublishRTMP publisher = new PushPublishRTMP();

    // Source stream
    publisher.setAppInstance(appInstance);
    publisher.setSrcStreamName("myStream");

    // Destination stream
    publisher.setHostname("localhost");
    publisher.setPort(1935);
    publisher.setDstApplicationName("live");
    publisher.setDstStreamName("myStream");

    // Uncomment if pushing to Adobe Media Server
    //publisher.setSendOriginalTimecodes(true);
    //publisher.setOriginalTimecodeThreshold(0x100000);

    // SecureToken shared secret
    //publisher.setSecureTokenSharedSecret("#ed%h0#w@1");

    publisher.setSendFCPublish(true);
    publisher.setSendReleaseStream(true);
    publisher.setDebugLog(true);

    publisher.connect();
}
catch(Exception e)
{
    WMSLoggerFactory.getLogger(null).info(CLASSNAME+"RTMP: ", e);
}
```

Sample Code to push to Wowza Server or Adobe Media Server (RTMP username/password authentication)

This method should work with **Level 3** as well if the publishing application is protected using RTMP authentication.

```
try
{
    PushPublishRTMP publisher = new PushPublishRTMP();

    // Source stream
    publisher.setAppInstance(appInstance);
    publisher.setSrcStreamName("myStream");

    // Destination stream
    publisher.setHostname("localhost");
    publisher.setPort(1935);
    publisher.setDstApplicationName("live");
    publisher.setDstStreamName("myStream");
    publisher.setConnectionFlashVersion(PushPublishRTMP.CURRENTFMLEVERSION);

    // Uncomment if pushing to Adobe Media Server
    //publisher.setSendOriginalTimecodes(true);
    //publisher.setOriginalTimecodeThreshold(0x100000);

    // SecureToken shared secret
    //publisher.setSecureTokenSharedSecret("#ed%h0#w@1");

    publisher.setSendFCPublish(true);
    publisher.setSendReleaseStream(true);
    publisher.setDebugLog(true);

    PushPublishRTMPAuthProviderAdobe adobeRTMPAuthProvider = new
PushPublishRTMPAuthProviderAdobe();

    adobeRTMPAuthProvider.init(publisher);
    adobeRTMPAuthProvider.setUsername("username");
    adobeRTMPAuthProvider.setPassword("password");
    publisher.setRTMPAuthProvider(adobeRTMPAuthProvider);

    publisher.connect();
}
catch(Exception e)
{
    WMSLoggerFactory.getLogger(null).info(CLASSNAME+"RTMP: ", e);
}
```

Sample Code to push to **Akamai**

```
try
{
    PushPublishRTMP publisher = new PushPublishRTMP();

    // Source stream
    publisher.setAppInstance(appInstance);
    publisher.setSrcStreamName("myStream");

    // Destination stream
    String streamId = "12345";
    String akamaiUsername = "56789";
    String akamaiPassword = "changeme";
    boolean isPrimary = true;
    String hostname = (isPrimary?"p":"b")+".ep"+streamId+".i.akamaientrypoint.net";
    String dstApplicationName = "EntryPoint";
    String dstStreamName = "myStream"+"@"+streamId;

    publisher.setHostname(hostname);
    publisher.setPort(1935);
    publisher.setDstApplicationName(dstApplicationName);
    publisher.setDstStreamName(dstStreamName);
    publisher.setDebugLog(true);

    publisher.setConnectionFlashVersion(PushPublishRTMP.getPushPublishVersionStr());

    if (PushPublishRTMP.isFlashVersionFMLE(publisher.getConnectionFlashVersion()))
    {
        PushPublishRTMPAuthProviderAdobe adobeRTMPAuthProvider = new
PushPublishRTMPAuthProviderAdobe();

        adobeRTMPAuthProvider.init(publisher);
        adobeRTMPAuthProvider.setUserName(akamaiUsername);
        adobeRTMPAuthProvider.setPassword(akamaiPassword);

        publisher.setRTMPAuthProvider(adobeRTMPAuthProvider);
    }
    else
    {
        publisher.setAkamaiUserName(akamaiUsername);
        publisher.setAkamaiPassword(akamaiPassword);
    }

    publisher.setSendFCPublish(true);
    publisher.setSendReleaseStream(true);
    publisher.setSendStreamCloseCommands(true);

    publisher.setSendOriginalTimecodes(true);
    publisher.setOriginalTimecodeThreshold(0x100000);

    publisher.connect();
}
```

```
catch(Exception e)
{
    WMSLoggerFactory.getLogger(null).info(CLASSNAME+"RTMP: ", e);
}
```

Sample Code to push to **Limelight**

```
try
{
    PushPublishRTMP publisher = new PushPublishRTMP();

    // Source stream
    publisher.setAppInstance(appInstance);
    publisher.setSrcStreamName("myStream");

    // Destination stream
    publisher.setHostname("fmmpush.lax.llnw.net");
    publisher.setPort(1935);
    publisher.setDstApplicationName("live");
    publisher.setDstStreamName("myStream");

    publisher.setSendFCPublish(true);
    publisher.setSendReleaseStream(true);
    publisher.setDebugLog(true);

    publisher.setSendOriginalTimecodes(true);
    publisher.setOriginalTimecodeThreshold(0x100000);

    PushPublishRTMPAuthProviderLimelight limelightRTMPAuthProvider = new
PushPublishRTMPAuthProviderLimelight();

    limelightRTMPAuthProvider.init(publisher);
    limelightRTMPAuthProvider.setUsername("username");
    limelightRTMPAuthProvider.setPassword("password");
    publisher.setRTMPAuthProvider(limelightRTMPAuthProvider);

    publisher.connect();
}
catch(Exception e)
{
    WMSLoggerFactory.getLogger(null).info(CLASSNAME+"RTMP: ", e);
}
```

Sample Code to push to **BitGravity** (streaming needs to be setup per instructions in **BG Live 3rd Party Encoder Configuration** guide.)

```

try
{
    PushPublishRTMP publisher = new PushPublishRTMP();

    // Source stream
    publisher.setAppInstance(client.getAppInstance());
    publisher.setSrcStreamName("myStream");

    // Destination stream
    publisher.setHostname("rtpdev1.iad1.bitgravity.com");
    publisher.setPort(1935);
    publisher.setDstApplicationName("rtmp");
    publisher.setDstAppInstanceName("push");

    publisher.setDstStreamName("test@test.com/71d73d4cfd1e2f2fed77238021a2cbbbe/test/live/feed01")
;

    publisher.setSendFCPublish(true);
    publisher.setSendReleaseStream(true);
    publisher.setDebugLog(true);

    publisher.connect();
}
catch(Exception e)
{
    WMSLoggerFactory.getLogger(null).info(CLASSNAME+"RTMP: ", e);
}

```

Field Summary

protected	akamaiOriginIp
protected	akamaiOriginPort
protected	akamaiPassword
protected	akamaiUserName
protected	bindAddress
public	bytesAvg

public static final	CLASS
public static final	CLASSNAME Value: PushPublishRTMP
protected	connectionFlashVersion
protected	connectionPageURL
protected	connectionQueryStr
protected	connectionResetCount
protected	connectionState
protected	connectionSwfURL
protected	connectionTimeout
protected	connectLastAttempt
protected	connectLastSuccess
protected	connectMetaData
public static final	CURRENTFLASHVERSION Value: WIN 10,0,12,36
public static final	CURRENTFMLEVERSION Value: FMLE/3.0 (compatible; FMSc/1.0)
protected	debugLogLastPacketCount
protected	debugPackets
protected	doSendOnMetaData
protected	dstAppInstanceName
protected	dstApplicationName
protected	howToPublish
protected	ioSessionToSessionHolder
protected	isReconnectorRunning
protected	isSSL

protected	lastAudioTC
protected	lastDataTC
protected	lastIdleReadTime
protected	lastIdleWriteTime
protected	lastVideoTC
protected	listeners
protected	lock
protected	netconnectToSessionHolder
public	offlineTime
public	onlineTime
protected	onMetadataFilter
protected	onMetadataItemsToAdd
protected	onMetadataItemsToRemove
protected	onMetadataToSetDataFrame
protected	originalTimecodeThreshold
public	outprint
protected	packetsSentAudio
protected	packetsSentData
protected	packetsSentVideo
protected	pingPongListenerRegistered
protected	queryString
protected	removeDefaultAppInstance
protected	resetOnTimecodeOutOfOrder
protected	rtmpAuthProvider

protected	rtmpDebugLog
protected	secureTokenSharedSecret
protected	sendFCAnnounce
protected	sendFCPublish
protected	sendOnMetadata
protected	sendOriginalTimecodes
protected	sendReleaseStream
protected	sendStreamCloseCommands
protected	sendStreamCloseCommandsSendTime
protected	sessionOrder
protected	srcStreamBufferSize
protected	streamCloseWaitTime
protected	syncPacketType
protected	syncTimecode
protected	timecodesOutOfOrderThreshold
protected	totalPacketsSent
protected	tryConnect
protected	usePingPong
protected	validationFrequency
protected	waitOnMetadataAudio
protected	waitOnMetadataAudioDataRate
protected	waitOnMetadataAvailable
protected	waitOnMetadataReady
protected	waitOnMetadataStartime

protected	waitOnMetadataTimeout
protected	waitOnMetadataVideo
protected	waitOnMetadataVideoDataRate

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishRTMP()
--------	-----------------------------------

Method Summary

void	addConnectMetaData (String key, AMFData value) Added metadata values to the connect metadata object
void	addListener (IPushPublishRTMPNotify listener) Add IPushPublishRTMPNotify listener
void	addOnMetadataItemToRemove (String name)
void	addSession (PushPublishRTMPNetConnectionSession sessionHolder) Add session
void	bumpReconnectWaitTime () Bump the reconnect wait time
void	callConnect (PushPublishRTMPNetConnectionSession pushPublisherSession, String addQueryStr) Internal connect
void	connect () Connect to server
AMFDataList	convertDataEvenToAMFData (AMFPacket packet)
AMFPacket	convertOnMetadataToSetDataFrame (AMFPacket packet)
IPushPublishSession	createPushPublishSession ()

void	disconnect() Disconnect from server
void	disconnect(boolean hard)
AMFPacket	filterOnMetadataEvent(AMFPacket packet, long flags, java.util.List itemsToRemove, java.util.Map itemsToAdd)
String	getAkamaiOriginIp() Get Akamai Origin IP
int	getAkamaiOriginPort() Get Akamai Origin Port
String	getAkamaiPassword() Get Akamai password
String	getAkamaiSessionKey(String sessionId) Get Akamai session key
String	getAkamaiUserName() Get Akamai user name
IApplicationInstance	getAppInstance() Get appInstance interface
String	getBindAddress()
int	getConnectedState()
String	getConnectionFlashVerion() Get Flash version used in connection metadata
String	getConnectionFlashVersion() Get Flash version used in connection metadata
String	getConnectionPageURL() Get Page URL used in connection metadata
String	getConnectionQueryStr() Get the connection query string
String	getConnectionSwfURL() Get SWF URL used in connection metadata
int	getConnectionTimeout() Get the connection timeout (milliseconds)
long	getConnectLastAttempt() Get timestamp of last connection attempt
long	getConnectLastSuccess() Get timestamp of last successful connection
String	getContextStr() Get the connection details

String	getDstAppInstanceName() Get destination appInstance name
String	getDstApplicationName() Get destination application name
String	getDstStreamName() Get destination stream name
String	getHowToPublish() Get the howToPublish string (valid values are "live", "record" and "append")
long	getLastAudioTC() Get the absolute timecode of the last sent audio packet (milliseconds)
long	getLastDataTC() Get the absolute timecode of the last sent data packet (milliseconds)
PushPublishRTMPNetConnectionSession	getLastSession() Get the last session interface
long	getLastVideoTC() Get the absolute timecode of the last sent video packet (milliseconds)
java.util.List	getLocalListeners() Get a list of IPushPublishRTMPNotify listeners
Object	getLock() Get the synchronization lock
long	getMessagesAttemptedCount()
long	getMessagesFailedCount()
long	getMessagesRetriedCount()
INetConnection	getNetConnection() Get the underlying INetConnection interface for this session
long	getOnMetadataFilter()
long	getOriginalTimecodeThreshold() Get the original timecode threshold.
long	getPacketsSentAudio()
long	getPacketsSentData()
long	getPacketsSentVideo()
int	getPort() Get destination server port
IPushPublishProfileUtil	getProfileUtil()

String	getQueryString() Get the queryString
int	getReconnectDelay(long currTime) Get the reconnect delay
IPushPublishRTMPAuthProvider	getRTMPAuthProvider() Get RTMP authentication provider
String	getSecureTokenSharedSecret() Get SecureToken shared secret
PushPublishRTMPNetConnectionSession	getSessionHolderByNetConnection(INetConnection netConnection) Get the session holder by INetConnection interface
PushPublishRTMPNetConnectionSession	getSessionHolderBySession(org.apache.mina.common.IoSession session) Get session holder by IoSession
String	getSessionListDebug() Get the list of active IoSession ids for this publishing session
long	getSrcStreamBufferSize() The amount of audio/video in milliseconds that must be available in the source streams buffer before push publishing will begin.
String	getSrcStreamName() Get source stream name
int	getStreamCloseWaitTime() Get stream close timeout (milliseconds)
int	getSyncPacketType()
long	getSyncTimecode()
int	getTimecodesOutOfOrderThreshold()
long	getTotalPacketsSent() Get total number of packets sent during push publishing session
long	getValidationFrequency() Get connection validation frequency (millisecond).
long	getWaitOnMetadataTimeout() Timeout (milliseconds) that the wait on onMetadata system will wait looking for video and audio data to be populated.
org.apache.mina.common.IoSession	internalConnect(PushPublishRTMPNetConnectionSession pushPublisherSession) Internal connect method
boolean	isCurrentSession(org.apache.mina.common.IoSession session) Test to see if passed in session is current session
boolean	isDebugLog() Is debug logging turned on
boolean	isDebugPackets() Set to true to log every packet being sent

static boolean	isFlashVerionFMLE (String flashVersion) Returns true if the Flash player version string is a Flash Media Live Encoder version (start with FMLE/ or FME/)
static boolean	isFlashVersionFMLE (String flashVersion) Returns true if the Flash player version string is a Flash Media Live Encoder version (start with FMLE/ or FME/)
boolean	isOnMetadataToSetDataFrame () If true all onMetadata events are converted to @setDataFrame calls
boolean	isRemoveDefaultAppInstance () If true and destination application instance is _definst_ then the application instance name will not be sent to the remove server as part of the connection information.
boolean	isResetOnTimecodeOutOfOrder () Set to true if you wish push to reset if timecodes jump out of order.
boolean	isSendFCAnnounce () If true call FCAnnounce(streamName) after connecting to server
boolean	isSendFCPublish () If true call FCPublish(streamName) after connecting to server
boolean	isSendOnMetadata () True if sending onMetadata event at start of stream
boolean	isSendOriginalTimecodes () true if sending the original timecodes of source stream.
boolean	isSendReleaseStream () If true call releaseStream(streamName) after connecting to server
boolean	isSendStreamCloseCommands () If true will send FCUnpublish, closeStream, deleteStream on disconnect
boolean	isSSL ()
boolean	isWaitOnMetadataAudio () If true and waitOnMetadataAvailable, publishing will not start until onMetadata packet is populated with audio data.
boolean	isWaitOnMetadataAudioDatarate ()
boolean	isWaitOnMetadataAvailable () Set to true to turn on system that will monitor onMetadata packet and wait for it to be populated before it starts sending the stream.
boolean	isWaitOnMetadataVideo () If true and waitOnMetadataAvailable, publishing will not start until onMetadata packet is populated with video data.
boolean	isWaitOnMetadataVideoDatarate ()
void	notifyAkamaiClientLogin (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params) Notify Akamai ClientLogin

void	notifyAkamaiSetChallenge (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params) Notify Akamai SetChallenge
void	notifyAkamaiSetOriginConnectionInfo (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params) Notify Akamai SetOriginConnectionInfo
void	notifyConnect (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params) Notify connect
void	notifyConnectFailure (PushPublishRTMPNetConnectionSession pushPublisherSession) Notify connect failure
void	notifyConnectStart (PushPublishRTMPNetConnectionSession pushPublisherSession) Notify connect start
void	notifyConnectSuccess (PushPublishRTMPNetConnectionSession pushPublisherSession) Notify connect success
void	notifyFCAnnounce (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params) Notify FCAnnounce
void	notifyFCPublish (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params) Notify FCPublish
void	notifyHandshakeResult (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params) Notify handshake result
void	notifyPublishHandlerPlay (PushPublishRTMPNetConnectionSession pushPublisherSession, java.io.OutputStream out, long[] playSizes) Notify publish handler play
void	notifyPushPublisherSessionCreate (PushPublishRTMPNetConnectionSession pushPublisherSession) Notify session create
void	notifyPushPublisherSessionDestroy (PushPublishRTMPNetConnectionSession pushPublisherSession) Notify session destroy
void	notifySessionClosed (PushPublishRTMPNetConnectionSession pushPublisherSession) Notify session closed
void	notifySessionIdle (PushPublishRTMPNetConnectionSession pushPublisherSession) Notify session idle event
void	notifySessionOpened (PushPublishRTMPNetConnectionSession pushPublisherSession) Notify session opened

void	notifyStreamCreate (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params) Notify stream create
void	notifyStreamOnPlayStatus (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params) Notify OnPlayStatus
void	notifyStreamOnStatus (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params) Notify StreamOnStatus
void	notifyValidateSession (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	notifyValidateSessionResult (PushPublishRTMPNetConnectionSession pushPublisherSession, boolean result)
void	putOnMetadataItemToAdd (String name, AMFData value)
boolean	removeListener (IPushPublishRTMPNotify listener) remove IPushPublishRTMPNotify listener
void	removeSession (PushPublishRTMPNetConnectionSession sessionHolder) Remove session
void	resetConnection () Reset server connection
void	resetConnection (boolean noDelay) Reset server connection
String	resolveHostName () Resolve host name to connect to
void	sessionClosed (org.apache.mina.common.IoSession session) Internal callback
void	sessionOpened (org.apache.mina.common.IoSession session) Internal callback
void	setAkamaiOriginIp (String akamaiOriginIp) Set Akamai Origin IP
void	setAkamaiOriginPort (int akamaiOriginPort) Set Akamai Origin Port
void	setAkamaiPassword (String akamaiPassword) Set Akamai password
void	setAkamaiUserName (String akamaiUserName) Set Akamai user name
void	setAppInstance (IApplicationInstance appInstance) Set appInstance interface

void	<u>setBindAddress</u> (String bindAddress)
void	<u>setConnectionFlashVerion</u> (String connectionFlashVersion) Set Flash version used in connection metadata
void	<u>setConnectionFlashVersion</u> (String connectionFlashVersion) Set Flash version used in connection metadata
void	<u>setConnectionPageURL</u> (String connectionPageURL) Set Page URL used in connection metadata
void	<u>setConnectionQueryStr</u> (String connectionQueryStr) Set the connection query string
void	<u>setConnectionSwfURL</u> (String connectionSwfURL) Set SWF URL used in connection metadata
void	<u>setConnectionTimeout</u> (int connectionTimeout) Set the connection timeout (milliseconds)
void	<u>setConnectLastAttempt</u> (long connectLastAttempt) Set timestamp of last connection attempt
void	<u>setConnectLastSuccess</u> (long connectLastSuccess) Set timestamp of last successful connection
void	<u>setDebugLog</u> (boolean debugLog) Set debug logging
void	<u>setDebugPackets</u> (boolean debugPackets) Set to true to log every packet being sent
void	<u>setDstAppInstanceName</u> (String dstAppInstanceName) Set destination appInstance name
void	<u>setDstApplicationName</u> (String dstApplicationName) Set destination application name
void	<u>setDstStreamName</u> (String dstStreamName) Set destination stream name
void	<u>setHowToPublish</u> (String howToPublish) Set the howToPublish string (valid values are "live", "record" and "append")
void	<u>setOnMetadataFilter</u> (long onMetadataFilter)
void	<u>setOnMetadataToSetDataFrame</u> (boolean onMetadataToSetDataFrame) If true all onMetadata events are converted to @setDataFrame calls
void	<u>setOriginalTimecodeThreshold</u> (long originalTimecodeThreshold) Set the original timecode threshold.
void	<u>setOriginalTimecodeThreshold</u> (String i)
void	<u>setPort</u> (int port) Set destination server port

void	<u>setQueryString</u> (String queryString) Set the queryString, as set in the map file
void	<u>setRemoveDefaultAppInstance</u> (boolean removeDefaultAppInstance) If true and destination application instance is <code>_definst_</code> then the application instance name will not be sent to the remove server as part of the connection information.
void	<u>setResetOnTimecodeOutOfOrder</u> (boolean resetOnTimecodeOutOfOrder) Set to true if you wish push to reset if timecodes jump out of order.
void	<u>setRTMPAuthProvider</u> (<u>IPushPublishRTMPAuthProvider</u> rtmpAuthProvider) Set RTMP authentication provider
void	<u>setSecureTokenSharedSecret</u> (String secureTokenSharedSecret) Set SecureToken shared secret
void	<u>setSendFCAnnounce</u> (boolean sendFCAnnounce) If true call FCAnnounce(streamName) after connecting to server
void	<u>setSendFCPublish</u> (boolean sendFCPublish) If true call FCPublish(streamName) after connecting to server
void	<u>setSendOnMetadata</u> (boolean sendOnMetadata) True if sending onMetadata event at start of stream
void	<u>setSendOriginalTimecodes</u> (boolean sendOriginalTimecodes) true if sending the original timecodes of source stream.
void	<u>setSendReleaseStream</u> (boolean sendReleaseStream) If true call releaseStream(streamName) after connecting to server
void	<u>setSendStreamCloseCommands</u> (boolean sendStreamCloseCommands) If true will send FCUnpublish, closeStream, deleteStream on disconnect
void	<u>setSrcStreamBufferSize</u> (long srcStreamBufferSize) The amount of audio/video in milliseconds that must be available in the source streams buffer before push publishing will being.
void	<u>setSrcStreamName</u> (String srcStreamName) Set source stream name
void	<u>setSSL</u> (boolean isSSL)
void	<u>setStreamCloseWaitTime</u> (int streamCloseWaitTime) Set stream close timeout (milliseconds)
void	<u>setSyncPacketType</u> (int syncPacketType)
void	<u>setSyncTimecode</u> (long syncTimecode)
void	<u>setTimecodesOutOfOrderThreshold</u> (int timecodesOutOfOrderThreshold)
void	<u>setValidationFrequency</u> (long validationFrequency) Set connection validation frequency (millisecond).
void	<u>setWaitOnMetadataAudio</u> (boolean waitOnMetadataAudio) If true and waitOnMetadataAvailable, publishing will not start until onMetadata packet is populated with audio data.

void	setWaitOnMetadataAudioDatarate (boolean waitOnMetadataAudioDatarate)
void	setWaitOnMetadataAvailable (boolean waitOnMetadataAvailable) Set to true to turn on system that will monitor onMetadata packet and wait for it to be populated before it starts sending the stream.
void	setWaitOnMetadataTimeout (long waitOnMetadataTimeout) Timeout (milliseconds) that the wait on onMetadata system will wait looking for video and audio data to be populated.
void	setWaitOnMetadataVideo (boolean waitOnMetadataVideo) If true and waitOnMetadataAvailable, publishing will not start until onMetadata packet is populated with video data.
void	setWaitOnMetadataVideoDatarate (boolean waitOnMetadataVideoDatarate)
void	tryToConnect (PushPublishRTMP.STATE connectionState) Try to connect to server

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [handleParentStreamDisconnect](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugLog](#), [isExternalRedundancy](#), [isParent](#), [isTargetedStream](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugLog](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateUsageTracker](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProfileUtil](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [handleParentStreamDisconnect](#), [init](#), [isParent](#), [isTargetedStream](#), [resetConnection](#), [setDebugLog](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Fields

(continued from last page)

CLASS

```
public static final java.lang.Class CLASS
```

CLASSNAME

```
public static final java.lang.String CLASSNAME
```

Constant value: **PushPublishRTMP**

CURRENTFMLEVERSION

```
public static final java.lang.String CURRENTFMLEVERSION
```

Constant value: **FMLE/3.0 (compatible; FMSc/1.0)**

CURRENTFLASHVERSION

```
public static final java.lang.String CURRENTFLASHVERSION
```

Constant value: **WIN 10,0,12,36**

rtmpDebugLog

```
protected boolean rtmpDebugLog
```

debugLogLastPacketCount

```
protected long debugLogLastPacketCount
```

debugPackets

```
protected boolean debugPackets
```

netconnectToSessionHolder

```
protected java.util.Map netconnectToSessionHolder
```

ioSessionToSessionHolder

```
protected java.util.Map ioSessionToSessionHolder
```

(continued from last page)

sessionOrderprotected java.util.List **sessionOrder**

listenersprotected java.util.List **listeners**

dstApplicationNameprotected java.lang.String **dstApplicationName**

dstAppInstanceNameprotected java.lang.String **dstAppInstanceName**

lockprotected java.lang.Object **lock**

howToPublishprotected java.lang.String **howToPublish**

sendFCPublishprotected boolean **sendFCPublish**

sendFCAnnounceprotected boolean **sendFCAnnounce**

sendReleaseStreamprotected boolean **sendReleaseStream**

sendStreamCloseCommandsprotected boolean **sendStreamCloseCommands**

(continued from last page)

sendOnMetadata

protected boolean **sendOnMetadata**

onMetadataToSetDataFrame

protected boolean **onMetadataToSetDataFrame**

onMetadataFilter

protected long **onMetadataFilter**

onMetadataItemsToRemove

protected java.util.List **onMetadataItemsToRemove**

onMetadataItemsToAdd

protected java.util.Map **onMetadataItemsToAdd**

timecodesOutOfOrderThreshold

protected int **timecodesOutOfOrderThreshold**

tryConnect

protected boolean **tryConnect**

isReconnectorRunning

protected boolean **isReconnectorRunning**

connectionQueryStr

protected java.lang.String **connectionQueryStr**

(continued from last page)

queryStringprotected java.lang.String **queryString**

connectionFlashVersionprotected java.lang.String **connectionFlashVersion**

connectionSwfURLprotected java.lang.String **connectionSwfURL**

connectionPageURLprotected java.lang.String **connectionPageURL**

secureTokenSharedSecretprotected java.lang.String **secureTokenSharedSecret**

akamaiUserNameprotected java.lang.String **akamaiUserName**

akamaiPasswordprotected java.lang.String **akamaiPassword**

akamaiOriginIpprotected java.lang.String **akamaiOriginIp**

akamaiOriginPortprotected java.lang.Integer **akamaiOriginPort**

validationFrequencyprotected long **validationFrequency**

(continued from last page)

sendOriginalTimecodes

protected boolean **sendOriginalTimecodes**

originalTimecodeThreshold

protected long **originalTimecodeThreshold**

connectionTimeout

protected int **connectionTimeout**

connectLastAttempt

protected long **connectLastAttempt**

connectLastSuccess

protected long **connectLastSuccess**

connectionResetCount

protected long **connectionResetCount**

connectionState

protected com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP.STATE
connectionState

doSendOnMetaData

protected boolean **doSendOnMetaData**

removeDefaultAppInstance

protected boolean **removeDefaultAppInstance**

(continued from last page)

resetOnTimecodeOutOfOrderprotected boolean **resetOnTimecodeOutOfOrder**

sendStreamCloseCommandsSendTimeprotected long **sendStreamCloseCommandsSendTime**

streamCloseWaitTimeprotected int **streamCloseWaitTime**

lastIdleReadTimeprotected long **lastIdleReadTime**

lastIdleWriteTimeprotected long **lastIdleWriteTime**

totalPacketsSentprotected long **totalPacketsSent**

lastVideoTCprotected long **lastVideoTC**

lastAudioTCprotected long **lastAudioTC**

lastDataTCprotected long **lastDataTC**

packetsSentAudioprotected long **packetsSentAudio**

(continued from last page)

packetsSentVideo

protected long **packetsSentVideo**

packetsSentData

protected long **packetsSentData**

waitOnMetadataAvailable

protected boolean **waitOnMetadataAvailable**

waitOnMetadataVideo

protected boolean **waitOnMetadataVideo**

waitOnMetadataVideoDatarate

protected boolean **waitOnMetadataVideoDatarate**

waitOnMetadataAudio

protected boolean **waitOnMetadataAudio**

waitOnMetadataAudioDatarate

protected boolean **waitOnMetadataAudioDatarate**

waitOnMetadataTimeout

protected long **waitOnMetadataTimeout**

waitOnMetadataReady

protected boolean **waitOnMetadataReady**

(continued from last page)

waitOnMetadataStartimeprotected long **waitOnMetadataStartime**

srcStreamBufferSizeprotected long **srcStreamBufferSize**

bindAddressprotected java.lang.String **bindAddress**

rtmpAuthProviderprotected com.wowza.wms.pushpublish.protocol.rtmp.IPushPublishRTMPAuthProvider
rtmpAuthProvider

connectMetaDataprotected java.util.Map **connectMetaData**

offlineTimepublic long **offlineTime**

onlineTimepublic long **onlineTime**

outprintpublic int **outprint**

bytesAvgpublic float **bytesAvg**

isSSLprotected boolean **isSSL**

(continued from last page)

usePingPong

protected boolean **usePingPong**

pingPongListenerRegistered

protected boolean **pingPongListenerRegistered**

syncTimecode

protected long **syncTimecode**

syncPacketType

protected int **syncPacketType**

Constructors

PushPublishRTMP

public **PushPublishRTMP**()

Methods

getNetConnection

public [INetConnection](#) **getNetConnection**()

Get the underlying INetConnection interface for this session

Returns:

INetConnection interface for this session

getLock

public Object **getLock**()

Get the synchronization lock

Returns:

synchronization lock

getConnectionTimeout

public int **getConnectionTimeout**()

(continued from last page)

Get the connection timeout (milliseconds)

Returns:

connection timeout (milliseconds)

setConnectionTimeout

```
public void setConnectionTimeout(int connectionTimeout)
```

Set the connection timeout (milliseconds)

Parameters:

connectionTimeout - connection timeout (milliseconds)

getHowToPublish

```
public String getHowToPublish()
```

Get the howToPublish string (valid values are "live", "record" and "append")

Returns:

howToPublish string

setHowToPublish

```
public void setHowToPublish(String howToPublish)
```

Set the howToPublish string (valid values are "live", "record" and "append")

Parameters:

howToPublish - howToPublish string

isSendFCPublish

```
public boolean isSendFCPublish()
```

If true call FCPublish(streamName) after connecting to server

Returns:

true if calling FCPublish(streamName) after connecting to server

setSendFCPublish

```
public void setSendFCPublish(boolean sendFCPublish)
```

If true call FCPublish(streamName) after connecting to server

Parameters:

sendFCPublish - true if calling FCPublish(streamName) after connecting to server

isSendReleaseStream

```
public boolean isSendReleaseStream()
```

If true call releaseStream(streamName) after connecting to server

Returns:

true if calling releaseStream(streamName) after connecting to server

setSendReleaseStream

```
public void setSendReleaseStream(boolean sendReleaseStream)
```

If true call `releaseStream(streamName)` after connecting to server

Parameters:

`sendReleaseStream` - true if calling `releaseStream(streamName)` after connecting to server

getSessionListDebug

```
public String getSessionListDebug()
```

Get the list of active `IoSession` ids for this publishing session

Returns:

list of active `IoSession` ids for this publishing session

isCurrentSession

```
public boolean isCurrentSession(org.apache.mina.common.IoSession session)
```

Test to see if passed in session is current session

Parameters:

`session` - `IoSession` interface

Returns:

true if current session

getLastSession

```
public PushPublishRTMPNetConnectionSession getLastSession()
```

Get the last session interface

Returns:

last session interface

addSession

```
public void addSession(PushPublishRTMPNetConnectionSession sessionHolder)
```

Add session

Parameters:

`sessionHolder` - session holder

removeSession

```
public void removeSession(PushPublishRTMPNetConnectionSession sessionHolder)
```

Remove session

Parameters:

`sessionHolder` - session holder

getSessionHolderBySession

```
public PushPublishRTMPNetConnectionSession  
getSessionHolderBySession(org.apache.mina.common.IoSession session)
```

Get session holder by IoSession

Parameters:

session - IoSession

Returns:

session holder

getSessionHolderByNetConnection

```
public PushPublishRTMPNetConnectionSession  
getSessionHolderByNetConnection(INetConnection netConnection)
```

Get the session holder by INetConnection interface

Parameters:

netConnection - INetConnection interface

Returns:

session holder

sessionOpened

```
public void sessionOpened(org.apache.mina.common.IoSession session)
```

Internal callback

Parameters:

session - IoSession

sessionClosed

```
public void sessionClosed(org.apache.mina.common.IoSession session)
```

Internal callback

Parameters:

session - IoSession

tryToConnect

```
protected void tryToConnect(PushPublishRTMP.STATE connectionState)
```

Try to connect to server

resetConnection

```
public void resetConnection()
```

Reset server connection

(continued from last page)

resetConnection

```
public void resetConnection(boolean noDelay)
```

Reset server connection

Parameters:

noDelay - if true reset immediately

getContextStr

```
public String getContextStr()
```

Get the connection details

Returns:

connection details

resolveHostName

```
protected String resolveHostName()
```

Resolve host name to connect to

Returns:

hostname

internalConnect

```
protected org.apache.mina.common.Session
```

```
internalConnect(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

Internal connect method

Parameters:

pushPublisherSession - session holder

Returns:

Io session

getConnectionQueryStr

```
public String getConnectionQueryStr()
```

Get the connection query string

Returns:

connection query string

setConnectionQueryStr

```
public void setConnectionQueryStr(String connectionQueryStr)
```

Set the connection query string

Parameters:

connectionQueryStr - connection query string

getQueryString

```
public String getQueryString()
```

Get the queryString

Parameters:

queryString

setQueryString

```
public void setQueryString(String queryString)
```

Set the queryString, as set in the map file

Parameters:

queryString

connect

```
public void connect()
```

Connect to server

callConnect

```
protected void callConnect(PushPublishRTMPNetConnectionSession pushPublisherSession,  
String addQueryStr)
```

Internal connect

Parameters:

pushPublisherSession - session holder

addQueryStr - additional query params

getAkamaiSessionKey

```
public String getAkamaiSessionKey(String sessionId)
```

Get Akamai session key

Parameters:

sessionId - session Id

Returns:

Akamai session key

getConnectionFlashVerion

```
public String getConnectionFlashVerion()
```

Get Flash version used in connection metadata

Returns:

Flash version used in connection metadata

(continued from last page)

getConnectionFlashVersion

```
public String getConnectionFlashVersion()
```

Get Flash version used in connection metadata

Returns:

Flash version used in connection metadata

setConnectionFlashVersion

```
public void setConnectionFlashVersion(String connectionFlashVersion)
```

Set Flash version used in connection metadata

Parameters:

connectionFlashVersion - Flash version used in connection metadata

setConnectionFlashVerion

```
public void setConnectionFlashVerion(String connectionFlashVersion)
```

Set Flash version used in connection metadata

Parameters:

connectionFlashVersion - Flash version used in connection metadata

getConnectionSwfURL

```
public String getConnectionSwfURL()
```

Get SWF URL used in connection metadata

Returns:

SWF URL used in connection metadata

setConnectionSwfURL

```
public void setConnectionSwfURL(String connectionSwfURL)
```

Set SWF URL used in connection metadata

Parameters:

connectionSwfURL - SWF URL used in connection metadata

getConnectionPageURL

```
public String getConnectionPageURL()
```

Get Page URL used in connection metadata

Returns:

Page URL used in connection metadata

setConnectionPageURL

```
public void setConnectionPageURL(String connectionPageURL)
```

(continued from last page)

Set Page URL used in connection metadata

Parameters:

connectionPageURL - Page URL used in connection metadata

getSecureTokenSharedSecret

```
public String getSecureTokenSharedSecret()
```

Get SecureToken shared secret

Returns:

SecureToken shared secret

setSecureTokenSharedSecret

```
public void setSecureTokenSharedSecret(String secureTokenSharedSecret)
```

Set SecureToken shared secret

Parameters:

secureTokenSharedSecret - SecureToken shared secret

getAkamaiUserName

```
public String getAkamaiUserName()
```

Get Akamai user name

Returns:

Akamai user name

setAkamaiUserName

```
public void setAkamaiUserName(String akamaiUserName)
```

Set Akamai user name

Parameters:

akamaiUserName - Akamai user name

getAkamaiPassword

```
public String getAkamaiPassword()
```

Get Akamai password

Returns:

Akamai password

setAkamaiPassword

```
public void setAkamaiPassword(String akamaiPassword)
```

Set Akamai password

Parameters:

akamaiPassword - Akamai password

getAkamaiOriginIp

```
public String getAkamaiOriginIp()
```

Get Akamai Origin IP

Returns:

Akamai Origin IP

setAkamaiOriginIp

```
public void setAkamaiOriginIp(String akamaiOriginIp)
```

Set Akamai Origin IP

Parameters:

akamaiOriginIp - Akamai Origin IP

getAkamaiOriginPort

```
public int getAkamaiOriginPort()
```

Get Akamai Origin Port

Returns:

Akamai Origin Port

setAkamaiOriginPort

```
public void setAkamaiOriginPort(int akamaiOriginPort)
```

Set Akamai Origin Port

Parameters:

akamaiOriginPort - Akamai Origin Port

isSendFCAnnounce

```
public boolean isSendFCAnnounce()
```

If true call FCAnnounce(streamName) after connecting to server

Returns:

true if calling FCAnnounce(streamName) after connecting to server

setSendFCAnnounce

```
public void setSendFCAnnounce(boolean sendFCAnnounce)
```

If true call FCAnnounce(streamName) after connecting to server

Parameters:

sendFCAnnounce - true if calling FCAnnounce(streamName) after connecting to server

getValidationFrequency

```
public long getValidationFrequency()
```

(continued from last page)

Get connection validation frequency (millisecond). Zero to turn off validation.

Returns:

connection validation frequency (millisecond)

setValidationFrequency

```
public void setValidationFrequency(long validationFrequency)
```

Set connection validation frequency (millisecond). Zero to turn off validation.

Parameters:

validationFrequency - connection validation frequency (millisecond)

addListener

```
public void addListener(IPushPublishRTMPNotify listener)
```

Add IPushPublishRTMPNotify listener

Parameters:

listener - IPushPublishRTMPNotify listener

removeListener

```
public boolean removeListener(IPushPublishRTMPNotify listener)
```

remove IPushPublishRTMPNotify listener

Parameters:

listener - IPushPublishRTMPNotify listener

Returns:

true if removed

getLocalListeners

```
protected java.util.List getLocalListeners()
```

Get a list of IPushPublishRTMPNotify listeners

Returns:

list of IPushPublishRTMPNotify listeners

notifyConnectStart

```
protected void notifyConnectStart(PushPublishRTMPNetConnectionSession  
pushPublisherSession)
```

Notify connect start

Parameters:

pushPublisherSession - session holder

notifyConnectSuccess

```
protected void notifyConnectSuccess(PushPublishRTMPNetConnectionSession  
pushPublisherSession)
```

(continued from last page)

Notify connect success

Parameters:

pushPublisherSession - session holder

notifyConnectFailure

protected void **notifyConnectFailure**([PushPublishRTMPNetConnectionSession](#)
pushPublisherSession)

Notify connect failure

Parameters:

pushPublisherSession - session holder

notifyHandshakeResult

protected void **notifyHandshakeResult**([PushPublishRTMPNetConnectionSession](#)
pushPublisherSession,
com.wowza.wms.request.RequestFunction function,
[AMFDataList](#) params)

Notify handshake result

Parameters:

pushPublisherSession - session holder

function - function

params - params

notifyAkamaiSetChallenge

protected void **notifyAkamaiSetChallenge**([PushPublishRTMPNetConnectionSession](#)
pushPublisherSession,
com.wowza.wms.request.RequestFunction function,
[AMFDataList](#) params)

Notify Akamai SetChallenge

Parameters:

pushPublisherSession - session holder

function - function

params - params

notifyAkamaiSetOriginConnectionInfo

protected void **notifyAkamaiSetOriginConnectionInfo**([PushPublishRTMPNetConnectionSession](#)
pushPublisherSession,
com.wowza.wms.request.RequestFunction function,
[AMFDataList](#) params)

Notify Akamai SetOriginConnectionInfo

Parameters:

pushPublisherSession - session holder

function - function

params - params

(continued from last page)

notifyAkamaiClientLogin

```
protected void notifyAkamaiClientLogin(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Notify Akamai ClientLogin

Parameters:

pushPublisherSession - session holder
function - function
params - params

notifyFCPublish

```
protected void notifyFCPublish(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Notify FCPublish

Parameters:

pushPublisherSession - session holder
function - function
params - params

notifyFCAnnounce

```
protected void notifyFCAnnounce(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Notify FCAnnounce

Parameters:

pushPublisherSession - session holder
function - function
params - params

notifyConnect

```
protected void notifyConnect(PushPublishRTMPNetConnectionSession pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Notify connect

Parameters:

pushPublisherSession - session holder
function - function
params - params

(continued from last page)

notifyStreamCreate

```
protected void notifyStreamCreate(PushPublishRTMPNetConnectionSession  
pushPublisherSession,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Notify stream create

Parameters:

pushPublisherSession - session holder
function - function
params - params

notifyStreamOnPlayStatus

```
protected void notifyStreamOnPlayStatus(PushPublishRTMPNetConnectionSession  
pushPublisherSession,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Notify OnPlayStatus

Parameters:

pushPublisherSession - session holder
function - function
params - params

notifyStreamOnStatus

```
protected void notifyStreamOnStatus(PushPublishRTMPNetConnectionSession  
pushPublisherSession,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Notify StreamOnStatus

Parameters:

pushPublisherSession - session holder
function - function
params - params

notifyPublishHandlerPlay

```
protected void notifyPublishHandlerPlay(PushPublishRTMPNetConnectionSession  
pushPublisherSession,  
    java.io.OutputStream out,  
    long[] playSizes)
```

Notify publish handler play

Parameters:

pushPublisherSession - session holder
out - output stream
playSizes - play sizes

notifySessionIdle

```
protected void notifySessionIdle(PushPublishRTMPNetConnectionSession  
pushPublisherSession)
```

(continued from last page)

Notify session idle event

Parameters:

pushPublisherSession - session holder

notifySessionOpened

protected void **notifySessionOpened**([PushPublishRTMPNetConnectionSession](#)
pushPublisherSession)

Notify session opened

Parameters:

pushPublisherSession - session holder

notifySessionClosed

protected void **notifySessionClosed**([PushPublishRTMPNetConnectionSession](#)
pushPublisherSession)

Notify session closed

Parameters:

pushPublisherSession - session holder

notifyValidateSession

protected void **notifyValidateSession**([PushPublishRTMPNetConnectionSession](#)
pushPublisherSession)

notifyValidateSessionResult

protected void **notifyValidateSessionResult**([PushPublishRTMPNetConnectionSession](#)
pushPublisherSession,
boolean result)

notifyPushPublisherSessionCreate

protected void **notifyPushPublisherSessionCreate**([PushPublishRTMPNetConnectionSession](#)
pushPublisherSession)

Notify session create

Parameters:

pushPublisherSession - session holder

notifyPushPublisherSessionDestroy

protected void **notifyPushPublisherSessionDestroy**([PushPublishRTMPNetConnectionSession](#)
pushPublisherSession)

Notify session destroy

Parameters:

pushPublisherSession - session holder

getConnectLastAttempt

```
public long getConnectLastAttempt()
```

Get timestamp of last connection attempt

Returns:

timestamp of last connection attempt

setConnectLastAttempt

```
public void setConnectLastAttempt(long connectLastAttempt)
```

Set timestamp of last connection attempt

Parameters:

connectLastAttempt - timestamp of last connection attempt

bumpReconnectWaitTime

```
protected void bumpReconnectWaitTime()
```

Bump the reconnect wait time

getReconnectDelay

```
protected int getReconnectDelay(long currTime)
```

Get the reconnect delay

Parameters:

currTime - current timestamp

Returns:

delay in milliseconds

getConnectLastSuccess

```
public long getConnectLastSuccess()
```

Get timestamp of last successful connection

Returns:

timestamp of last successful connection

setConnectLastSuccess

```
public void setConnectLastSuccess(long connectLastSuccess)
```

Set timestamp of last successful connection

Parameters:

connectLastSuccess - timestamp of last successful connection

isSendOriginalTimecodes

```
public boolean isSendOriginalTimecodes()
```

(continued from last page)

true if sending the original timecodes of source stream. false if starting at zero.

Returns:

true if sending the original timecodes of source stream

setSendOriginalTimecodes

```
public void setSendOriginalTimecodes(boolean sendOriginalTimecodes)
```

true if sending the original timecodes of source stream. false if starting at zero.

Parameters:

sendOriginalTimecodes - true if sending the original timecodes of source stream

getOriginalTimecodeThreshold

```
public long getOriginalTimecodeThreshold()
```

Get the original timecode threshold. This value will attempt to reduce the magnitude of absolute timecodes while keeping multiple-bitrate alignment. It is probably best to set this value quite high to a value such as 0x100000. The value is in milliseconds. The following formula is used to calculate a timecode offset $\text{timecodeOffset} = \text{timecode} - (\text{timecode} \% \text{originalTimecodeThreshold})$;

Returns:

original timecode threshold

setOriginalTimecodeThreshold

```
public void setOriginalTimecodeThreshold(long originalTimecodeThreshold)
```

Set the original timecode threshold. This value will attempt to reduce the magnitude of absolute timecodes while keeping multiple-bitrate alignment. It is probably best to set this value quite high to a value such as 0x100000. The value is in milliseconds. The following formula is used to calculate a timecode offset $\text{timecodeOffset} = \text{timecode} - (\text{timecode} \% \text{originalTimecodeThreshold})$;

Parameters:

originalTimecodeThreshold - original timecode threshold

setOriginalTimecodeThreshold

```
public void setOriginalTimecodeThreshold(String i)
```

isDebugLog

```
public boolean isDebugLog()
```

Is debug logging turned on

Returns:

true if debug logging is turned on

setDebugLog

```
public void setDebugLog(boolean debugLog)
```

Set debug logging

(continued from last page)

Parameters:

debugLog - debug logging

getAppInstancepublic [IApplicationInstance](#) **getAppInstance**()

Get appInstance interface

Returns:

appInstance interface

setAppInstancepublic void **setAppInstance**([IApplicationInstance](#) appInstance)

Set appInstance interface

Parameters:

appInstance - appInstance interface

getSrcStreamNamepublic String **getSrcStreamName**()

Get source stream name

Returns:

source stream name

setSrcStreamNamepublic void **setSrcStreamName**(String srcStreamName)

Set source stream name

Parameters:

srcStreamName - source stream name

getDstStreamNamepublic String **getDstStreamName**()

Get destination stream name

Returns:

destination stream name

setDstStreamNamepublic void **setDstStreamName**(String dstStreamName)

Set destination stream name

Parameters:

dstStreamName - destination stream name

(continued from last page)

getPort

```
public int getPort()
```

Get destination server port

Returns:

destination server port

setPort

```
public void setPort(int port)
```

Set destination server port

Parameters:

port - destination server port

getDstApplicationName

```
public String getDstApplicationName()
```

Get destination application name

Returns:

destination application name

setDstApplicationName

```
public void setDstApplicationName(String dstApplicationName)
```

Set destination application name

Parameters:

dstApplicationName - destination application name

getDstAppInstanceName

```
public String getDstAppInstanceName()
```

Get destination appInstance name

Returns:

destination appInstance name

setDstAppInstanceName

```
public void setDstAppInstanceName(String dstAppInstanceName)
```

Set destination appInstance name

Parameters:

dstAppInstanceName - destination appInstance name

getRTMPAuthProvider

```
public IPushPublishRTMPAuthProvider getRTMPAuthProvider()
```

(continued from last page)

Get RTMP authentication provider

Returns:

RTMP authentication provider

setRTMPAuthProvider

```
public void setRTMPAuthProvider(IPushPublishRTMPAuthProvider rtmpAuthProvider)
```

Set RTMP authentication provider

Parameters:

rtmpAuthProvider - RTMP authentication provider

isSendOnMetadata

```
public boolean isSendOnMetadata()
```

True if sending onMetadata event at start of stream

Returns:

True if sending onMetadata event at start of stream

setSendOnMetadata

```
public void setSendOnMetadata(boolean sendOnMetadata)
```

True if sending onMetadata event at start of stream

Parameters:

sendOnMetadata - True if sending onMetadata event at start of stream

isRemoveDefaultAppInstance

```
public boolean isRemoveDefaultAppInstance()
```

If true and destination application instance is `_definst_` then the application instance name will not be sent to the remove server as part of the connection information.

Returns:

true if omitting `_definst_`

setRemoveDefaultAppInstance

```
public void setRemoveDefaultAppInstance(boolean removeDefaultAppInstance)
```

If true and destination application instance is `_definst_` then the application instance name will not be sent to the remove server as part of the connection information.

Parameters:

removeDefaultAppInstance - true if omitting `_definst_`

isOnMetadataToSetDataFrame

```
public boolean isOnMetadataToSetDataFrame()
```

If true all onMetadata events are converted to `@setDataFrame` calls

Returns:

(continued from last page)

true all onMetadata events are converted to @setDataFrame calls

setOnMetadataToSetDataFrame

```
public void setOnMetadataToSetDataFrame(boolean onMetadataToSetDataFrame)
```

If true all onMetadata events are converted to @setDataFrame calls

Parameters:

onMetadataToSetDataFrame - true all onMetadata events are converted to @setDataFrame calls

isSendStreamCloseCommands

```
public boolean isSendStreamCloseCommands()
```

If true will send FCUnpublish, closeStream, deleteStream on disconnect

Returns:

true will send close commands

setSendStreamCloseCommands

```
public void setSendStreamCloseCommands(boolean sendStreamCloseCommands)
```

If true will send FCUnpublish, closeStream, deleteStream on disconnect

Parameters:

sendStreamCloseCommands - true will send close commands

convertDataEventToAMFData

```
public AMFDataList convertDataEventToAMFData(AMFPacket packet)
```

convertOnMetadataToSetDataFrame

```
public AMFPacket convertOnMetadataToSetDataFrame(AMFPacket packet)
```

filterOnMetadataEvent

```
public AMFPacket filterOnMetadataEvent(AMFPacket packet,  
    long flags,  
    java.util.List itemsToRemove,  
    java.util.Map itemsToAdd)
```

getStreamCloseWaitTime

```
public int getStreamCloseWaitTime()
```

Get stream close timeout (milliseconds)

Returns:

stream close timeout (milliseconds)

setStreamCloseWaitTime

```
public void setStreamCloseWaitTime(int streamCloseWaitTime)
```

Set stream close timeout (milliseconds)

Parameters:

streamCloseWaitTime - stream close timeout (milliseconds)

disconnect

```
public void disconnect()
```

Disconnect from server

disconnect

```
public void disconnect(boolean hard)
```

isFlashVerionFMLE

```
public static boolean isFlashVerionFMLE(String flashVersion)
```

Returns true if the Flash player version string is a Flash Media Live Encoder version (start with FMLE/ or FME/)

Parameters:

flashVersion - true if Flash Media Live Encoder version

Returns:

true if flash

isFlashVersionFMLE

```
public static boolean isFlashVersionFMLE(String flashVersion)
```

Returns true if the Flash player version string is a Flash Media Live Encoder version (start with FMLE/ or FME/)

Parameters:

flashVersion - true if Flash Media Live Encoder version

Returns:

true if flash

isDebugPackets

```
public boolean isDebugPackets()
```

Set to true to log every packet being sent

Returns:

true to log every packet being sent

setDebugPackets

```
public void setDebugPackets(boolean debugPackets)
```

(continued from last page)

Set to true to log every packet being sent

Parameters:

`debugPackets` - true to log every packet being sent

getTotalPacketsSent

```
public long getTotalPacketsSent()
```

Get total number of packets sent during push publishing session

Returns:

total number of packets sent during push publishing session

isResetOnTimecodeOutOfOrder

```
public boolean isResetOnTimecodeOutOfOrder()
```

Set to true if you wish push to reset if timecodes jump out of order.

Returns:

true if you wish push to reset if timecodes jump out of order

setResetOnTimecodeOutOfOrder

```
public void setResetOnTimecodeOutOfOrder(boolean resetOnTimecodeOutOfOrder)
```

Set to true if you wish push to reset if timecodes jump out of order.

Parameters:

`resetOnTimecodeOutOfOrder` - true if you wish push to reset if timecodes jump out of order

getTimecodesOutOfOrderThreshold

```
public int getTimecodesOutOfOrderThreshold()
```

setTimecodesOutOfOrderThreshold

```
public void setTimecodesOutOfOrderThreshold(int timecodesOutOfOrderThreshold)
```

getLastVideoTC

```
public long getLastVideoTC()
```

Get the absolute timecode of the last sent video packet (milliseconds)

Returns:

absolute timecode of the last sent video packet (milliseconds)

getLastAudioTC

```
public long getLastAudioTC()
```

Get the absolute timecode of the last sent audio packet (milliseconds)

(continued from last page)

Returns:

absolute timecode of the last sent audio packet (milliseconds)

getLastDataTC

```
public long getLastDataTC()
```

Get the absolute timecode of the last sent data packet (milliseconds)

Returns:

absolute timecode of the last sent data packet (milliseconds)

isWaitOnMetadataAvailable

```
public boolean isWaitOnMetadataAvailable()
```

Set to true to turn on system that will monitor onMetadata packet and wait for it to be populated before it starts sending the stream. Default is true. If stream is audio or video only, be sure to use `setWaitOnMetadataVideo` and `setWaitOnMetadataAudio` to properly turn off the channel you are not using or the system will always timeout.

Returns:

true to turn on system that will monitor onMetadata packet

setWaitOnMetadataAvailable

```
public void setWaitOnMetadataAvailable(boolean waitOnMetadataAvailable)
```

Set to true to turn on system that will monitor onMetadata packet and wait for it to be populated before it starts sending the stream. Default is true. If stream is audio or video only, be sure to use `setWaitOnMetadataVideo` and `setWaitOnMetadataAudio` to properly turn off the channel you are not using or the system will always timeout.

Parameters:`waitOnMetadataAvailable` - true to turn on system that will monitor onMetadata packet

isWaitOnMetadataVideo

```
public boolean isWaitOnMetadataVideo()
```

If true and `waitOnMetadataAvailable`, publishing will not start until onMetadata packet is populated with video data.

Returns:

publishing will not start until onMetadata packet is populated with video data

setWaitOnMetadataVideo

```
public void setWaitOnMetadataVideo(boolean waitOnMetadataVideo)
```

If true and `waitOnMetadataAvailable`, publishing will not start until onMetadata packet is populated with video data.

Parameters:`waitOnMetadataVideo` - publishing will not start until onMetadata packet is populated with video data

isWaitOnMetadataAudio

```
public boolean isWaitOnMetadataAudio()
```

If true and `waitOnMetadataAvailable`, publishing will not start until onMetadata packet is populated with audio data.

(continued from last page)

Returns:

publishing will not start until onMetadata packet is populated with audio data

setWaitOnMetadataAudio

```
public void setWaitOnMetadataAudio(boolean waitOnMetadataAudio)
```

If true and waitOnMetadataAvailable, publishing will not start until onMetadata packet is populated with audio data.

Parameters:

waitOnMetadataAudio - publishing will not start until onMetadata packet is populated with audio data

getWaitOnMetadataTimeout

```
public long getWaitOnMetadataTimeout()
```

Timeout (milliseconds) that the wait on onMetadata system will wait looking for video and audio data to be populated.

Returns:

timeout (milliseconds) that the wait on onMetadata system will wait looking for video and audio data to be populated

setWaitOnMetadataTimeout

```
public void setWaitOnMetadataTimeout(long waitOnMetadataTimeout)
```

Timeout (milliseconds) that the wait on onMetadata system will wait looking for video and audio data to be populated.

Parameters:

waitOnMetadataTimeout - timeout (milliseconds) that the wait on onMetadata system will wait looking for video and audio data to be populated

isWaitOnMetadataVideoDatarate

```
public boolean isWaitOnMetadataVideoDatarate()
```

setWaitOnMetadataVideoDatarate

```
public void setWaitOnMetadataVideoDatarate(boolean waitOnMetadataVideoDatarate)
```

isWaitOnMetadataAudioDatarate

```
public boolean isWaitOnMetadataAudioDatarate()
```

setWaitOnMetadataAudioDatarate

```
public void setWaitOnMetadataAudioDatarate(boolean waitOnMetadataAudioDatarate)
```

getSrcStreamBufferSize

```
public long getSrcStreamBufferSize()
```

(continued from last page)

The amount of audio/video in milliseconds that must be available in the source streams buffer before push publishing will be being.

Returns:

amount of audio/video in milliseconds that must be available

setSrcStreamBufferSize

```
public void setSrcStreamBufferSize(long srcStreamBufferSize)
```

The amount of audio/video in milliseconds that must be available in the source streams buffer before push publishing will be being.

Parameters:

srcStreamBufferSize - amount of audio/video in milliseconds that must be available

addConnectMetaData

```
public void addConnectMetaData(String key,  
    AMFData value)
```

Added metadata values to the connect metadata object

Parameters:

key - key
value - AMFDataObj value

createPushPublishSession

```
public IPushPublishSession createPushPublishSession()
```

getPacketsSentAudio

```
public long getPacketsSentAudio()
```

getPacketsSentVideo

```
public long getPacketsSentVideo()
```

getPacketsSentData

```
public long getPacketsSentData()
```

isSSL

```
public boolean isSSL()
```

(continued from last page)

setSSL

```
public void setSSL(boolean isSSL)
```

getBindAddress

```
public String getBindAddress()
```

setBindAddress

```
public void setBindAddress(String bindAddress)
```

getConnectedState

```
public int getConnectedState()
```

getProfileUtil

```
public IPushPublishProfileUtil getProfileUtil()
```

getMessagesAttemptedCount

```
public long getMessagesAttemptedCount()
```

getMessagesRetriedCount

```
public long getMessagesRetriedCount()
```

getMessagesFailedCount

```
public long getMessagesFailedCount()
```

getSyncTimecode

```
public long getSyncTimecode()
```

setSyncTimecode

```
public void setSyncTimecode(long syncTimecode)
```

(continued from last page)

getSyncPacketType

```
public int getSyncPacketType()
```

setSyncPacketType

```
public void setSyncPacketType(int syncPacketType)
```

getOnMetadataFilter

```
public long getOnMetadataFilter()
```

setOnMetadataFilter

```
public void setOnMetadataFilter(long onMetadataFilter)
```

addOnMetadataItemToRemove

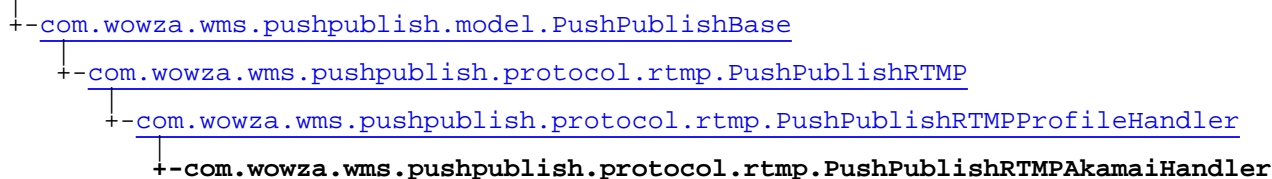
```
public void addOnMetadataItemToRemove(String name)
```

putOnMetadataItemToAdd

```
public void putOnMetadataItemToAdd(String name,  
    AMFData value)
```

com.wowza.wms.pushpublish.protocol.rtmp Class PushPublishRTMPAkamaiHandler

java.lang.Object



All Implemented Interfaces:

[IPushPublish](#)

public class **PushPublishRTMPAkamaiHandler**

extends [PushPublishRTMPProfileHandler](#)

Field Summary

public static final	CLASS
public static final	CLASSNAME Value: PushPublishRTMPAkamaiHandler
protected	SendToBackupServer The is backup.

Fields inherited from class [com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPProfileHandler](#)

[CLASS](#), [CLASSNAME](#), [streamId](#)

Fields inherited from class [com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP](#)

[akamaiOriginIp](#), [akamaiOriginPort](#), [akamaiPassword](#), [akamaiUserName](#), [bindAddress](#), [bytesAvg](#), [CLASS](#), [CLASSNAME](#), [connectionFlashVersion](#), [connectionPageURL](#), [connectionQueryStr](#), [connectionResetCount](#), [connectionState](#), [connectionSwfURL](#), [connectionTimeout](#), [connectLastAttempt](#), [connectLastSuccess](#), [connectMetaData](#), [CURRENTFLASHVERSION](#), [CURRENTFMLEVERSION](#), [debugLogLastPacketCount](#), [debugPackets](#), [doSendOnMetaData](#), [dstAppInstanceName](#), [dstApplicationName](#), [howToPublish](#), [ioSessionToSessionHolder](#), [isReconnectorRunning](#), [isSSL](#), [lastAudioTC](#), [lastDataTC](#), [lastIdleReadTime](#), [lastIdleWriteTime](#), [lastVideoTC](#), [listeners](#), [lock](#), [netconnectToSessionHolder](#), [offlineTime](#), [onlineTime](#), [onMetadataFilter](#), [onMetadataItemsToAdd](#), [onMetadataItemsToRemove](#), [onMetadataToSetDataFrame](#), [originalTimecodeThreshold](#), [outprint](#), [packetsSentAudio](#), [packetsSentData](#), [packetsSentVideo](#), [pingPongListenerRegistered](#), [queryString](#), [removeDefaultAppInstance](#), [resetOnTimecodeOutOfOrder](#), [rtmpAuthProvider](#), [rtmpDebugLog](#), [secureTokenSharedSecret](#), [sendFCAnnounce](#), [sendFCPublish](#), [sendOnMetadata](#), [sendOriginalTimecodes](#), [sendReleaseStream](#), [sendStreamCloseCommands](#), [sendStreamCloseCommandsSendTime](#), [sessionOrder](#), [srcStreamBufferSize](#), [streamCloseWaitTime](#), [syncPacketType](#), [syncTimecode](#), [timecodesOutOfOrderThreshold](#), [totalPacketsSent](#), [tryConnect](#), [usePingPong](#), [validationFrequency](#), [waitOnMetadataAudio](#), [waitOnMetadataAudioDataRate](#), [waitOnMetadataAvailable](#), [waitOnMetadataReady](#), [waitOnMetadataStartime](#), [waitOnMetadataTimeout](#), [waitOnMetadataVideo](#), [waitOnMetadataVideoDataRate](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishRTMPAkamaiHandler()
--------	--

Method Summary

String	createAkamaiStreamName (String dstStreamName, IMediaStream stream)
String	getStreamAngle ()
String	getStreamBandWidth ()
void	init (IApplicationInstance appInstance2, String streamName, IMediaStream stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean debug)
void	load (java.util.HashMap dataMap)
void	setAkamaiOriginIp (String akamaiOriginIp) Set Akamai Origin IP.
void	setAkamaiOriginPort (String akamaiOriginPort)
void	setAkamaiPassword (String string)
void	setAkamaiStreamId (String id) Sets the akamai stream id.
void	setAkamaiUserName (String string)
void	setPassword (String password)
void	setStreamAngle (String streamAngleIn)
void	setStreamBandWidth (String streamBandWidth)

void	setStreamId (String id)
void	setUserName (String userName)

Methods inherited from class[com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPProfileHandler](#)

[getDstAppInstanceName](#), [getDstApplicationName](#), [getLocalBindAddress](#), [init](#), [isDebugLog](#), [isDebugPackets](#), [isUsePingPong](#), [load](#), [setApplication](#), [setConnectionFlashVersion](#), [setConnectionInfoPageURL](#), [setConnectionInfoQueryString](#), [setConnectionInfoSwfURL](#), [setConnectionTimeout](#), [setConnectLastAttempt](#), [setConnectLastSuccess](#), [setDebugPackets](#), [setDebugPackets](#), [setDstAppInstanceName](#), [setDstApplicationName](#), [setDstStreamName](#), [setHowToPublish](#), [setlocalBindAddress](#), [setOnMetadataToSetDataFrame](#), [setOriginalTimecodeThreshold](#), [setQueryString](#), [setReconnectWaitTime](#), [setRemoveDefaultAppInstance](#), [setResetOnTimecodeOutOfOrder](#), [setSecureTokenSharedSecret](#), [setSendFCAnnounce](#), [setSendFCPublish](#), [setSendOnMetadata](#), [setSendOriginalTimecodes](#), [setSendReleaseStream](#), [setSendStreamCloseCommands](#), [setSSL](#), [setStreamCloseWaitTime](#), [setTimecodesOutOfOrderThreshold](#), [setUsePingPong](#), [setUsePingPong](#), [setValidationFrequency](#), [setWaitOnMetadataAudio](#), [setWaitOnMetadataAudioDatarate](#), [setWaitOnMetadataAvailable](#), [setWaitOnMetadataTimeout](#), [setWaitOnMetadataVideo](#), [setWaitOnMetadataVideoDatarate](#)

Methods inherited from class [com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP](#)

[addConnectMetaData](#), [addListener](#), [addOnMetadataItemToRemove](#), [addSession](#), [bumpReconnectWaitTime](#), [callConnect](#), [connect](#), [convertDataEventToAMFData](#), [convertOnMetadataToSetDataFrame](#), [createPushPublishSession](#), [disconnect](#), [disconnect](#), [filterOnMetadataEvent](#), [getAkamaiOriginIp](#), [getAkamaiOriginPort](#), [getAkamaiPassword](#), [getAkamaiSessionKey](#), [getAkamaiUserName](#), [getAppInstance](#), [getBindAddress](#), [getConnectedState](#), [getConnectionFlashVerion](#), [getConnectionFlashVersion](#), [getConnectionPageURL](#), [getConnectionQueryStr](#), [getConnectionSwfURL](#), [getConnectionTimeout](#), [getConnectLastAttempt](#), [getConnectLastSuccess](#), [getContextStr](#), [getDstAppInstanceName](#), [getDstApplicationName](#), [getDstStreamName](#), [getHowToPublish](#), [getLastAudioTC](#), [getLastDataTC](#), [getLastSession](#), [getLastVideoTC](#), [getLocalListeners](#), [getLock](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getNetConnection](#), [getOnMetadataFilter](#), [getOriginalTimecodeThreshold](#), [getPacketsSentAudio](#), [getPacketsSentData](#), [getPacketsSentVideo](#), [getPort](#), [getProfileUtil](#), [getQueryString](#), [getReconnectDelay](#), [getRTMPAuthProvider](#), [getSecureTokenSharedSecret](#), [getSessionHolderByNetConnection](#), [getSessionHolderBySession](#), [getSessionListDebug](#), [getSrcStreamBufferSize](#), [getSrcStreamName](#), [getStreamCloseWaitTime](#), [getSyncPacketType](#), [getSyncTimecode](#), [getTimecodesOutOfOrderThreshold](#), [getTotalPacketsSent](#), [getValidationFrequency](#), [getWaitOnMetadataTimeout](#), [internalConnect](#), [isCurrentSession](#), [isDebugLog](#), [isDebugPackets](#), [isFlashVerionFMLE](#), [isFlashVersionFMLE](#), [isOnMetadataToSetDataFrame](#), [isRemoveDefaultAppInstance](#), [isResetOnTimecodeOutOfOrder](#), [isSendFCAnnounce](#), [isSendFCPublish](#), [isSendOnMetadata](#), [isSendOriginalTimecodes](#), [isSendReleaseStream](#), [isSendStreamCloseCommands](#), [isSSL](#), [isWaitOnMetadataAudio](#), [isWaitOnMetadataAudioDatarate](#), [isWaitOnMetadataAvailable](#), [isWaitOnMetadataVideo](#), [isWaitOnMetadataVideoDatarate](#), [notifyAkamaiClientLogin](#), [notifyAkamaiSetChallenge](#), [notifyAkamaiSetOriginConnectionInfo](#), [notifyConnect](#), [notifyConnectFailure](#), [notifyConnectStart](#), [notifyConnectSuccess](#), [notifyFCAnnounce](#), [notifyFCPublish](#), [notifyHandshakeResult](#), [notifyPublishHandlerPlay](#), [notifyPushPublisherSessionCreate](#), [notifyPushPublisherSessionDestroy](#), [notifySessionClosed](#), [notifySessionIdle](#), [notifySessionOpened](#), [notifyStreamCreate](#), [notifyStreamOnPlayStatus](#), [notifyStreamOnStatus](#), [notifyValidateSession](#), [notifyValidateSessionResult](#), [putOnMetadataItemToAdd](#), [removeListener](#), [removeSession](#), [resetConnection](#), [resetConnection](#), [resolveHostName](#), [sessionClosed](#), [sessionOpened](#), [setAkamaiOriginIp](#), [setAkamaiOriginPort](#), [setAkamaiPassword](#), [setAkamaiUserName](#), [setAppInstance](#), [setBindAddress](#), [setConnectionFlashVerion](#), [setConnectionFlashVersion](#), [setConnectionPageURL](#), [setConnectionQueryStr](#), [setConnectionSwfURL](#), [setConnectionTimeout](#), [setConnectLastAttempt](#), [setConnectLastSuccess](#), [setDebugLog](#), [setDebugPackets](#), [setDstAppInstanceName](#), [setDstApplicationName](#), [setDstStreamName](#), [setHowToPublish](#), [setOnMetadataFilter](#), [setOnMetadataToSetDataFrame](#), [setOriginalTimecodeThreshold](#), [setOriginalTimecodeThreshold](#), [setPort](#), [setQueryString](#), [setRemoveDefaultAppInstance](#), [setResetOnTimecodeOutOfOrder](#), [setRTMPAuthProvider](#), [setSecureTokenSharedSecret](#), [setSendFCAnnounce](#), [setSendFCPublish](#), [setSendOnMetadata](#), [setSendOriginalTimecodes](#), [setSendReleaseStream](#), [setSendStreamCloseCommands](#), [setSrcStreamBufferSize](#), [setSrcStreamName](#), [setSSL](#), [setStreamCloseWaitTime](#), [setSyncPacketType](#), [setSyncTimecode](#), [setTimecodesOutOfOrderThreshold](#), [setValidationFrequency](#), [setWaitOnMetadataAudio](#), [setWaitOnMetadataAudioDatarate](#), [setWaitOnMetadataAvailable](#), [setWaitOnMetadataTimeout](#), [setWaitOnMetadataVideo](#), [setWaitOnMetadataVideoDatarate](#), [tryToConnect](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [handleParentStreamDisconnect](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugEnabled](#), [isExternalRedundancy](#), [isParent](#), [isTargetedStream](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugEnabled](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateUsageTracker](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface `com.wowza.wms.pushpublish.model.IPushPublish`

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProfileUtil](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [handleParentStreamDisconnect](#), [init](#), [isParent](#), [isTargetedStream](#), [resetConnection](#), [setDebugEnabled](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Fields

CLASS

`public static final java.lang.Class CLASS`

CLASSNAME

`public static final java.lang.String CLASSNAME`

Constant value: `PushPublishRTMPAkamaiHandler`

SendToBackupServer

`protected boolean SendToBackupServer`

The is backup.

Constructors

(continued from last page)

PushPublishRTMPAkamaiHandler

```
public PushPublishRTMPAkamaiHandler()
```

Methods

init

```
public void init(IApplicationInstance appInstance2,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean debug)
```

Initiates the instance.

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

setUserName

```
public void setUserName(String userName)
```

Set user name.

setPassword

```
public void setPassword(String password)
```

Set password.

setAkamaiOriginIp

```
public void setAkamaiOriginIp(String akamaiOriginIp)
```

Set Akamai Origin IP.

Parameters:

akamaiOriginIp - Akamai Origin IP

setAkamaiOriginPort

```
public void setAkamaiOriginPort(String akamaiOriginPort)
```

setAkamaiStreamId

```
public void setAkamaiStreamId(String id)
```

Sets the akamai stream id.

(continued from last page)

Parameters:

id - the new akamai stream id

setStreamId

```
public void setStreamId(String id)
```

setAkamaiUserName

```
public void setAkamaiUserName(String string)
```

Set Akamai user name

setAkamaiPassword

```
public void setAkamaiPassword(String string)
```

Set Akamai password

getStreamAngle

```
public String getStreamAngle()
```

setStreamAngle

```
public void setStreamAngle(String streamAngleIn)
```

getStreamBandWidth

```
public String getStreamBandWidth()
```

setStreamBandWidth

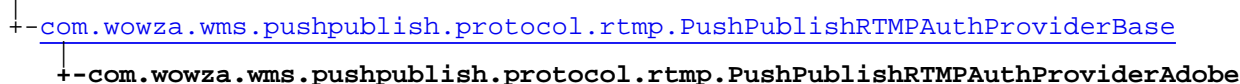
```
public void setStreamBandWidth(String streamBandWidth)
```

createAkamaiStreamName

```
public String createAkamaiStreamName(String dstStreamName,  
    IMediaStream stream)
```

com.wowza.wms.pushpublish.protocol.rtmp Class PushPublishRTMPAuthProviderAdobe

java.lang.Object



All Implemented Interfaces:

[IPushPublishRTMPAuthProvider](#)

```

public class PushPublishRTMPAuthProviderAdobe
extends PushPublishRTMPAuthProviderBase
  
```

Field Summary

protected	authMode
protected	challenge
public static final	CLASS
public static final	CLASSNAME Value: PushPublishRTMPAuthProviderAdobe
protected	md5Digest
protected	opaque
protected	salt

Fields inherited from class

[com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPAuthProviderBase](#)

[lock](#), [PARAM1](#), [password](#), [publisher](#), [userName](#)

Constructor Summary

public	PushPublishRTMPAuthProviderAdobe()
--------	--

Method Summary

String	addAuthQueryString (String queryString)
void	handleConnectResponse (com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	init (PushPublishRTMP publisher)

Methods inherited from class[com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPAuthProviderBase](#)[getParamObj](#), [getPassword](#), [getPublisher](#), [getUserName](#), [init](#), [setPassword](#), [setUserName](#), [splitQueryStr](#)**Methods inherited from class java.lang.Object**

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface[com.wowza.wms.pushpublish.protocol.rtmp.IPushPublishRTMPAuthProvider](#)[addAuthQueryString](#), [getPassword](#), [getPublisher](#), [getUserName](#), [handleConnectResponse](#), [init](#), [setPassword](#), [setUserName](#)

Fields

CLASS

public static final java.lang.Class **CLASS**

CLASSNAME

public static final java.lang.String **CLASSNAME**Constant value: **PushPublishRTMPAuthProviderAdobe**

authMode

protected java.lang.String **authMode**

salt

protected java.lang.String **salt**

challenge

protected java.lang.String **challenge**

opaque

protected java.lang.String **opaque**

md5Digest

protected java.security.MessageDigest **md5Digest**

Constructors

PushPublishRTMPAuthProviderAdobe

```
public PushPublishRTMPAuthProviderAdobe()
```

Methods

init

```
public void init(PushPublishRTMP publisher)
```

addAuthQueryString

```
public String addAuthQueryString(String queryString)
```

handleConnectResponse

```
public void handleConnectResponse(com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

com.wowza.wms.pushpublish.protocol.rtmp Class PushPublishRTMPAuthProviderBase

java.lang.Object

└-com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPAuthProviderBase

All Implemented Interfaces:

[IPushPublishRTMPAuthProvider](#)

Direct Known Subclasses:

[PushPublishRTMPAuthProviderLimelight](#), [PushPublishRTMPAuthProviderAdobe](#)

public abstract class **PushPublishRTMPAuthProviderBase**

extends Object

implements [IPushPublishRTMPAuthProvider](#)

Field Summary

protected	lock
public static final	PARAM1 Value: 3
protected	password
protected	publisher
protected	userName

Constructor Summary

public	PushPublishRTMPAuthProviderBase()
--------	---

Method Summary

AMFDataObj	getParamObj (AMFDataList params, int index)
String	getPassword ()
PushPublishRTMP	getPublisher ()
String	getUserName ()
void	init (PushPublishRTMP publisher)
void	setPassword (String password)

void	setUserName (String userName)
java.util.Map	splitQueryStr (String queryStr)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface

[com.wowza.wms.pushpublish.protocol.rtmp.IPushPublishRTMPAuthProvider](#)

[addAuthQueryString](#), [getPassword](#), [getPublisher](#), [getUserName](#), [handleConnectResponse](#), [init](#), [setPassword](#), [setUserName](#)

Fields

PARAM1

public static final int **PARAM1**

Constant value: **3**

publisher

protected com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP **publisher**

userName

protected java.lang.String **userName**

password

protected java.lang.String **password**

lock

protected java.lang.Object **lock**

Constructors

PushPublishRTMPAuthProviderBase

public **PushPublishRTMPAuthProviderBase**()

Methods

init

```
public void init(PushPublishRTMP publisher)
```

getParamObj

```
protected AMFDataObj getParamObj(AMFDataList params,  
int index)
```

getUserName

```
public String getUserName()
```

setUserName

```
public void setUserName(String userName)
```

getPassword

```
public String getPassword()
```

setPassword

```
public void setPassword(String password)
```

getPublisher

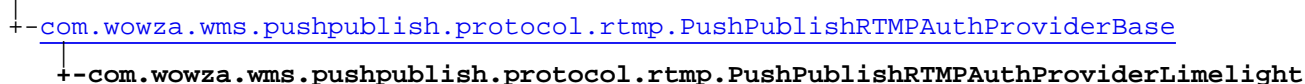
```
public PushPublishRTMP getPublisher()
```

splitQueryStr

```
public java.util.Map splitQueryStr(String queryStr)
```

com.wowza.wms.pushpublish.protocol.rtmp Class PushPublishRTMPAuthProviderLimelight

java.lang.Object



All Implemented Interfaces:

[IPushPublishRTMPAuthProvider](#)

```

public class PushPublishRTMPAuthProviderLimelight
extends PushPublishRTMPAuthProviderBase
  
```

Field Summary

protected	authMode
public static final	CLASS
public static final	CLASSNAME Value: PushPublishRTMPAuthProviderLimelight
protected	conce
protected	methodValue
protected	ncCounter
protected	nonce
protected	qopValue
protected	realm

Fields inherited from class

[com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPAuthProviderBase](#)

[lock](#), [PARAM1](#), [password](#), [publisher](#), [userName](#)

Constructor Summary

public	PushPublishRTMPAuthProviderLimelight()
--------	--

Method Summary

String	addAuthQueryString (String queryString)
--------	---

String	getAuthMode()
String	getConce()
String	getMethodValue()
int	getNCCounter()
String	getNonce()
PushPublishRTMP	getPublisher()
String	getQOPValue()
String	getRealm()
void	handleConnectResponse (com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	init (PushPublishRTMP publisher)
void	initConce()
void	setAuthMode (String authMode)
void	setConce (String conce)
void	setMethodValue (String methodValue)
void	setNCCounter (int ncCounter)
void	setNonce (String nonce)
void	setQOPValue (String qopValue)
void	setRealm (String realm)

Methods inherited from class[com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPAuthProviderBase](#)[getParamObj](#), [getPassword](#), [getPublisher](#), [getUserName](#), [init](#), [setPassword](#), [setUserName](#), [splitQueryStr](#)**Methods inherited from class java.lang.Object**

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface[com.wowza.wms.pushpublish.protocol.rtmp.IPushPublishRTMPAuthProvider](#)

[addAuthQueryString](#), [getPassword](#), [getPublisher](#), [getUserName](#), [handleConnectResponse](#), [init](#), [setPassword](#), [setUserName](#)

Fields

CLASS

public static final java.lang.Class **CLASS**

CLASSNAME

public static final java.lang.String **CLASSNAME**

Constant value: **PushPublishRTMPAuthProviderLimelight**

realm

protected java.lang.String **realm**

methodValue

protected java.lang.String **methodValue**

qopValue

protected java.lang.String **qopValue**

authMode

protected java.lang.String **authMode**

nonce

protected java.lang.String **nonce**

conce

protected java.lang.String **conce**

(continued from last page)

ncCounter

```
protected int ncCounter
```

Constructors

PushPublishRTMPAuthProviderLimelight

```
public PushPublishRTMPAuthProviderLimelight()
```

Methods

init

```
public void init(PushPublishRTMP publisher)
```

initOnce

```
protected void initOnce()
```

addAuthQueryString

```
public String addAuthQueryString(String queryString)
```

handleConnectResponse

```
public void handleConnectResponse(com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

getPublisher

```
public PushPublishRTMP getPublisher()
```

getRealm

```
public String getRealm()
```

setRealm

```
public void setRealm(String realm)
```

getMethodValue

```
public String getMethodValue()
```

setMethodValue

```
public void setMethodValue(String methodValue)
```

getQOPValue

```
public String getQOPValue()
```

setQOPValue

```
public void setQOPValue(String qopValue)
```

getAuthMode

```
public String getAuthMode()
```

setAuthMode

```
public void setAuthMode(String authMode)
```

getNonce

```
public String getNonce()
```

setNonce

```
public void setNonce(String nonce)
```

getConce

```
public String getConce()
```

setConce

```
public void setConce(String conce)
```

(continued from last page)

getNCCounter

```
public int getNCCounter()
```

setNCCounter

```
public void setNCCounter(int ncCounter)
```

com.wowza.wms.pushpublish.protocol.rtmp Class PushPublishRTMPNetConnectionSession

java.lang.Object

└─com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPNetConnectionSession

public class **PushPublishRTMPNetConnectionSession**
extends Object

Field Summary

protected	netConnection
protected	publishStream
protected	session
protected	streamsToPublish

Constructor Summary

public	PushPublishRTMPNetConnectionSession (INetConnection netConnection, org.apache.mina.common.IoSession session)
--------	---

Method Summary

INetConnection	getNetConnection ()
IMediaStream	getPublishStream ()
org.apache.mina.common.IoSession	getSession ()
java.util.List	getStreamsToPublish ()
void	setNetConnection (INetConnection netConnection)
void	setPublishStream (IMediaStream publishStream)
void	setSession (org.apache.mina.common.IoSession session)
void	setStreamsToPublish (java.util.List streamsToPublish)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

session

protected org.apache.mina.common.Session **session**

netConnection

protected com.wowza.wms.netconnection.INetConnection **netConnection**

streamsToPublish

protected java.util.List **streamsToPublish**

publishStream

protected com.wowza.wms.stream.IMediaStream **publishStream**

Constructors

PushPublishRTMPNetConnectionSession

```
public PushPublishRTMPNetConnectionSession(INetConnection netConnection,  
                                             org.apache.mina.common.Session session)
```

Methods

getSession

```
public org.apache.mina.common.Session getSession()
```

setSession

```
public void setSession(org.apache.mina.common.Session session)
```

getNetConnection

```
public INetConnection getNetConnection()
```

setNetConnection

```
public void setNetConnection(INetConnection netConnection)
```

getStreamsToPublish

```
public java.util.List getStreamsToPublish()
```

setStreamsToPublish

```
public void setStreamsToPublish(java.util.List streamsToPublish)
```

getPublishStream

```
public IMediaStream getPublishStream()
```

setPublishStream

```
public void setPublishStream(IMediaStream publishStream)
```

com.wowza.wms.pushpublish.protocol.rtmp Class PushPublishRTMPNotifyBase

java.lang.Object

└-com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPNotifyBase

All Implemented Interfaces:

[IPushPublishRTMPNotify](#)

public abstract class **PushPublishRTMPNotifyBase**
extends Object
implements [IPushPublishRTMPNotify](#)

Abstract base class for [IPushPublishRTMPNotify](#) interface

See Also:

[PushPublishRTMP.addListener\(IPushPublishRTMPNotify\)](#)

Constructor Summary

public	PushPublishRTMPNotifyBase()
--------	---

Method Summary

void	onAkamaiClientLogin (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onAkamaiSetChallenge (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onAkamaiSetOriginConnectionInfo (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onConnect (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onConnectFailure (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onConnectStart (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onConnectSuccess (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onFCAnnounce (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onFCPublish (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)

void	onHandshakeResult (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onPublishHandlerPlay (PushPublishRTMPNetConnectionSession pushPublisherSession, java.io.OutputStream out, long[] playSizes)
void	onPushPublisherSessionCreate (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onPushPublisherSessionDestroy (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onReleaseStream (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onSessionClosed (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onSessionIdle (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onSessionOpened (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onStreamCreate (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onStreamOnPlayStatus (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onStreamOnStatus (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onValidateSession (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onValidateSessionResult (PushPublishRTMPNetConnectionSession pushPublisherSession, boolean result)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.pushpublish.protocol.rtmp.IPushPublishRTMPNotify](#)

[onAkamaiClientLogin](#), [onAkamaiSetChallenge](#), [onAkamaiSetOriginConnectionInfo](#), [onConnect](#), [onConnectFailure](#), [onConnectStart](#), [onConnectSuccess](#), [onFCAnnounce](#), [onFCPublish](#), [onHandshakeResult](#), [onPublishHandlerPlay](#), [onPushPublisherSessionCreate](#), [onPushPublisherSessionDestroy](#), [onReleaseStream](#), [onSessionClosed](#), [onSessionIdle](#), [onSessionOpened](#), [onStreamCreate](#), [onStreamOnPlayStatus](#), [onStreamOnStatus](#), [onValidateSession](#), [onValidateSessionResult](#)

Constructors

PushPublishRTMPNotifyBase

```
public PushPublishRTMPNotifyBase()
```

Methods

onConnectStart

```
public void onConnectStart(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

onConnectSuccess

```
public void onConnectSuccess(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

onConnectFailure

```
public void onConnectFailure(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

onHandshakeResult

```
public void onHandshakeResult(PushPublishRTMPNetConnectionSession  
pushPublisherSession,  
com.wowza.wms.request.RequestFunction function,  
AMFDataList params)
```

onAkamaiSetChallenge

```
public void onAkamaiSetChallenge(PushPublishRTMPNetConnectionSession  
pushPublisherSession,  
com.wowza.wms.request.RequestFunction function,  
AMFDataList params)
```

onAkamaiSetOriginConnectionInfo

```
public void onAkamaiSetOriginConnectionInfo(PushPublishRTMPNetConnectionSession  
pushPublisherSession,  
com.wowza.wms.request.RequestFunction function,  
AMFDataList params)
```

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onAkamaiClientLogin

```
public void onAkamaiClientLogin(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onFCPublish

```
public void onFCPublish(PushPublishRTMPNetConnectionSession pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onFCAnnounce

```
public void onFCAnnounce(PushPublishRTMPNetConnectionSession pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onReleaseStream

```
public void onReleaseStream(PushPublishRTMPNetConnectionSession pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onConnect

```
public void onConnect(PushPublishRTMPNetConnectionSession pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onStreamCreate

```
public void onStreamCreate(PushPublishRTMPNetConnectionSession pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onStreamOnPlayStatus

```
public void onStreamOnPlayStatus(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

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onStreamOnStatus

```
public void onStreamOnStatus(PushPublishRTMPNetConnectionSession pushPublisherSession,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

onPublishHandlerPlay

```
public void onPublishHandlerPlay(PushPublishRTMPNetConnectionSession  
pushPublisherSession,  
    java.io.OutputStream out,  
    long[] playSizes)
```

onSessionIdle

```
public void onSessionIdle(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

onSessionOpened

```
public void onSessionOpened(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

onSessionClosed

```
public void onSessionClosed(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

onValidateSession

```
public void onValidateSession(PushPublishRTMPNetConnectionSession  
pushPublisherSession)
```

onValidateSessionResult

```
public void onValidateSessionResult(PushPublishRTMPNetConnectionSession  
pushPublisherSession,  
    boolean result)
```

onPushPublisherSessionCreate

```
public void onPushPublisherSessionCreate(PushPublishRTMPNetConnectionSession  
pushPublisherSession)
```

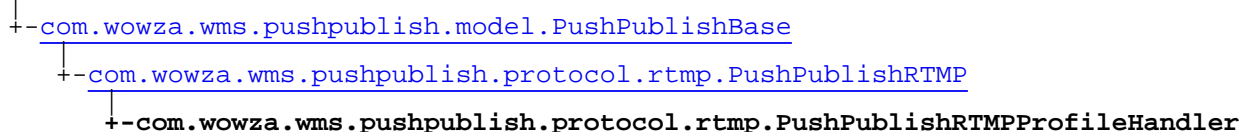
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onPushPublisherSessionDestroy

```
public void onPushPublisherSessionDestroy(PushPublishRTMPNetConnectionSession  
pushPublisherSession)
```

com.wowza.wms.pushpublish.protocol.rtmp Class PushPublishRTMPProfileHandler

java.lang.Object



All Implemented Interfaces:

[IPushPublish](#)

Direct Known Subclasses:

[PushPublishRTMPAkamaiHandler](#)

```

public class PushPublishRTMPProfileHandler
extends PushPublishRTMP
  
```

Field Summary

public static final	CLASS
public static final	CLASSNAME Value: PushPublishRTMPProfileHandler
protected	streamId The stream id.

Fields inherited from class [com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP](#)

[akamaiOriginIp](#), [akamaiOriginPort](#), [akamaiPassword](#), [akamaiUserName](#), [bindAddress](#), [bytesAvg](#), [CLASS](#), [CLASSNAME](#), [connectionFlashVersion](#), [connectionPageURL](#), [connectionQueryStr](#), [connectionResetCount](#), [connectionState](#), [connectionSwfURL](#), [connectionTimeout](#), [connectLastAttempt](#), [connectLastSuccess](#), [connectMetaData](#), [CURRENTFLASHVERSION](#), [CURRENTFMLEVERSION](#), [debugLogLastPacketCount](#), [debugPackets](#), [doSendOnMetaData](#), [dstAppInstanceName](#), [dstApplicationName](#), [howToPublish](#), [ioSessionToSessionHolder](#), [isReconnectorRunning](#), [isSSL](#), [lastAudioTC](#), [lastDataTC](#), [lastIdleReadTime](#), [lastIdleWriteTime](#), [lastVideoTC](#), [listeners](#), [lock](#), [netconnectToSessionHolder](#), [offlineTime](#), [onlineTime](#), [onMetadataFilter](#), [onMetadataItemsToAdd](#), [onMetadataItemsToRemove](#), [onMetadataToSetDataFrame](#), [originalTimecodeThreshold](#), [outprint](#), [packetsSentAudio](#), [packetsSentData](#), [packetsSentVideo](#), [pingPongListenerRegistered](#), [queryString](#), [removeDefaultAppInstance](#), [resetOnTimecodeOutOfOrder](#), [rtmpAuthProvider](#), [rtmpDebugLog](#), [secureTokenSharedSecret](#), [sendFCAnnounce](#), [sendFCPublish](#), [sendOnMetadata](#), [sendOriginalTimecodes](#), [sendReleaseStream](#), [sendStreamCloseCommands](#), [sendStreamCloseCommandsSendTime](#), [sessionOrder](#), [srcStreamBufferSize](#), [streamCloseWaitTime](#), [syncPacketType](#), [syncTimecode](#), [timecodesOutOfOrderThreshold](#), [totalPacketsSent](#), [tryConnect](#), [usePingPong](#), [validationFrequency](#), [waitOnMetadataAudio](#), [waitOnMetadataAudioDatarate](#), [waitOnMetadataAvailable](#), [waitOnMetadataReady](#), [waitOnMetadataStartime](#), [waitOnMetadataTimeout](#), [waitOnMetadataVideo](#), [waitOnMetadataVideoDatarate](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishRTMPPProfileHandler() Instantiates a new push publisher rtmp.
--------	---

Method Summary

String	getDstAppInstanceName() Get destination appInstance name.
String	getDstApplicationName() Get destination application name.
String	getLocalBindAddress() Get local bind address for the connection.
void	init(IApplicationInstance appInstance2, String streamName, IMediaStream stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean debug)
boolean	isDebugLog() Is debug logging turned on.
boolean	isDebugPackets() Checks if is debug packets.
boolean	isUsePingPong() Is RTMP ping pong support enabled.
void	load(java.util.HashMap dataMap)
void	setApplication(String dstApplicationNameIN) Set destination application name.
void	setConnectionFlashVersion(String connectionFlashVersion) Set Flash version used in connection metadata.
void	setConnectionInfoPageURL(String connectionPageURL) Set Page URL used in connection metadata.
void	setConnectionInfoQueryString(String connectionQueryStr) Set the connection query string.

void	<u>setConnectionInfoSwfURL</u> (String connectionSwfURL) Set SWF URL used in connection metadata.
void	<u>setConnectionTimeout</u> (String connectionTimeout)
void	<u>setConnectLastAttempt</u> (String connectLastAttempt)
void	<u>setConnectLastSuccess</u> (String connectLastSuccess)
void	<u>setDebugPackets</u> (boolean debugPackets) Sets the debug packets.
void	<u>setDebugPackets</u> (String debugPacketsIn) Sets the debug packets.
void	<u>setDstAppInstanceName</u> (String dstAppInstanceName)
void	<u>setDstApplicationName</u> (String string) Sets the dst application name.
void	<u>setDstStreamName</u> (String dstStreamNameIn)
void	<u>setHowToPublish</u> (String howToPublish)
void	<u>setlocalBindAddress</u> (String bindAddress) Sets the local bind address for the connection.
void	<u>setOnMetadataToSetDataFrame</u> (String onMetadataToSetDataFrame)
void	<u>setOriginalTimecodeThreshold</u> (String originalTimecodeThreshold) Sets the original timecode threshold.
void	<u>setQueryString</u> (String queryString)
void	<u>setReconnectWaitTime</u> (String reconnectWaitTime)
void	<u>setRemoveDefaultAppInstance</u> (String removeDefaultAppInstance) Sets the removes the default app instance.
void	<u>setResetOnTimecodeOutOfOrder</u> (String resetOnTimecodeOutOfOrder) Set to true if you wish push to reset if timecodes jump out of order.
void	<u>setSecureTokenSharedSecret</u> (String secureTokenSharedSecret) Set SecureToken shared secret.
void	<u>setSendFCAnnounce</u> (String sendFCAnnounce)
void	<u>setSendFCPublish</u> (String sendFCPublish) Sets the send fc publish.
void	<u>setSendOnMetadata</u> (String sendOnMetadata)
void	<u>setSendOriginalTimecodes</u> (String sendOriginalTimecodes) Sets the send original timecodes.

void	setSendReleaseStream (String sendReleaseStream) Sets the send release stream.
void	setSendStreamCloseCommands (String sendStreamCloseCommands) Sets the send stream close commands.
void	setSSL (String sslStr)
void	setStreamCloseWaitTime (String streamCloseWaitTime)
void	setTimecodesOutOfOrderThreshold (String timecodesOutOfOrderThreshold)
void	setUsePingPong (boolean usePingPong) Sets the RTMP ping pong support parameter.
void	setUsePingPong (String usePingPong) Sets the RTMP ping pong support parameter.
void	setValidationFrequency (String validationFrequency)
void	setWaitOnMetadataAudio (String waitOnMetadataAudio)
void	setWaitOnMetadataAudioDatarate (String waitOnMetadataAudioDatarate)
void	setWaitOnMetadataAvailable (String waitOnMetadataAvailable)
void	setWaitOnMetadataTimeout (String waitOnMetadataTimeout) Timeout (milliseconds) that the wait on onMetadata system will wait looking for video and audio data to be populated.
void	setWaitOnMetadataVideo (String waitOnMetadataVideo)
void	setWaitOnMetadataVideoDatarate (String waitOnMetadataVideoDatarate)

Methods inherited from class [com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP](#)

[addConnectMetaData](#), [addListener](#), [addOnMetadataItemToRemove](#), [addSession](#), [bumpReconnectWaitTime](#), [callConnect](#), [connect](#), [convertDataEventToAMFData](#), [convertOnMetadataToSetDataFrame](#), [createPushPublishSession](#), [disconnect](#), [disconnect](#), [filterOnMetadataEvent](#), [getAkamaiOriginIp](#), [getAkamaiOriginPort](#), [getAkamaiPassword](#), [getAkamaiSessionKey](#), [getAkamaiUserName](#), [getAppInstance](#), [getBindAddress](#), [getConnectedState](#), [getConnectionFlashVerion](#), [getConnectionFlashVersion](#), [getConnectionPageURL](#), [getConnectionQueryStr](#), [getConnectionSwfURL](#), [getConnectionTimeout](#), [getConnectLastAttempt](#), [getConnectLastSuccess](#), [getContextStr](#), [getDstAppInstanceName](#), [getDstApplicationName](#), [getDstStreamName](#), [getHowToPublish](#), [getLastAudioTC](#), [getLastDataTC](#), [getLastSession](#), [getLastVideoTC](#), [getLocalListeners](#), [getLock](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getNetConnection](#), [getOnMetadataFilter](#), [getOriginalTimecodeThreshold](#), [getPacketsSentAudio](#), [getPacketsSentData](#), [getPacketsSentVideo](#), [getPort](#), [getProfileUtil](#), [getQueryString](#), [getReconnectDelay](#), [getRTMPAuthProvider](#), [getSecureTokenSharedSecret](#), [getSessionHolderByNetConnection](#), [getSessionHolderBySession](#), [getSessionListDebug](#), [getSrcStreamBufferSize](#), [getSrcStreamName](#), [getStreamCloseWaitTime](#), [getSyncPacketType](#), [getSyncTimecode](#), [getTimecodesOutOfOrderThreshold](#), [getTotalPacketsSent](#), [getValidationFrequency](#), [getWaitOnMetadataTimeout](#), [internalConnect](#), [isCurrentSession](#), [isDebugLog](#), [isDebugPackets](#), [isFlashVerionFMLE](#), [isFlashVersionFMLE](#), [isOnMetadataToSetDataFrame](#), [isRemoveDefaultAppInstance](#), [isResetOnTimecodeOutOfOrder](#), [isSendFCAnnounce](#), [isSendFCPublish](#), [isSendOnMetadata](#), [isSendOriginalTimecodes](#), [isSendReleaseStream](#), [isSendStreamCloseCommands](#), [isSSL](#), [isWaitOnMetadataAudio](#), [isWaitOnMetadataAudioDatarate](#), [isWaitOnMetadataAvailable](#), [isWaitOnMetadataVideo](#), [isWaitOnMetadataVideoDatarate](#), [notifyAkamaiClientLogin](#), [notifyAkamaiSetChallenge](#), [notifyAkamaiSetOriginConnectionInfo](#), [notifyConnect](#), [notifyConnectFailure](#), [notifyConnectStart](#), [notifyConnectSuccess](#), [notifyFCAnnounce](#), [notifyFCPublish](#), [notifyHandshakeResult](#), [notifyPublishHandlerPlay](#), [notifyPushPublisherSessionCreate](#), [notifyPushPublisherSessionDestroy](#), [notifySessionClosed](#), [notifySessionIdle](#), [notifySessionOpened](#), [notifyStreamCreate](#), [notifyStreamOnPlayStatus](#), [notifyStreamOnStatus](#), [notifyValidateSession](#), [notifyValidateSessionResult](#), [putOnMetadataItemToAdd](#), [removeListener](#), [removeSession](#), [resetConnection](#), [resetConnection](#), [resolveHostName](#), [sessionClosed](#), [sessionOpened](#), [setAkamaiOriginIp](#), [setAkamaiOriginPort](#), [setAkamaiPassword](#), [setAkamaiUserName](#), [setAppInstance](#), [setBindAddress](#), [setConnectionFlashVerion](#), [setConnectionFlashVersion](#), [setConnectionPageURL](#), [setConnectionQueryStr](#), [setConnectionSwfURL](#), [setConnectionTimeout](#), [setConnectLastAttempt](#), [setConnectLastSuccess](#), [setDebugLog](#), [setDebugPackets](#), [setDstAppInstanceName](#), [setDstApplicationName](#), [setDstStreamName](#), [setHowToPublish](#), [setOnMetadataFilter](#), [setOnMetadataToSetDataFrame](#), [setOriginalTimecodeThreshold](#), [setOriginalTimecodeThreshold](#), [setPort](#), [setQueryString](#), [setRemoveDefaultAppInstance](#), [setResetOnTimecodeOutOfOrder](#), [setRTMPAuthProvider](#), [setSecureTokenSharedSecret](#), [setSendFCAnnounce](#), [setSendFCPublish](#), [setSendOnMetadata](#), [setSendOriginalTimecodes](#), [setSendReleaseStream](#), [setSendStreamCloseCommands](#), [setSrcStreamBufferSize](#), [setSrcStreamName](#), [setSSL](#), [setStreamCloseWaitTime](#), [setSyncPacketType](#), [setSyncTimecode](#), [setTimecodesOutOfOrderThreshold](#), [setValidationFrequency](#), [setWaitOnMetadataAudio](#), [setWaitOnMetadataAudioDatarate](#), [setWaitOnMetadataAvailable](#), [setWaitOnMetadataTimeout](#), [setWaitOnMetadataVideo](#), [setWaitOnMetadataVideoDatarate](#), [tryToConnect](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [handleParentStreamDisconnect](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugEnabled](#), [isExternalRedundancy](#), [isParent](#), [isTargetedStream](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugEnabled](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateUsageTracker](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface `com.wowza.wms.pushpublish.model.IPushPublish`

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProfileUtil](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [handleParentStreamDisconnect](#), [init](#), [isParent](#), [isTargetedStream](#), [resetConnection](#), [setDebugEnabled](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Fields

CLASS

```
public static final java.lang.Class CLASS
```

CLASSNAME

```
public static final java.lang.String CLASSNAME
```

Constant value: **PushPublishRTMPPProfileHandler**

streamId

```
protected java.lang.String streamId
```

The stream id.

Constructors

(continued from last page)

PushPublishRTMPProfileHandler

```
public PushPublishRTMPProfileHandler()
```

Instantiates a new push publisher rtmp.

Throws:

LicensingException - the licensing exception

Methods

setConnectionTimeout

```
public void setConnectionTimeout(String connectionTimeout)
```

setSendFCPublish

```
public void setSendFCPublish(String sendFCPublish)
```

Sets the send fc publish.

Parameters:

sendFCPublish - the new send fc publish

setSendReleaseStream

```
public void setSendReleaseStream(String sendReleaseStream)
```

Sets the send release stream.

Parameters:

sendReleaseStream - the new send release stream

setConnectionInfoQueryString

```
public void setConnectionInfoQueryString(String connectionQueryStr)
```

Set the connection query string.

Parameters:

connectionQueryStr - connection query string

setConnectionFlashVersion

```
public void setConnectionFlashVersion(String connectionFlashVersion)
```

Set Flash version used in connection metadata.

Parameters:

connectionFlashVersion - Flash version used in connection metadata

setConnectionInfoSwfURL

```
public void setConnectionInfoSwfURL(String connectionSwfURL)
```

(continued from last page)

Set SWF URL used in connection metadata.

Parameters:

connectionSwfURL - SWF URL used in connection metadata

setConnectionInfoPageURL

```
public void setConnectionInfoPageURL(String connectionPageURL)
```

Set Page URL used in connection metadata.

Parameters:

connectionPageURL - Page URL used in connection metadata

setSecureTokenSharedSecret

```
public void setSecureTokenSharedSecret(String secureTokenSharedSecret)
```

Set SecureToken shared secret.

Parameters:

secureTokenSharedSecret - SecureToken shared secret

setSendFCAnnounce

```
public void setSendFCAnnounce(String sendFCAnnounce)
```

setValidationFrequency

```
public void setValidationFrequency(String validationFrequency)
```

setConnectLastAttempt

```
public void setConnectLastAttempt(String connectLastAttempt)
```

setReconnectWaitTime

```
public void setReconnectWaitTime(String reconnectWaitTime)
```

setConnectLastSuccess

```
public void setConnectLastSuccess(String connectLastSuccess)
```

setSendOriginalTimecodes

```
public void setSendOriginalTimecodes(String sendOriginalTimecodes)
```

Sets the send original timecodes.

(continued from last page)

Parameters:

sendOriginalTimecodes - the new send original timecodes

setSendOnMetadata

```
public void setSendOnMetadata(String sendOnMetadata)
```

setRemoveDefaultAppInstance

```
public void setRemoveDefaultAppInstance(String removeDefaultAppInstance)
```

Sets the removes the default app instance.

Parameters:

removeDefaultAppInstance - the new removes the default app instance

setHowToPublish

```
public void setHowToPublish(String howToPublish)
```

Set the howToPublish string (valid values are "live", "record" and "append")

setOnMetadataToSetDataFrame

```
public void setOnMetadataToSetDataFrame(String onMetadataToSetDataFrame)
```

setSendStreamCloseCommands

```
public void setSendStreamCloseCommands(String sendStreamCloseCommands)
```

Sets the send stream close commands.

Parameters:

sendStreamCloseCommands - the new send stream close commands

setStreamCloseWaitTime

```
public void setStreamCloseWaitTime(String streamCloseWaitTime)
```

setOriginalTimecodeThreshold

```
public void setOriginalTimecodeThreshold(String originalTimecodeThreshold)
```

Sets the original timecode threshold.

Parameters:

originalTimecodeThreshold - the new original timecode threshold

setQueryString

```
public void setQueryString(String queryString)
```

(continued from last page)

Set the queryString, as set in the map file

setResetOnTimecodeOutOfOrder

```
public void setResetOnTimecodeOutOfOrder(String resetOnTimecodeOutOfOrder)
```

Set to true if you wish push to reset if timecodes jump out of order.

Parameters:

resetOnTimecodeOutOfOrder - true if you wish push to reset if timecodes jump out of order

setTimecodesOutOfOrderThreshold

```
public void setTimecodesOutOfOrderThreshold(String timecodesOutOfOrderThreshold)
```

setWaitOnMetadataTimeout

```
public void setWaitOnMetadataTimeout(String waitOnMetadataTimeout)
```

Timeout (milliseconds) that the wait on onMetadata system will wait looking for video and audio data to be populated.

Parameters:

waitOnMetadataTimeout - the new timeout value (milliseconds-string)

setWaitOnMetadataAvailable

```
public void setWaitOnMetadataAvailable(String waitOnMetadataAvailable)
```

setWaitOnMetadataVideo

```
public void setWaitOnMetadataVideo(String waitOnMetadataVideo)
```

setWaitOnMetadataAudio

```
public void setWaitOnMetadataAudio(String waitOnMetadataAudio)
```

setWaitOnMetadataVideoDatarate

```
public void setWaitOnMetadataVideoDatarate(String waitOnMetadataVideoDatarate)
```

setWaitOnMetadataAudioDatarate

```
public void setWaitOnMetadataAudioDatarate(String waitOnMetadataAudioDatarate)
```

(continued from last page)

setSSL

```
public void setSSL(String sslStr)
```

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

isDebugPackets

```
public boolean isDebugPackets()
```

Checks if is debug packets.

Returns:

true, if is debug packets

setDebugPackets

```
public void setDebugPackets(boolean debugPackets)
```

Sets the debug packets.

Parameters:

debugPackets - the new debug packets

setDebugPackets

```
public void setDebugPackets(String debugPacketsIn)
```

Sets the debug packets.

Parameters:

debugPacketsIn - the new debug packets

isUsePingPong

```
public boolean isUsePingPong()
```

Is RTMP ping pong support enabled.

Returns:

true if ping pong support is enabled

setUsePingPong

```
public void setUsePingPong(boolean usePingPong)
```

Sets the RTMP ping pong support parameter.

Parameters:

usePingPong - true to enable RTMP ping pong support

(continued from last page)

setUsePingPong

```
public void setUsePingPong(String usePingPong)
```

Sets the RTMP ping pong support parameter.

Parameters:

usePingPong - "true" to enable RTMP ping pong support

isDebugLog

```
public boolean isDebugLog()
```

Is debug logging turned on.

Returns:

true if debug logging is turned on

getDstApplicationName

```
public String getDstApplicationName()
```

Get destination application name.

Returns:

destination application name

setApplication

```
public void setApplication(String dstApplicationNameIN)
```

Set destination application name.

Parameters:

dstApplicationNameIN - destination application name

setDstApplicationName

```
public void setDstApplicationName(String string)
```

Sets the dst application name.

Parameters:

string - the new dst application name

getDstAppInstanceName

```
public String getDstAppInstanceName()
```

Get destination appInstance name.

Returns:

destination appInstance name

setlocalBindAddress

```
public void setlocalBindAddress(String bindAddress)
```

(continued from last page)

Sets the local bind address for the connection.

Parameters:

`bindAddress` - the local bind address for the connection

getLocalBindAddress

```
public String getLocalBindAddress()
```

Get local bind address for the connection.

Returns:

local bind address for the connection

init

```
public void init(IApplicationInstance appInstance2,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean debug)
```

Inits the instance.

setDstStreamName

```
public void setDstStreamName(String dstStreamNameIn)
```

Set destination stream name

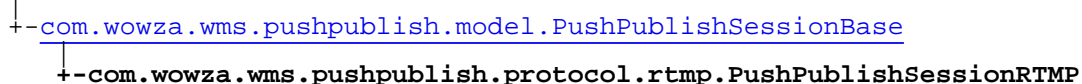
setDstAppInstanceName

```
public void setDstAppInstanceName(String dstAppInstanceName)
```

Set destination appInstance name

com.wowza.wms.pushpublish.protocol.rtmp Class PushPublishSessionRTMP

java.lang.Object



All Implemented Interfaces:
[IPushPublishSession](#)

public class **PushPublishSessionRTMP**
extends [PushPublishSessionBase](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishSessionBase](#)

[profile](#), [pushPublishImpl](#), [stream](#), [type](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishSession](#)

[PUSHPUBLISHSESSION_TYPE_RTMP](#), [PUSHPUBLISHSESSION_TYPE_RTP](#),
[PUSHPUBLISHSESSION_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishSessionRTMP()
--------	--

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishSessionBase](#)

[getContextStr](#), [getDestinationID](#), [getProfile](#), [getPushPublishImpl](#), [getStream](#), [getType](#),
[setProfile](#), [setPushPublishImpl](#), [setStream](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishSession](#)

[getContextStr](#), [getDestinationID](#), [getProfile](#), [getPushPublishImpl](#), [getStream](#), [getType](#),
[setProfile](#), [setPushPublishImpl](#), [setStream](#)

Constructors

PushPublishSessionRTMP

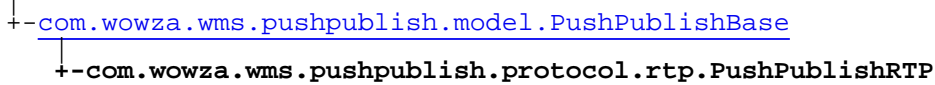
public **PushPublishSessionRTMP**()

Package

com.wowza.wms.pushpublish.protocol.rtp

com.wowza.wms.pushpublish.protocol.rtp Class PushPublishRTP

java.lang.Object



All Implemented Interfaces:

[IPushPublish](#)

```

public class PushPublishRTP
extends PushPublishBase
  
```

The Class PushPublishRTP.

Field Summary	
protected	audioHost The audio host.
protected	audioPort The audio port.
public static final	CLASS
public static final	CLASSNAME Value: PushPublishRTP
protected	isRTPWrapped The is rtp wrapped.
protected	lock
protected	mRtpDestination The m rtp destination.
protected	removeSDPFiles The remove sdp files
protected	rtpPushPublishSession The rtp push publish session.
public static final	SDPFILEEXTENSION The Constant SDPFILEEXTENSION. Value: .sdp
protected	singleStreamAV The stream packetizer.
protected	videoHost The video host.

protected	videoPort The video port.
protected	writeSDPFiles The write sdp files.

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishRTP()
--------	----------------------------------

Method Summary

void	add(IOPerformanceCounter totalValue)
void	addIOPerformance2(IOPerformanceCounter totalIOPerformanceResult)
void	connect()
IPushPublishSession	createPushPublishSession()
void	disconnect()
void	disconnect (boolean hard)
IApplicationInstance	getAppInstance()
String	getAudioHost() Gets the audio host.
int	getAudioPort() Gets the audio port.
int	getConnectedState()
String	getContextStr()
String	getHostname()

String	getHostType() Gets the host type.
long	getMessagesAttemptedCount()
long	getMessagesFailedCount()
long	getMessagesRetriedCount()
RTPDestination	getmRtpDestination()
IPushPublishProfileUtil	getProfileUtil()
RTPPushPublishSession	getRTPPushPublishSession() Gets the rTP push publish session.
long	getRtpStreamWaitTimeout()
int	getTimeToLive() Gets the time to live.
String	getVideoHost() Gets the video host.
int	getVideoPort() Gets the video port.
void	init(IApplicationInstance appInstance, String streamName, IMediaStream stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean debug)
boolean	isRTPWrapped() Checks if is rTP wrapped.
boolean	isSingleStreamAV() Checks if is stream is packetized.
void	load(java.util.HashMap dataMap)
void	resetConnection()
void	resetConnection(int delay)
void	setAppInstance(IApplicationInstance appInstance)
void	setAudioHost(String audioHost) Sets the audio host.
void	setAudioPort(int audioPort) Sets the audio port.
void	setAudioPort(String audioPort) Sets the audio port.

void	setConnectionStatus (Boolean connected)
void	setHostname (String hostname)
void	setHostType (String hostType) Sets the host type.
void	setPort (int port) Set destination server port.
void	setPort (String portIn)
void	setRTPPushPublishSession (RTPPushPublishSession rtpPushPublishSession) Sets the rTP push publish session.
void	setRtpStreamWaitTimeout (long rtpStreamWaitTimeout)
void	setRtpStreamWaitTimeout (String rtpStreamWaitTimeout)
void	setRTPWrapped (String string) Sets the rTP wrapped.
void	setSingleStreamAV (boolean inSingleStreamAV) Sets the stream packetizer.
void	setSingleStreamAV (String inSingleStreamAV)
void	setTimeToLive (String ttl) Sets the time to live.
void	setVideoHost (String videoHost) Sets the video host.
void	setVideoPort (String videoPort) Sets the video port.

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [handleParentStreamDisconnect](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugEnabled](#), [isExternalRedundancy](#), [isParent](#), [isTargetedStream](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugEnabled](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateUsageTracker](#)

Methods inherited from class [java.lang.Object](#)

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProfileUtil](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [handleParentStreamDisconnect](#), [init](#), [isParent](#), [isTargetedStream](#), [resetConnection](#), [setDebugLog](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Fields

CLASS

public static final java.lang.Class **CLASS**

CLASSNAME

public static final java.lang.String **CLASSNAME**

Constant value: **PushPublishRTP**

SDPFILEEXTENSION

public static final java.lang.String **SDPFILEEXTENSION**

The Constant SDPFILEEXTENSION.

Constant value: **.sdp**

rtpPushPublishSession

protected com.wowza.wms.rtp.model.RTPPushPublishSession **rtpPushPublishSession**

The rtp push publish session.

singleStreamAV

protected boolean **singleStreamAV**

The stream packetizer.

audioPort

protected int **audioPort**

The audio port.

videoPort

protected int **videoPort**

The video port.

audioHost

protected java.lang.String **audioHost**

The audio host.

videoHost

protected java.lang.String **videoHost**

The video host.

isRTPWrapped

protected boolean **isRTPWrapped**

The is rtp wrapped.

writeSDPFiles

protected boolean **writeSDPFiles**

The write sdp files.

removeSDPFiles

protected boolean **removeSDPFiles**

The remove sdp files

mRtpDestination

protected com.wowza.wms.rtp.model.RTPDestination **mRtpDestination**

The m rtp destination.

lock

protected java.lang.Object **lock**

Constructors

PushPublishRTP

public **PushPublishRTP**()

Methods

(continued from last page)

init

```
public void init(IApplicationInstance appInstance,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean debug)
```

Inits the instance.

connect

```
public void connect()
```

disconnect

```
public void disconnect()
```

disconnect

```
public void disconnect(boolean hard)
```

resetConnection

```
public void resetConnection()
```

resetConnection

```
public void resetConnection(int delay)
```

getRTTPushPublishSession

```
public RTTPushPublishSession getRTTPushPublishSession()
```

Gets the rTP push publish session.

Returns:

the rTP push publish session

setRTTPushPublishSession

```
public void setRTTPushPublishSession(RTTPushPublishSession rtpPushPublishSession)
```

Sets the rTP push publish session.

Parameters:

(continued from last page)

rtpPushPublishSession - the new rTP push publish session

getAppInstance

```
public IApplicationInstance getAppInstance()
```

Get appInstance interface.

setAppInstance

```
public void setAppInstance(IApplicationInstance appInstance)
```

Set appInstance interface.

isSingleStreamAV

```
public boolean isSingleStreamAV()
```

Checks if is stream is packetized.

Returns:

true, if is stream packetizer

setSingleStreamAV

```
public void setSingleStreamAV(boolean inSingleStreamAV)
```

Sets the stream packetizer.

Parameters:

inSingleStreamAV - whether stream is packetized

setSingleStreamAV

```
public void setSingleStreamAV(String inSingleStreamAV)
```

getHostname

```
public String getHostname()
```

Get destination server host name.

setHostname

```
public void setHostname(String hostname)
```

setPort

```
public void setPort(int port)
```

Set destination server port.

Parameters:

port - destination server port

setPort

```
public void setPort(String portIn)
```

Set destination server port.

getAudioPort

```
public int getAudioPort()
```

Gets the audio port.

Returns:

the audio port

setAudioPort

```
public void setAudioPort(int audioPort)
```

Sets the audio port.

Parameters:

audioPort - the new audio port

getAudioHost

```
public String getAudioHost()
```

Gets the audio host.

Returns:

the audio host

setAudioHost

```
public void setAudioHost(String audioHost)
```

Sets the audio host.

Parameters:

audioHost - the new audio host

getVideoHost

```
public String getVideoHost()
```

Gets the video host.

Returns:

the video host

setVideoHost

```
public void setVideoHost(String videoHost)
```

Sets the video host.

(continued from last page)

Parameters:

videoHost - the new video host

setAudioPort

```
public void setAudioPort(String audioPort)
```

Sets the audio port.

Parameters:

audioPort - the new audio port

getVideoPort

```
public int getVideoPort()
```

Gets the video port.

Returns:

the video port

setVideoPort

```
public void setVideoPort(String videoPort)
```

Sets the video port.

Parameters:

videoPort - the new video port

isRTPWrapped

```
public boolean isRTPWrapped()
```

Checks if is rTP wrapped.

Returns:

true, if is rTP wrapped

setRTPWrapped

```
public void setRTPWrapped(String string)
```

Sets the rTP wrapped.

Parameters:

string - the new rTP wrapped

getHostType

```
public String getHostType()
```

Gets the host type.

Returns:

the host type

(continued from last page)

setHostType

```
public void setHostType(String hostType)
```

Sets the host type.

Parameters:

hostType - the new host type

setTimeToLive

```
public void setTimeToLive(String ttl)
```

Sets the time to live.

Parameters:

ttl - the new time to live

getTimeToLive

```
public int getTimeToLive()
```

Gets the time to live.

Returns:

the time to live

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

getRtpStreamWaitTimeout

```
public long getRtpStreamWaitTimeout()
```

setRtpStreamWaitTimeout

```
public void setRtpStreamWaitTimeout(String rtpStreamWaitTimeout)
```

setRtpStreamWaitTimeout

```
public void setRtpStreamWaitTimeout(long rtpStreamWaitTimeout)
```

createPushPublishSession

```
public IPushPublishSession createPushPublishSession()
```

(continued from last page)

getContextStr

```
public String getContextStr()
```

getmRtpDestination

```
public RTPDestination getmRtpDestination()
```

getConnectedState

```
public int getConnectedState()
```

getProfileUtil

```
public IPushPublishProfileUtil getProfileUtil()
```

setConnectionStatus

```
public void setConnectionStatus(Boolean connected)
```

getMessagesAttemptedCount

```
public long getMessagesAttemptedCount()
```

getMessagesRetriedCount

```
public long getMessagesRetriedCount()
```

getMessagesFailedCount

```
public long getMessagesFailedCount()
```

add

```
public void add(IOPerformanceCounter totalValue)
```

addIOPerformance2

```
public void addIOPerformance2(IOPerformanceCounter totalIOPerformanceResult)
```

(continued from last page)

com.wowza.wms.pushpublish.protocol.rtp Class PushPublishRTPRunner

java.lang.Object

└- java.lang.Thread

└- **com.wowza.wms.pushpublish.protocol.rtp.PushPublishRTPRunner**

All Implemented Interfaces:

Runnable

```
public class PushPublishRTPRunner
extends Thread
```

The Class RTPStarter. Utility class to starts an RTP session for push publishing

Field Summary

public static final	CLASS
public static final	CLASSNAME Value: PushPublishRTPRunner

Fields inherited from class java.lang.Thread

MAX_PRIORITY, MIN_PRIORITY, NORM_PRIORITY

Constructor Summary

public	PushPublishRTPRunner (PushPublishRTP pushPublisherRTP, RTPDestination rtpDestination) Instantiates a new rTP PushPublishRTPRunner.
--------	--

Method Summary

void	disconnect ()
void	run ()

Methods inherited from class java.lang.Thread

activeCount, checkAccess, clone, countStackFrames, currentThread, destroy, dumpStack, enumerate, getAllStackTraces, getContextClassLoader, getDefaultUncaughtExceptionHandler, getId, getName, getPriority, getStackTrace, getState, getThreadGroup, getUncaughtExceptionHandler, holdsLock, interrupt, interrupted, isAlive, isDaemon, isInterrupted, join, join, join, resume, run, setContextClassLoader, setDaemon, setDefaultUncaughtExceptionHandler, setName, setPriority, setUncaughtExceptionHandler, sleep, sleep, start, stop, stop, suspend, toString, yield

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Methods inherited from interface `java.lang.Runnable`

```
run
```

Fields

CLASS

```
public static final java.lang.Class CLASS
```

CLASSNAME

```
public static final java.lang.String CLASSNAME
```

Constant value: **PushPublishRTPRunner**

Constructors

PushPublishRTPRunner

```
public PushPublishRTPRunner(PushPublishRTP pushPublisherRTP,  
                             RTPDestination rtpDestination)
```

Instantiates a new rTP PushPublishRTPRunner.

Parameters:

`pushPublisherRTP` - the push publisher rtp
`rtpDestination` - the rtp destination

Methods

disconnect

```
public void disconnect()
```

run

```
public void run()
```

com.wowza.wms.pushpublish.protocol.rtp Class PushPublishRTSPActionNotify

java.lang.Object

└-com.wowza.wms.pushpublish.protocol.rtp.PushPublishRTSPActionNotify

All Implemented Interfaces:

[IRTSPActionNotify](#)

```
public class PushPublishRTSPActionNotify
extends Object
implements IRTSPActionNotify
```

The Class PushPublishRTSPActionNotify.

Constructor Summary

public	PushPublishRTSPActionNotify (com.wowza.wms.pushpublish.module.ModulePushPublish modulePushPublish) Instantiates a new push publish rtsp action notify.
--------	---

Method Summary

void	onAnnounce (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
void	onDescribe (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
void	onGetParameter (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
void	onOptions (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
void	onPause (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
void	onPlay (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
void	onRecord (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
void	onRedirect (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)

void	onSetParameter (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
void	onSetup (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
void	onTeardown (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.rtp.model.IRTSPActionNotify](#)

[onAnnounce](#), [onDescribe](#), [onGetParameter](#), [onOptions](#), [onPause](#), [onPlay](#), [onRecord](#), [onRedirect](#), [onSetParameter](#), [onSetup](#), [onTeardown](#)

Constructors

PushPublishRTSPActionNotify

```
public PushPublishRTSPActionNotify(com.wowza.wms.pushpublish.module.ModulePushPublish modulePushPublish)
```

Instantiates a new push publish rtsp action notify.

Parameters:

modulePushPublish - the module push publish

Methods

onDescribe

```
public void onDescribe(RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

onAnnounce

```
public void onAnnounce(RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

onGetParameter

```
public void onGetParameter(RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

(continued from last page)

onSetParameter

```
public void onSetParameter(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

onOptions

```
public void onOptions(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

onPause

```
public void onPause(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

onPlay

```
public void onPlay(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

onRecord

```
public void onRecord(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

onRedirect

```
public void onRedirect(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

onSetup

```
public void onSetup(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

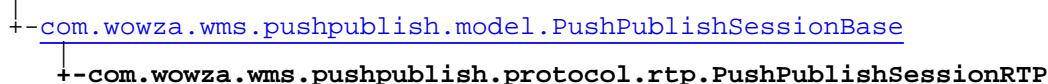
(continued from last page)

onTeardown

```
public void onTeardown(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

com.wowza.wms.pushpublish.protocol.rtp Class PushPublishSessionRTP

java.lang.Object



All Implemented Interfaces:
[IPushPublishSession](#)

public class **PushPublishSessionRTP**
extends [PushPublishSessionBase](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishSessionBase](#)

[profile](#), [pushPublishImpl](#), [stream](#), [type](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishSession](#)

[PUSHPUBLISHSESSION_TYPE_RTMP](#), [PUSHPUBLISHSESSION_TYPE_RTP](#),
[PUSHPUBLISHSESSION_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishSessionRTP()
--------	---

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishSessionBase](#)

[getContextStr](#), [getDestinationID](#), [getProfile](#), [getPushPublishImpl](#), [getStream](#), [getType](#),
[setProfile](#), [setPushPublishImpl](#), [setStream](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishSession](#)

[getContextStr](#), [getDestinationID](#), [getProfile](#), [getPushPublishImpl](#), [getStream](#), [getType](#),
[setProfile](#), [setPushPublishImpl](#), [setStream](#)

Constructors

PushPublishSessionRTP

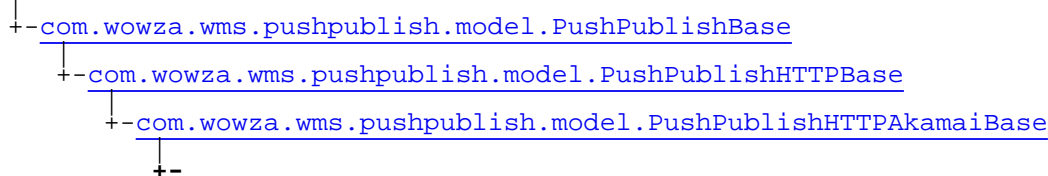
public **PushPublishSessionRTP**()

Package

**com.wowza.wms.pushpublish.protocol.sanjo
se**

com.wowza.wms.pushpublish.protocol.sanjose Class PushPublishHTTPSanJoseAkamaiHandler

java.lang.Object



com.wowza.wms.pushpublish.protocol.sanjose.PushPublishHTTPSanJoseAkamaiHandler

All Implemented Interfaces:

[IPushPublishProfileUtil](#), [IPushPublishHTTPOutputBuilder](#), [IPushPublishHTTPGroupMember](#), [IPushPublish](#)

```

public class PushPublishHTTPSanJoseAkamaiHandler
extends PushPublishHTTPAkamaiBase
implements IPushPublish, IPushPublishHTTPGroupMember, IPushPublishHTTPOutputBuilder,
IPushPublishProfileUtil
  
```

Field Summary

public static final	AKAMAI SANJOSE CHUNK DURATION Value: 6000
public static final	BITRATE KBPS PLACEHOLDER Value: {bitrateKbps}
public static final	BOOTSTRAP INFO ID Value: bootstrap{bitrateKbps}kbps
public static final	BOOTSTRAP URL Value: {bitrateKbps}kbps.bootstrap
public static final	CHUNK ID PLACEHOLDER Value: {chunkId}
public static final	CHUNK LIST NAME Value: playlist.abst
public static final	CHUNK MEDIUM NAME Value: {bitrateKbps}kbpsSeg1-Frag{chunkId}
public static final	CLASS
public static final	CLASS NAME Value: PushPublishHTTPSanJoseAkamai

public static final	HTTPADAPTER_NAME Value: sanjosestreaming
public static final	LIVESTREAMPACKETIZER_NAME Value: sanjosestreamingpacketizer
public static final	MEDIAURLFILENAME Value: {bitrateKbps}kbps
public static final	REPRESENTATIONID Value: {bitrateKbps}kbps
public static final	SETLEVELPLAYLISTNAME Value: setlevelmanifest.f4m
public static final	STREAMLEVELPLAYLISTNAME Value: {bitrateKbps}kbps.f4m
public static final	STREAMNAMEPLACHOLDER Value: {streamName}
public static final	TAB1 Value:
public static final	TAB2 Value:

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPAkamaiBase](#)

[AKAMAI_DEFAULT_HOSTID](#), [akamaiEventName](#), [akamaiHostId](#), [akamaiProtocolName](#), [akamaiStreamId](#), [CLASS](#), [CLASSNAME](#), [connectionTimeout](#), [fakePosts](#), [httpIngressDomainOverride](#), [httpIngressDomainSuffix](#), [httpPlaybackDomainOverride](#), [httpPlaybackDomainSuffix](#), [httpWriterDebug](#), [isPlaybackSSL](#), [isSendSSL](#), [maxRetries](#), [protocol](#), [queryParams](#), [readWriteTimeout](#), [resolvedHostname](#), [reuseSockets](#), [sendToBackupServer](#), [userAgent](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[httpLogManifests](#), [httpManifestDebug](#), [INDETERMINATE_PLAYLIST_COUNT](#), [MIN_PLAYLIST_COUNT](#), [playlistAcrossSessions](#), [playlistCountFromMap](#), [playlistCountFromPacketizer](#), [playlistCrossName](#), [playlistDurationFromMap](#), [playlistMap](#), [playlistName](#), [playlistTimeout](#), [relativePlaylists](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUBLISH_TYPE_CUPERTINO](#), [PUBLISH_TYPE_MPEGDASH](#), [PUBLISH_TYPE_RTMP](#), [PUBLISH_TYPE_RTP](#), [PUBLISH_TYPE_RTP_BUFFERED](#), [PUBLISH_TYPE_SANJOSE](#), [PUBLISH_TYPE_SRT](#), [PUBLISH_TYPE_UNKNOWN](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPOutputBuilder](#)

[PUSHER_ERROR_LIVEPACKETIZER_NOT_CONFIGURED](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishProfileUtil](#)

[PROPERTY_LOG_DEBUG_MANIFEST](#)

Constructor Summary

public	PushPublishHTTPSanJoseAkamaiHandler()
--------	---

Method Summary

Boolean	adaptiveGroupPlaylistNeedsUpdating (long lastUpdateTime, java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups)
void	connect ()
ManifestModel	createGroupPlaylist (String id, java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups, IApplicationInstance appInstance, String context, WMSProperties properties)
PushPublishHTTPOutputItem	createOutputItem (ILiveStreamPacketizer liveStreamPacketizer, int lastChunkIndex)
void	disconnect ()
void	disconnect (boolean hard)
void	error (int errorCode)
String	getAkamaiPlaybackChunklistURL (String filename)
int	getChunkDurationTarget (ILiveStreamPacketizer liveStreamPacketizer)
int	getConnectedState ()
String	getContextStr ()
String	getGroupPlaylistRenditionDescription ()
int	getLastChunkId (ILiveStreamPacketizer liveStreamPacketizer)
String	getLiveStreamPacketizerName ()

long	getMessagesAttemptedCount()
long	getMessagesFailedCount()
long	getMessagesRetriedCount()
Object	getPacketizerLock(ILiveStreamPacketizer liveStreamPacketizer)
String	getPlaylistF4M(LiveStreamPacketizerSanJose packetizer, boolean setLevel)
WMSProperties	getPlaylistProperties()
IPushPublishProfileUtil	getProfileUtil()
String	getSetLevelMediaElements()
String	getStreamLevelMediaElements(LiveStreamPacketizerSanJose packetizer)
void	init(IApplicationInstance appInstance, String streamName, IMediaStream stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean streamDebug)
boolean	isDebugLog()
boolean	isDeleteSentChunks()
Boolean	isGroupReady(java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups)
boolean	isParent(java.util.Map entry)
boolean	isTargetedStream(java.util.Map entry, String streamName)
void	load(java.util.HashMap dataMap)
void	onDeleteEntry(java.util.Map entry)
void	onReadEntry(java.util.Map entry)
void	onWriteEntry(java.util.Map oldEntry, java.util.Map newEntry)
boolean	outputClose()
boolean	outputOpen()
void	outputSend(PushPublishHTTPOutputItem outputItem, int maxItemsInDir)

String	padInt (int value, int len)
void	resetNewPacketizer (ILiveStreamPacketizer liveStreamPacketizer)
void	sendGroupPlaylist (String groupName, ManifestModel manifest)
void	setApplicationName (String appName)
void	setDebugLog (boolean debugLog)
void	setDeleteSentChunks (boolean deleteSentChunks)
void	setRepresentationId (String representationId)
void	setVHost (IVHost vhost)
boolean	validateEntry (java.util.Map entry)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPAkamaiBase](#)

[getAkamaiEventName](#), [getAkamaiHostId](#), [getAkamaiPlaybackDomain](#), [getAkamaiPlaybackURL](#), [getAkamaiStreamId](#), [getConnectionTimeout](#), [getDestinationAdaptiveGroupPath](#), [getDestinationAdaptiveGroupURL](#), [getDestinationDomain](#), [getDestinationPath](#), [getDestinationPort](#), [getDestinationURL](#), [getMaxRetries](#), [getReadWriteTimeout](#), [getResolvedAkamaiStreamId](#), [getUserAgent](#), [init](#), [isDeleteSentChunks](#), [isFakePosts](#), [isHttpDebug](#), [isInRedundancyPair](#), [isReuseSockets](#), [isSendToBackupServer](#), [load](#), [resetConnection](#), [resolveAkamaiStreamId](#), [setAkamaiEventName](#), [setAkamaiHostId](#), [setAkamaiStreamId](#), [setConnectionTimeout](#), [setDeleteSentChunks](#), [setFakePosts](#), [setHttpWriterDebug](#), [setMaxRetries](#), [setReadWriteTimeout](#), [setReuseSockets](#), [setSendToBackupServer](#), [setUserAgent](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[addAdaptiveGroupName](#), [getAdaptiveGroupNames](#), [getPlaylistCount](#), [getPlaylistMap](#), [getPlaylistTimeout](#), [init](#), [isInAdaptiveGroup](#), [isLogDebugManifest](#), [isPlaylistAcrossSessions](#), [isRelativePlaylists](#), [load](#), [logDebugManifest](#), [setPlaylistAcrossSessions](#), [setPlaylistCountFromMap](#), [setPlaylistCountFromPacketizer](#), [setPlaylistTimeout](#), [setRelativePlaylists](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [handleParentStreamDisconnect](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugLog](#), [isExternalRedundancy](#), [isParent](#), [isTargetedStream](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugLog](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateUsageTracker](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProfileUtil](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [handleParentStreamDisconnect](#), [init](#), [isParent](#), [isTargetedStream](#), [resetConnection](#), [setDebugLog](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPGroupMember](#)

[adaptiveGroupPlaylistNeedsUpdating](#), [addAdaptiveGroupName](#), [getAdaptiveGroupNames](#), [getGroupPlaylistRenditionDescription](#), [getPlaylistProperties](#), [isGroupReady](#), [isInAdaptiveGroup](#), [isInRedundancyPair](#), [isLogDebugManifest](#), [isSendToBackupServer](#), [sendGroupPlaylist](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPOutputBuilder](#)

[createOutputItem](#), [error](#), [getAppInstance](#), [getChunkDurationTarget](#), [getDstStreamName](#), [getLastChunkId](#), [getLiveStreamPacketizerName](#), [getPacketizerLock](#), [getSrcStreamName](#), [isDebugLog](#), [outputClose](#), [outputOpen](#), [outputSend](#), [resetNewPacketizer](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishProfileUtil](#)

[createGroupPlaylist](#), [isParent](#), [isTargetedStream](#), [onDeleteEntry](#), [onReadEntry](#), [onWriteEntry](#), [setApplicationName](#), [setVHost](#), [validateEntry](#)

Fields

(continued from last page)

CLASS

```
public static final java.lang.Class CLASS
```

CLASSNAME

```
public static final java.lang.String CLASSNAME
```

Constant value: **PushPublishHTTPSanJoseAkamai**

LIVESTREAMPACKETIZER_NAME

```
public static final java.lang.String LIVESTREAMPACKETIZER_NAME
```

Constant value: **sanjosestreamingpacketizer**

HTTPADAPTER_NAME

```
public static final java.lang.String HTTPADAPTER_NAME
```

Constant value: **sanjosestreaming**

BITRATEKBPSPLACHOLDER

```
public static final java.lang.String BITRATEKBPSPLACHOLDER
```

Constant value: **{bitrateKbps}**

STREAMNAMEPLACHOLDER

```
public static final java.lang.String STREAMNAMEPLACHOLDER
```

Constant value: **{streamName}**

SETLEVELPLAYLISTNAME

```
public static final java.lang.String SETLEVELPLAYLISTNAME
```

Constant value: **setlevelmanifest.f4m**

REPRESENTATIONID

```
public static final java.lang.String REPRESENTATIONID
```

Constant value: **{bitrateKbps}kbps**

STREAMLEVELPLAYLISTNAME

```
public static final java.lang.String STREAMLEVELPLAYLISTNAME
```

(continued from last page)

Constant value: `{bitrateKbps}kbps.f4m`

BOOTSTRAPURL

```
public static final java.lang.String BOOTSTRAPURL
```

Constant value: `{bitrateKbps}kbps.bootstrap`

BOOTSTRAPINFOID

```
public static final java.lang.String BOOTSTRAPINFOID
```

Constant value: `bootstrap{bitrateKbps}kbps`

MEDIAURLFILENAME

```
public static final java.lang.String MEDIAURLFILENAME
```

Constant value: `{bitrateKbps}kbps`

CHUNKLISTNAME

```
public static final java.lang.String CHUNKLISTNAME
```

Constant value: `playlist.abst`

CHUNKIDPLACEHOLDER

```
public static final java.lang.String CHUNKIDPLACEHOLDER
```

Constant value: `{chunkId}`

CHUNKMEDIANAME

```
public static final java.lang.String CHUNKMEDIANAME
```

Constant value: `{bitrateKbps}kbpsSeg1-Frag{chunkId}`

TAB1

```
public static final java.lang.String TAB1
```

Constant value:

TAB2

```
public static final java.lang.String TAB2
```

Constant value:

AKAMAISANJOSECHUNKDURATION

```
public static final int AKAMAISANJOSECHUNKDURATION
```

Constant value: **6000**

Constructors

PushPublishHTTPSanJoseAkamaiHandler

```
public PushPublishHTTPSanJoseAkamaiHandler()
```

Methods

init

```
public void init(IApplicationInstance appInstance,  
    String streamName,  
    IMediaStream stream,  
    java.util.Map profileData,  
    java.util.Map maps,  
    com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
    boolean streamDebug)
```

Inits the instance.

getSetLevelMediaElements

```
public String getSetLevelMediaElements()
```

getStreamLevelMediaElements

```
public String getStreamLevelMediaElements(LiveStreamPacketizerSanJose packetizer)
```

getPlaylistF4M

```
public String getPlaylistF4M(LiveStreamPacketizerSanJose packetizer,  
    boolean setLevel)
```

createOutputItem

```
public PushPublishHTTPOutputItem createOutputItem(ILiveStreamPacketizer  
    liveStreamPacketizer,  
    int lastChunkIndex)
```

(continued from last page)

outputSend

```
public void outputSend(PushPublishHTTPOutputItem outputItem,  
    int maxItemsInDir)
```

getContextStr

```
public String getContextStr()
```

getAkamaiPlaybackChunklistURL

```
public String getAkamaiPlaybackChunklistURL(String filename)
```

resetNewPacketizer

```
public void resetNewPacketizer(ILiveStreamPacketizer liveStreamPacketizer)
```

sendGroupPlaylist

```
public void sendGroupPlaylist(String groupName,  
    ManifestModel manifest)
```

getGroupPlaylistRenditionDescription

```
public String getGroupPlaylistRenditionDescription()
```

isGroupReady

```
public Boolean isGroupReady(java.util.List groupingsByRedundantPairs,  
    java.util.List groupingsByAbrGroups)
```

adaptiveGroupPlaylistNeedsUpdating

```
public Boolean adaptiveGroupPlaylistNeedsUpdating(long lastUpdateTime,  
    java.util.List groupingsByRedundantPairs,  
    java.util.List groupingsByAbrGroups)
```

getPlaylistProperties

```
public WMSProperties getPlaylistProperties()
```

padInt

```
public String padInt(int value,  
                    int len)
```

connect

```
public void connect()
```

disconnect

```
public void disconnect()
```

disconnect

```
public void disconnect(boolean hard)
```

isDeleteSentChunks

```
public boolean isDeleteSentChunks()
```

setDeleteSentChunks

```
public void setDeleteSentChunks(boolean deleteSentChunks)
```

setRepresentationId

```
public void setRepresentationId(String representationId)
```

isDebugLog

```
public boolean isDebugLog()
```

setDebugLog

```
public void setDebugLog(boolean debugLog)
```

Set debug logging.

(continued from last page)

getLiveStreamPacketizerName

```
public String getLiveStreamPacketizerName()
```

getPacketizerLock

```
public Object getPacketizerLock(ILiveStreamPacketizer liveStreamPacketizer)
```

getLastChunkId

```
public int getLastChunkId(ILiveStreamPacketizer liveStreamPacketizer)
```

getChunkDurationTarget

```
public int getChunkDurationTarget(ILiveStreamPacketizer liveStreamPacketizer)
```

outputOpen

```
public boolean outputOpen()
```

outputClose

```
public boolean outputClose()
```

getConnectedState

```
public int getConnectedState()
```

getProfileUtil

```
public IPushPublishProfileUtil getProfileUtil()
```

getMessagesAttemptedCount

```
public long getMessagesAttemptedCount()
```

getMessagesRetriedCount

```
public long getMessagesRetriedCount()
```

(continued from last page)

getMessagesFailedCount

```
public long getMessagesFailedCount()
```

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

error

```
public void error(int errorCode)
```

onWriteEntry

```
public void onWriteEntry(java.util.Map oldEntry,  
    java.util.Map newEntry)
```

onReadEntry

```
public void onReadEntry(java.util.Map entry)
```

onDeleteEntry

```
public void onDeleteEntry(java.util.Map entry)
```

validateEntry

```
public boolean validateEntry(java.util.Map entry)
```

isParent

```
public boolean isParent(java.util.Map entry)
```

isTargetedStream

```
public boolean isTargetedStream(java.util.Map entry,  
    String streamName)
```

createGroupPlaylist

```
public ManifestModel createGroupPlaylist(String id,  
    java.util.List groupingsByRedundantPairs,  
    java.util.List groupingsByAbrGroups,  
    IApplicationInstance appInstance,  
    String context,  
    WMSProperties properties)
```

setVHost

```
public void setVHost(IVHost vhost)
```

setApplicationName

```
public void setApplicationName(String appName)
```

com.wowza.wms.pushpublish.protocol.sanjose Class PushPublishHTTPSanJoseOutputItemChunk

java.lang.Object

└─ [com.wowza.wms.pushpublish.model.PushPublishHTTPOutputItemChunk](#)

└─

com.wowza.wms.pushpublish.protocol.sanjose.PushPublishHTTPSanJoseOutputItemChunk

```
public class PushPublishHTTPSanJoseOutputItemChunk
extends PushPublishHTTPOutputItemChunk
```

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPOutputItemChunk](#)

[chunk](#), [isCustomChunkId](#), [playlistEntry](#), [renditionIndex](#)

Constructor Summary

public	PushPublishHTTPSanJoseOutputItemChunk()
--------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

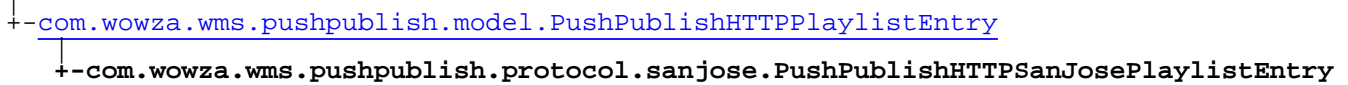
Constructors

PushPublishHTTPSanJoseOutputItemChunk

```
public PushPublishHTTPSanJoseOutputItemChunk()
```

com.wowza.wms.pushpublish.protocol.sanjose Class PushPublishHTTPSanJosePlaylistEntry

java.lang.Object



public class **PushPublishHTTPSanJosePlaylistEntry**
extends [PushPublishHTTPPlaylistEntry](#)

Field Summary

public	chunk
public	chunkListCustomId
public	chunkListId
public	playlistChunkMediaName

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPPlaylistEntry](#)

[delete](#)

Constructor Summary

public	PushPublishHTTPSanJosePlaylistEntry()
--------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

playlistChunkMediaName

public java.lang.String **playlistChunkMediaName**

chunkListId

public long **chunkListId**

chunkListCustomId

public long **chunkListCustomId**

chunk

public
com.wowza.wms.httpstreamer.sanjosestreaming.livestreampacketizer.LiveStreamPacketizerSanJoseChunk **chunk**

Constructors

PushPublishHTTPSanJosePlaylistEntry

public **PushPublishHTTPSanJosePlaylistEntry**()

Package

**com.wowza.wms.pushpublish.protocol.shout
cast**

com.wowza.wms.pushpublish.protocol.shoutcast Interface IPushPublishShoutcastConnector

public interface **IPushPublishShoutcastConnector**
extends

Method Summary

void	addMetaData (String key, String value)
void	clearMetaData ()
void	close (boolean log)
void	connect ()
String	encodeURL (String url)
java.util.HashMap	expandQueryString (String url)
boolean	getConnected ()
boolean	getDebug ()
java.util.HashMap	getMetaData ()
boolean	isMetaDataReady ()
boolean	sendData (byte[] data)
void	sendMetaData (java.util.HashMap metaData)
void	setDebug (boolean debug)
void	setPushPublishShoutcast (PushPublishShoutcast shoutcast)

Methods

connect

public void **connect**()

(continued from last page)

setPushPublishShoutcast

```
public void setPushPublishShoutcast(PushPublishShoutcast shoutcast)
```

sendMetaData

```
public void sendMetaData(java.util.HashMap metaData)
```

isMetaDataReady

```
public boolean isMetaDataReady()
```

getMetaData

```
public java.util.HashMap getMetaData()
```

clearMetaData

```
public void clearMetaData()
```

addMetaData

```
public void addMetaData(String key,  
                        String value)
```

getConnected

```
public boolean getConnected()
```

sendData

```
public boolean sendData(byte[] data)
```

setDebug

```
public void setDebug(boolean debug)
```

getDebug

```
public boolean getDebug()
```

(continued from last page)

close

```
public void close(boolean log)
```

encodeURL

```
public String encodeURL(String url)
```

expandQueryString

```
public java.util.HashMap expandQueryString(String url)
```

com.wowza.wms.pushpublish.protocol.shoutcast Interface IPushPublishShoutcastNotify

public interface **IPushPublishShoutcastNotify**
extends

Method Summary

void	onConnect (IPushPublishShoutcastConnector pushPublisherSession)
void	onConnectFailure (IPushPublishShoutcastConnector pushPublisherSession)
void	onConnectStart (IPushPublishShoutcastConnector pushPublisherSession)
void	onConnectSuccess (IPushPublishShoutcastConnector pushPublisherSession)
void	onDisconnect (IPushPublishShoutcastConnector pushPublisherSession)
void	onPushPublisherSessionCreate (IPushPublishShoutcastConnector pushPublisherSession)
void	onPushPublisherSessionDestroy (IPushPublishShoutcastConnector pushPublisherSession)

Methods

onConnectStart

public void **onConnectStart**([IPushPublishShoutcastConnector](#) pushPublisherSession)

onConnectSuccess

public void **onConnectSuccess**([IPushPublishShoutcastConnector](#) pushPublisherSession)

onConnectFailure

public void **onConnectFailure**([IPushPublishShoutcastConnector](#) pushPublisherSession)

onConnect

public void **onConnect**([IPushPublishShoutcastConnector](#) pushPublisherSession)

onDisconnect

```
public void onDisconnect(IPushPublishShoutcastConnector pushPublisherSession)
```

onPushPublisherSessionCreate

```
public void onPushPublisherSessionCreate(IPushPublishShoutcastConnector  
pushPublisherSession)
```

onPushPublisherSessionDestroy

```
public void onPushPublisherSessionDestroy(IPushPublishShoutcastConnector  
pushPublisherSession)
```

com.wowza.wms.pushpublish.protocol.shoutcast Class PushPublishShoutcast

java.lang.Object

└- [com.wowza.wms.pushpublish.model.PushPublishBase](#)

└- **com.wowza.wms.pushpublish.protocol.shoutcast.PushPublishShoutcast**

All Implemented Interfaces:

[IPublish](#)

```
public class PushPublishShoutcast
extends PushPublishBase
```

Field Summary

protected	aacType
protected	bitrate
protected	channels
public static final	CLASS
public static final	CLASSNAME Value: PushPublishShoutcast
protected	connected
protected	connectionResetCount
protected	connectionTimeout
protected	connectLastAttempt
protected	connectLastSuccess
protected	doSendOnMetaData
protected	frameLength
protected	frequency
protected	isReconnectorRunning
protected	listeners

protected	lock
protected	mpegLayer
protected	mpegProtection
protected	mpegVersion
protected	shoutcastAIM
protected	shoutcastBitrate
protected	shoutcastConnectorProvider
protected	shoutcastContentType
protected	shoutcastDescription
protected	shoutcastGenre
protected	shoutcastICQ
protected	shoutcastIRC
protected	shoutcastName
protected	shoutcastPublic
protected	shoutcastQoS_H
protected	shoutcastQoS_L
protected	shoutcastRunner
protected	shoutcastStreamExpandMeta
protected	shoutcastStreamTitleMetaName
protected	shoutcastURL
protected	tryConnect
protected	waitOnMetadataAudio
protected	waitOnMetadataAudioDataRate

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishShoutcast()
--------	--

Method Summary

String	aacChannel (int channel)
int	aacSamplerate (int freq)
int	aacSamplerateRev (int freq)
String	aacType (int type)
void	addListener (IPushPublishShoutcastNotify listener) Add IPushPublishShoutcastNotify listener
void	bumpReconnectWaitTime () Bump the reconnect wait time
void	connect ()
byte[]	createAACHeader (int aacProfile, int frequency, int channel, int length)
void	disconnect ()
void	disconnect (boolean hard)
int	getConnectedState ()
int	getConnectionTimeout () Get the connection timeout (milliseconds)
String	getContextStr ()
java.util.List	getLocalListeners () Get a list of IPushPublishShoutcastNotify listeners
long	getMessagesAttemptedCount ()

long	getMessagesFailedCount()
long	getMessagesRetriedCount()
IPushPublishProfileUtil	getProfileUtil()
int	getReconnectDelay(long currTime)
IPushPublishShoutcastConnector	getShoutcasConnectorProvider()
String	getShoutcastStreamTitleMetaName()
int	mp3bitrate(int version, int layer, int bitrateidx)
String	mp3channel(int channel)
int	mp3samplerate(int version, int samplerateidx)
void	notifyConnect(IPushPublishShoutcastConnector pushPublisherSession)
void	notifyConnectFailure(IPushPublishShoutcastConnector pushPublisherSession)
void	notifyConnectStart(IPushPublishShoutcastConnector pushPublisherSession)
void	notifyConnectSuccess(IPushPublishShoutcastConnector pushPublisherSession)
void	notifyDisconnect(IPushPublishShoutcastConnector pushPublisherSession)
void	notifyPushPublisherSessionCreate(IPushPublishShoutcastConnector pushPublisherSession)
void	notifyPushPublisherSessionDestroy(IPushPublishShoutcastConnector pushPublisherSession)
void	resetConnection()
void	resetWaitTime()
String	resolveHostName()
void	setConnectionTimeout(int connectionTimeout) Set the connection timeout (milliseconds)
void	setShoutcastConnectorProvider(IPushPublishShoutcastConnector scConn)
void	setShoutcastExpandMetaData(String flag)

void	setShoutcastStreamAIM (String aim)
void	setShoutcastStreamBitrate (String bitrate)
void	setShoutcastStreamContentType (String contenttype)
void	setShoutcastStreamDescription (String desc)
void	setShoutcastStreamGenre (String genre)
void	setShoutcastStreamICQ (String icq)
void	setShoutcastStreamIRC (String irc)
void	setShoutcastStreamName (String name)
void	setShoutcastStreamPublic (String publicf)
void	setShoutcastStreamTitleMetaName (String metaName)
void	setShoutcastStreamURL (String url)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [handleParentStreamDisconnect](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugEnabled](#), [isExternalRedundancy](#), [isParent](#), [isTargetedStream](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugEnabled](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateUsageTracker](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

```
connect, createPushPublishSession, disconnect, getConnectedState, getContextStr,  
getDestinationID, getDestinationName, getDstStreamName, getEntryName, getHostname,  
getMap, getMessagesAttemptedCount, getMessagesFailedCount, getMessagesRetriedCount,  
getPort, getProfile, getProfileUtil, getProperties, getPushPublishType,  
getReconnectWaitTime, getSrcStream, getSrcStreamName, handleParentStreamDisconnect,  
init, isParent, isTargetedStream, resetConnection, setDebugLog, setDestinationName,  
setDstStreamName, setEntryName, setHost, setHostname, setPort, setPort, setProfile,  
setReconnectWaitTime, setSrcStream, setSrcStreamName, setStreamName,  
updateUsageTracker
```

Fields

CLASS

```
public static final java.lang.Class CLASS
```

CLASSNAME

```
public static final java.lang.String CLASSNAME
```

Constant value: **PushPublishShoutcast**

shoutcastQosH

```
protected int shoutcastQosH
```

shoutcastQosL

```
protected int shoutcastQosL
```

shoutcastName

```
protected java.lang.String shoutcastName
```

shoutcastURL

```
protected java.lang.String shoutcastURL
```

shoutcastIRC

```
protected java.lang.String shoutcastIRC
```

shoutcastAIM

protected java.lang.String **shoutcastAIM**

shoutcastICQ

protected java.lang.String **shoutcastICQ**

shoutcastPublic

protected java.lang.String **shoutcastPublic**

shoutcastGenre

protected java.lang.String **shoutcastGenre**

shoutcastBitrate

protected java.lang.String **shoutcastBitrate**

shoutcastContentType

protected java.lang.String **shoutcastContentType**

shoutcastDescription

protected java.lang.String **shoutcastDescription**

shoutcastStreamTitleMetaName

protected java.lang.String **shoutcastStreamTitleMetaName**

shoutcastStreamExpandMeta

protected boolean **shoutcastStreamExpandMeta**

mpegVersion

protected int **mpegVersion**

(continued from last page)

mpegLayer

protected int **mpegLayer**

mpegProtection

protected int **mpegProtection**

bitrate

protected int **bitrate**

channels

protected int **channels**

frequency

protected int **frequency**

frameLength

protected int **frameLength**

aacType

protected int **aacType**

shoutcastConnectorProvider

protected com.wowza.wms.pushpublish.protocol.shoutcast.IPushPublishShoutcastConnector
shoutcastConnectorProvider

shoutcastRunner

protected com.wowza.wms.pushpublish.protocol.shoutcast.PushPublishShoutcastRunner
shoutcastRunner

listeners

protected java.util.List **listeners**

connectLastAttempt

protected long **connectLastAttempt**

connectLastSuccess

protected long **connectLastSuccess**

connectionResetCount

protected long **connectionResetCount**

connectionTimeout

protected int **connectionTimeout**

connected

protected boolean **connected**

doSendOnMetaData

protected boolean **doSendOnMetaData**

waitOnMetadataAudio

protected boolean **waitOnMetadataAudio**

waitOnMetadataAudioDatarate

protected boolean **waitOnMetadataAudioDatarate**

lock

protected java.lang.Object **lock**

(continued from last page)

isReconnectorRunning

protected boolean **isReconnectorRunning**

tryConnect

protected boolean **tryConnect**

Constructors

PushPublishShoutcast

public **PushPublishShoutcast**()

Methods

setShoutcastConnectorProvider

public void **setShoutcastConnectorProvider**([IPushPublishShoutcastConnector](#) scConn)

getShoutcasConnectorProvider

public [IPushPublishShoutcastConnector](#) **getShoutcasConnectorProvider**()

connect

public void **connect**()

disconnect

public void **disconnect**()

disconnect

public void **disconnect**(boolean hard)

resetConnection

public void **resetConnection**()

(continued from last page)

getConnectedState

```
public int getConnectedState()
```

getProfileUtil

```
public IPushPublishProfileUtil getProfileUtil()
```

getMessagesAttemptedCount

```
public long getMessagesAttemptedCount()
```

getMessagesRetriedCount

```
public long getMessagesRetriedCount()
```

getMessagesFailedCount

```
public long getMessagesFailedCount()
```

getReconnectDelay

```
protected int getReconnectDelay(long currTime)
```

resetWaitTime

```
protected void resetWaitTime()
```

bumpReconnectWaitTime

```
protected void bumpReconnectWaitTime()
```

Bump the reconnect wait time

getConnectionTimeout

```
public int getConnectionTimeout()
```

Get the connection timeout (milliseconds)

Returns:

connection timeout (milliseconds)

setConnectionTimeout

```
public void setConnectionTimeout(int connectionTimeout)
```

Set the connection timeout (milliseconds)

Parameters:

connectionTimeout - connection timeout (milliseconds)

resolveHostName

```
protected String resolveHostName()
```

getLocalListeners

```
protected java.util.List getLocalListeners()
```

Get a list of IPushPublishShoutcastNotify listeners

Returns:

list of IPushPublishShoutcastNotify listeners

addListener

```
public void addListener(IPushPublishShoutcastNotify listener)
```

Add IPushPublishShoutcastNotify listener

Parameters:

listener - IPushPublishShoutcastNotify listener

notifyConnect

```
protected void notifyConnect(IPushPublishShoutcastConnector pushPublisherSession)
```

notifyConnectStart

```
protected void notifyConnectStart(IPushPublishShoutcastConnector pushPublisherSession)
```

notifyConnectSuccess

```
protected void notifyConnectSuccess(IPushPublishShoutcastConnector  
pushPublisherSession)
```

notifyConnectFailure

```
protected void notifyConnectFailure(IPushPublishShoutcastConnector  
pushPublisherSession)
```

notifyPushPublisherSessionCreate

protected void **notifyPushPublisherSessionCreate**([IPushPublishShoutcastConnector](#) pushPublisherSession)

notifyPushPublisherSessionDestroy

protected void **notifyPushPublisherSessionDestroy**([IPushPublishShoutcastConnector](#) pushPublisherSession)

notifyDisconnect

protected void **notifyDisconnect**([IPushPublishShoutcastConnector](#) pushPublisherSession)

aacChannel

public String **aacChannel**(int channel)

aacSamplerate

public int **aacSamplerate**(int freq)

aacsampleraterev

public int **aacsampleraterev**(int freq)

mp3bitrate

public int **mp3bitrate**(int version,
int layer,
int bitrateidx)

mp3samplerate

public int **mp3samplerate**(int version,
int samplerateidx)

mp3channel

public String **mp3channel**(int channel)

aacType

```
public String aacType(int type)
```

createAACHeader

```
public byte[] createAACHeader(int aacProfile,  
    int frequency,  
    int channel,  
    int length)
```

setShoutcastStreamDescription

```
public void setShoutcastStreamDescription(String desc)
```

setShoutcastStreamName

```
public void setShoutcastStreamName(String name)
```

setShoutcastStreamURL

```
public void setShoutcastStreamURL(String url)
```

setShoutcastStreamIRC

```
public void setShoutcastStreamIRC(String irc)
```

setShoutcastStreamAIM

```
public void setShoutcastStreamAIM(String aim)
```

setShoutcastStreamICQ

```
public void setShoutcastStreamICQ(String icq)
```

setShoutcastStreamPublic

```
public void setShoutcastStreamPublic(String publicf)
```

setShoutcastStreamGenre

```
public void setShoutcastStreamGenre(String genre)
```

setShoutcastStreamBitrate

```
public void setShoutcastStreamBitrate(String bitrate)
```

setShoutcastStreamContentType

```
public void setShoutcastStreamContentType(String contenttype)
```

setShoutcastStreamTitleMetaName

```
public void setShoutcastStreamTitleMetaName(String metaName)
```

getShoutcastStreamTitleMetaName

```
public String getShoutcastStreamTitleMetaName()
```

setShoutcastExpandMetaData

```
public void setShoutcastExpandMetaData(String flag)
```

getContextStr

```
public String getContextStr()
```

Package

com.wowza.wms.response

com.wowza.wms.response Class ResponseFunction

java.lang.Object

└─com.wowza.wms.response.ResponseFunction

```
public class ResponseFunction
extends Object
```

ResponseFunction: class for sending status messages to the client.

Field Summary

public	doBreak
--------	-------------------------

Constructor Summary

public	ResponseFunction (IClient client) Create an empty ResponseFunction
public	ResponseFunction (INetConnection netConnection) Create an empty ResponseFunction
public	ResponseFunction (INetConnection netConnection, AMFObj amfObj) Create an empty ResponseFunction
public	ResponseFunction (IClient client, AMFObj amfObj) Create an empty ResponseFunction
public	ResponseFunction (IMediaStream stream, AMFObj amfObj) Create an empty ResponseFunction

Method Summary

void	addBody (AMFData body) Add AMFData to the body of the message.
void	addBytes (byte[] inbytes) Add raw AMFData bytes[] to message body
void	createBroadcastMessage (java.nio.ByteBuffer messageBytes) Create broadcast message.
void	createConnectMessage (String inName, double inResultNum) Create net connection connect message.
void	createDefaultMessage (String inName, double inResultNum) Create a default message (onStatus type messages).
void	createEnhancedSeekMessage (byte[] messageBuffer, int src, int tc)

void	createPlayStatusMessage (String inName) Create onPlayStatus message.
void	createSeekMessage (String inName) Create a seek result message.
void	createSOMessage (byte[] messageBuffer, int objectEncoding) Create shared object message.
long	getTimecode () Get function timecode (milliseconds).
int	getType () Get message type.
boolean	isForceAMF0 ()
void	setBody (int index, AMFData body) Add AMFData to the body of the message.
void	setForceAMF0 (boolean forceAMF0)
void	setMessageBytes (byte[] messageBytes)
void	setRetAMFNumber (int innum) Set the return channel id
void	setSrc (int src) Set the src (stream id) for the message.
void	setTimecode (long timecode) Set function timecode (milliseconds).
void	setType (int type) Set message type.
int	write (java.io.OutputStream out, boolean isAbsTimecode, int chunkSize) Write message directly to OutputStream
int	write (java.io.OutputStream out, int chunkSize) Write message directly to OutputStream.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

doBreak

public boolean **doBreak**

(continued from last page)

Constructors

ResponseFunction

```
public ResponseFunction(IClient client)
```

Create an empty ResponseFunction

Parameters:

client - client

ResponseFunction

```
public ResponseFunction(INetConnection netConnection)
```

Create an empty ResponseFunction

Parameters:

netConnection - net connection

ResponseFunction

```
public ResponseFunction(INetConnection netConnection,  
AMFObj amfObj)
```

Create an empty ResponseFunction

Parameters:

netConnection - net connection

amfObj - amf object

ResponseFunction

```
public ResponseFunction(IClient client,  
AMFObj amfObj)
```

Create an empty ResponseFunction

Parameters:

client - client object

amfObj - amf object

ResponseFunction

```
public ResponseFunction(IMediaStream stream,  
AMFObj amfObj)
```

Create an empty ResponseFunction

Parameters:

stream - media stream object

amfObj - amf object

Methods

setSrc

```
public void setSrc(int src)
```

(continued from last page)

Set the src (stream id) for the message.

Parameters:

src - src (stream id)

createDefaultMessage

```
public void createDefaultMessage(String inName,  
    double inResultNum)
```

Create a default message (onStatus type messages).

Parameters:

inName - handler name (example: onStatus)

inResultNum - result number of 0 if not result

createConnectMessage

```
public void createConnectMessage(String inName,  
    double inResultNum)
```

Create net connection connect message.

Parameters:

inName - handler name (example: connection)

inResultNum - result number if 0 not a result

createSeekMessage

```
public void createSeekMessage(String inName)
```

Create a seek result message.

Parameters:

inName - handler name (example: onStatus)

createPlayStatusMessage

```
public void createPlayStatusMessage(String inName)
```

Create onPlayStatus message.

Parameters:

inName - handler name (example: onPlayStatus)

setMessageBytes

```
public void setMessageBytes(byte[] messageBytes)
```

createBroadcastMessage

```
public void createBroadcastMessage(java.nio.ByteBuffer messageBytes)
```

Create broadcast message. Used for ByteBuffer handler calls.

Parameters:

(continued from last page)

messageBytes - ByteBuffer with raw AMFData bytes to be sent to client

createSOMessage

```
public void createSOMessage(byte[] messageBuffer,  
    int objectEncoding)
```

Create shared object message. Used for ByteBuffer handler calls.

Parameters:

messageBuffer

createEnhancedSeekMessage

```
public void createEnhancedSeekMessage(byte[] messageBuffer,  
    int src,  
    int tc)
```

addBody

```
public void addBody(AMFData body)
```

Add AMFData to the body of the message.

Parameters:

body - AMFData message

setBody

```
public void setBody(int index,  
    AMFData body)
```

Add AMFData to the body of the message.

Parameters:

index - index in body list

body - AMFData message

addBytes

```
public void addBytes(byte[] inbytes)
```

Add raw AMFData bytes[] to message body

Parameters:

inbytes - raw AMFData bytes[]

setRetAMFNumber

```
public void setRetAMFNumber(int innum)
```

Set the return channel id

Parameters:

innum - return channel id

(continued from last page)

getTimecode

```
public long getTimecode()
```

Get function timecode (milliseconds).

Returns:

function timecode (milliseconds)

setTimecode

```
public void setTimecode(long timecode)
```

Set function timecode (milliseconds).

Parameters:

timecode - function timecode (milliseconds)

setType

```
public void setType(int type)
```

Set message type. See IVHost.CONTENTTYPE_*

Parameters:

type - message type

getType

```
public int getType()
```

Get message type. See IVHost.CONTENTTYPE_*

Returns:

message type

write

```
public int write(java.io.OutputStream out,  
                int chunkSize)
```

Write message directly to OutputStream.

Parameters:

out - OutputStream

Returns:

number of bytes written

isForceAMF0

```
public boolean isForceAMF0()
```

setForceAMF0

```
public void setForceAMF0(boolean forceAMF0)
```

(continued from last page)

write

```
public int write(java.io.OutputStream out,  
                boolean isAbsTimecode,  
                int chunkSize)
```

Write message directly to OutputStream

Parameters:

out - OutputStream
isAbsTimecode - is timecode absolute

Returns:

number of bytes written

com.wowza.wms.response Class ResponseFunctions

java.lang.Object

└─com.wowza.wms.response.ResponseFunctions

```
public class ResponseFunctions
extends Object
```

ResponseFunctions: collection of ResponseFunction objects. This interface is used to asynchronously collect up a set of client responses that will be sent to the client at the next opportunity.

Constructor Summary

public	ResponseFunctions()
--------	-------------------------------------

Method Summary

void	add(ResponseFunction wmsResponseFunction) Add a function.
void	clear()
boolean	isPending() Are there any pending items in the list.
int	output(java.io.OutputStream out, int sendChunkSize) Write all functions (in order added to list) to OutputStream.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ResponseFunctions

```
public ResponseFunctions()
```

Methods

add

```
public void add(ResponseFunction wmsResponseFunction)
```

Add a function.

(continued from last page)

Parameters:

wmsResponseFunction - function

clear

```
public void clear()
```

isPending

```
public boolean isPending()
```

Are there any pending items in the list.

Returns:

true if items in list

output

```
public int output(java.io.OutputStream out,  
int sendChunkSize)
```

Write all functions (in order added to list) to OutputStream.

Parameters:

out - OutputStream

Returns:

total number of bytes written

com.wowza.wms.response Class ResponseStream

java.lang.Object

└─com.wowza.wms.response.ResponseStream

public class **ResponseStream**
extends Object

Constructor Summary

public	ResponseStream (IMediaStream stream)
--------	---

Method Summary

void	addPackets (java.util.List packets)
void	clearPackets ()
java.util.List	getPackets ()
IMediaStream	getStream ()
void	setStream (IMediaStream stream)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ResponseStream

public **ResponseStream**([IMediaStream](#) stream)

Methods

addPackets

public void **addPackets**(java.util.List packets)

(continued from last page)

getPackets

```
public java.util.List getPackets()
```

clearPackets

```
public void clearPackets()
```

getStream

```
public IMediaStream getStream()
```

setStream

```
public void setStream(IMediaStream stream)
```

com.wowza.wms.response Class ResponseStreams

java.lang.Object

└-com.wowza.wms.response.ResponseStreams

public class **ResponseStreams**
extends Object

Constructor Summary

public	ResponseStreams()
--------	-----------------------------------

Method Summary

void	addStreamResponse (IMediaStream stream)
boolean	isPending ()
int	output (java.io.OutputStream out, IClient clientInt)
int	size ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ResponseStreams

public **ResponseStreams**()

Methods

addStreamResponse

public void **addStreamResponse**([IMediaStream](#) stream)

(continued from last page)

output

```
public int output(java.io.OutputStream out,  
    IClient clientInt)
```

isPending

```
public boolean isPending()
```

size

```
public int size()
```

Package

com.wowza.wms.rtp.model

com.wowza.wms.rtp.model Interface IRTPEncryptionProvider

public interface **IRTPEncryptionProvider**
extends

Method Summary

void	onTrack (RTPSession rtpSession, RTPTrack rtpTrack)
------	---

Methods

onTrack

public void **onTrack**([RTPSession](#) rtpSession,
RTPTrack rtpTrack)

com.wowza.wms.rtp.model Interface IRTPMessageHandler

public interface **IRTPMessageHandler**
extends

IRTPMessageHandler: Internal use.

Method Summary

void	handleMessage (java.net.SocketAddress socketAddr, byte[] buffer, int offset, int len)
------	---

Methods

handleMessage

```
public void handleMessage(java.net.SocketAddress socketAddr,  
    byte[] buffer,  
    int offset,  
    int len)
```

com.wowza.wms.rtp.model Interface IRTPMetadataProvider

public interface **IRTPMetadataProvider**
extends

IRTPMetadataProvider: Internal use.

Method Summary

byte[]	getMetadataPacket (RTPStream stream)
--------	---

Methods

getMetadataPacket

public byte[] **getMetadataPacket**([RTPStream](#) stream)

com.wowza.wms.rtp.model Interface IRTPSessionNotify

public interface **IRTPSessionNotify**
extends

IRTPSessionNotify: listener interface for RTP sessions. See RTPSessions.addSessionListener(IRTPSessionNotify listener)

Method Summary

void	onRTPSessionCreate (RTPSession rtpSession) Invoked when RTP session is created
void	onRTPSessionDestroy (RTPSession rtpSession) Invoked when RTP session is destroyed

Methods

onRTPSessionCreate

public void **onRTPSessionCreate**([RTPSession](#) rtpSession)

Invoked when RTP session is created

Parameters:

rtpSession - RTP session

onRTPSessionDestroy

public void **onRTPSessionDestroy**([RTPSession](#) rtpSession)

Invoked when RTP session is destroyed

Parameters:

rtpSession - RTP session

com.wowza.wms.rtp.model Interface IRTSPActionNotify

All Known Implementing Classes:

[PushPublishRTSPActionNotify](#)

public interface **IRTSPActionNotify**
extends

IRTSPActionNotify: listener interface for RTSP actions. See RTPSession.addActionListener(IRTSPActionNotify actionListener)

Method Summary	
void	onAnnounce (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by ANNOUNCE command
void	onDescribe (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by DESCRIBE command
void	onGetParameter (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by GET_PARAMETER command
void	onOptions (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by OPTIONS command
void	onPause (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by PAUSE command
void	onPlay (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by PLAY command
void	onRecord (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by RECORD command
void	onRedirect (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by REDIRECT command
void	onSetParameter (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by SET_PARAMETER command
void	onSetup (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by SETUP command

void	<pre>onTearDown(RTPSession rtspSession, com.wowza.wms.rtp.RTSPRequestMessage req, com.wowza.wms.rtp.RTSPResponseMessages resp)</pre> <p>Invoked by TEARDOWN command</p>
------	---

Methods

onDescribe

```
public void onDescribe(RTPSession rtspSession,  
com.wowza.wms.rtp.RTSPRequestMessage req,  
com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by DESCRIBE command

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

onAnnounce

```
public void onAnnounce(RTPSession rtspSession,  
com.wowza.wms.rtp.RTSPRequestMessage req,  
com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by ANNOUNCE command

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

onSetParameter

```
public void onSetParameter(RTPSession rtspSession,  
com.wowza.wms.rtp.RTSPRequestMessage req,  
com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by SET_PARAMETER command

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

onGetParameter

```
public void onGetParameter(RTPSession rtspSession,  
com.wowza.wms.rtp.RTSPRequestMessage req,  
com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by GET_PARAMETER command

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

onOptions

```
public void onOptions(RTPSession rtspSession,  
    com.wowza.wms.rtp.RTSPRequestMessage req,  
    com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by OPTIONS command

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

onPause

```
public void onPause(RTPSession rtspSession,  
    com.wowza.wms.rtp.RTSPRequestMessage req,  
    com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by PAUSE command

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

onPlay

```
public void onPlay(RTPSession rtspSession,  
    com.wowza.wms.rtp.RTSPRequestMessage req,  
    com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by PLAY command

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

onRecord

```
public void onRecord(RTPSession rtspSession,  
    com.wowza.wms.rtp.RTSPRequestMessage req,  
    com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by RECORD command

Parameters:

rtspSession
req
resp

onRedirect

```
public void onRedirect(RTPSession rtspSession,  
    com.wowza.wms.rtp.RTSPRequestMessage req,  
    com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by REDIRECT command

(continued from last page)

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

onSetup

```
public void onSetup(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked by SETUP command

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

onTeardown

```
public void onTeardown(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked by TEARDOWN command

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

com.wowza.wms.rtp.model Class RTPContext

java.lang.Object

└-com.wowza.wms.rtp.model.RTPContext

public class **RTPContext**
extends Object

RTPContext: RTP context

Constructor Summary

public	RTPContext (IVHost vhost) Constructor
--------	---

Method Summary

boolean	acquireSocketAddress (java.net.SocketAddress socketAddress) Acquire UDP socket address
int	acquireUDPPortPair () Acquire next available UDP port pair
int	acquireUDPPortPair (int port) Acquire UDP port pair
void	cacheRTPStream (RTPStream stream) Cache an RTP stream, Internal use.
void	doWatchdog () Idle events for cleanup
boolean	existsRTSPTunnelingSession (String sessionId) Return true if session id is valid RTSP/RTP tunneling session id
int[]	expandToPortPair (int port) Expand a single port to a pair.
RTPPacketizerItem	getAudioPacketizerItem (IApplicationInstance appInstance, int codecId) Get audio packetizer for a given codec id.
com.wowza.wms.rtp.dep acketizer.RTPDePacket izerList	getDePacketizerList () Get a list of the available depacketizers
String	getDePacketizerName (RTPTrack rtpTrack) Get a depacketizer by name
Object	getLock () Get the UDP port manager lock
Object	getRTSPTunnelingLock () Get the RTSP/RTP tunneling lock

com.wowza.wms.rtsp.RTSP TunnelingSession	getRTSP TunnelingSession (String sessionId) Get RTSP/RTP tunneling session by session id
RTPSessions	getSessions () Get RTP sessions
RTPPacketizerItem	getStreamPacketizerItem (IApplicationInstance appInstance, int codecId) Get stream packetizer for a given codec id.
UDPTransportManager	getUDPTransportManager () Get the UDP transport manager
IVHost	getVHost () Get vhost
RTPPacketizerItem	getVideoPacketizerItem (IApplicationInstance appInstance, int codecId) Get video packetizer for a given codec id.
void	init () Initialize
boolean	isUDPPortDebugLog ()
void	putAudioPacketizerItem (int codecId, RTPPacketizerItem rtpPacketizerInfo) Set the audio packetizer for a given codec id
void	putRTSP TunnelingSession (String sessionId, com.wowza.wms.rtsp.RTSP TunnelingSession rtspTunnelingSession) Remove RTSP/RTP tunneling session by session id
void	putStreamPacketizerItem (int codecId, RTPPacketizerItem rtpPacketizerInfo) Set the stream packetizer for a given codec id
void	putVideoPacketizerItem (int codecId, RTPPacketizerItem rtpPacketizerInfo) Set the video packetizer for a given codec id
boolean	releaseSocketAddress (java.net.SocketAddress socketAddress) Release UDP socket address
void	releaseUDPPortPair (int port) Release port pair
com.wowza.wms.rtsp.RTSP TunnelingSession	removeRTSP TunnelingSession (String sessionId) Remove RTSP/RTP tunneling session by session id
void	shutdown () Shutdown
void	shutdownRTPSession (RTPSession rtpSession) Gracefully and forcefully shutdown and RTP session
void	shutdownRTPSession (String sessionId) Gracefully and forcefully shutdown and RTP session
RTPStream	uncacheRTPStream (String streamId) UnCache an RTP stream, Internal use.

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

RTPContext

```
public RTPContext(IVHost vhost)
```

Constructor

Parameters:

vhost - vhost

Methods

doWatchdog

```
public void doWatchdog()
```

Idle events for cleanup

init

```
public void init()
```

Initialize

shutdown

```
public void shutdown()
```

Shutdown

getAudioPacketizerItem

```
public RTPPacketizerItem getAudioPacketizerItem(IApplicationInstance appInstance,  
int codecId)
```

Get audio packetizer for a given codec id.

Parameters:

appInstance - application instance

codecId - codec id, see `IVHost.CODEC_AUDIO_*`

Returns:

packetizer info

putAudioPacketizerItem

```
public void putAudioPacketizerItem(int codecId,  
RTPPacketizerItem rtpPacketizerInfo)
```

Set the audio packetizer for a given codec id

(continued from last page)

Parameters:

codecId - codec id, see IVHost.CODEC_AUDIO_*
rtpPacketizerInfo - packetizer info

getVideoPacketizerItem

```
public RTPPacketizerItem getVideoPacketizerItem(IApplicationInstance appInstance,  
int codecId)
```

Get video packetizer for a given codec id.

Parameters:

appInstance - application instance
codecId - codec id, see IVHost.CODEC_VIDEO_*

Returns:

packetizer info

putVideoPacketizerItem

```
public void putVideoPacketizerItem(int codecId,  
RTPPacketizerItem rtpPacketizerInfo)
```

Set the video packetizer for a given codec id

Parameters:

codecId - codec id, see IVHost.CODEC_VIDEO_*
rtpPacketizerInfo - packetizer info

getStreamPacketizerItem

```
public RTPPacketizerItem getStreamPacketizerItem(IApplicationInstance appInstance,  
int codecId)
```

Get stream packetizer for a given codec id.

Parameters:

appInstance - application instance
codecId - codec id, see IVHost.CODEC_STREAM_*

Returns:

packetizer info

putStreamPacketizerItem

```
public void putStreamPacketizerItem(int codecId,  
RTPPacketizerItem rtpPacketizerInfo)
```

Set the stream packetizer for a given codec id

Parameters:

codecId - codec id, see IVHost.CODEC_STREAM_*
rtpPacketizerInfo - packetizer info

getSessions

```
public RTPSessions getSessions()
```

(continued from last page)

Get RTP sessions

Returns:

RTP sessions

getVHost

public [IVHost](#) **getVHost**()

Get vhost

Returns:

vhost

getUDPTransportManager

public [UDPTransportManager](#) **getUDPTransportManager**()

Get the UDP transport manager

Returns:

UDP transport manager

getLock

public Object **getLock**()

Get the UDP port manager lock

Returns:

UDP port manager lock

acquireSocketAddress

public boolean **acquireSocketAddress**(java.net.SocketAddress socketAddress)

Acquire UDP socket address

Parameters:

socketAddress - UDP socket address

Returns:

true if available

releaseSocketAddress

public boolean **releaseSocketAddress**(java.net.SocketAddress socketAddress)

Release UDP socket address

Parameters:

socketAddress - UDP socket address

Returns:

true if available

(continued from last page)

acquireUDPPortPair

```
public int acquireUDPPortPair(int port)
```

Acquire UDP port pair

Parameters:

port - starting port

Returns:

port

expandToPortPair

```
public int[] expandToPortPair(int port)
```

Expand a single port to a pair. Ports are allocated in pairs always starting with even port number.

Parameters:

port - port

Returns:

port

acquireUDPPortPair

```
public int acquireUDPPortPair()
```

Acquire next available UDP port pair

Returns:

port

releaseUDPPortPair

```
public void releaseUDPPortPair(int port)
```

Release port pair

Parameters:

port - first port of pair

isUDPPortDebugLog

```
public boolean isUDPPortDebugLog()
```

cacheRTPStream

```
public void cacheRTPStream(RTPStream stream)
```

Cache an RTP stream, Internal use.

Parameters:

stream - RTP stream

(continued from last page)

uncacheRTPStream

```
public RTPStream uncacheRTPStream(String streamId)
```

UnCache an RTP stream, Internal use.

Parameters:

streamId - stream id

Returns:

RTP Stream

getDePacketizerList

```
public com.wowza.wms.rtp.depaketizer.RTPDePacketizerList getDePacketizerList()
```

Get a list of the available depacketizers

Returns:

list of the available depacketizers

getDePacketizerName

```
public String getDePacketizerName(RTPTrack rtpTrack)
```

Get a depacketizer by name

Parameters:

rtpTrack - track

Returns:

depacketizer

getRTSPTunnelingLock

```
public Object getRTSPTunnelingLock()
```

Get the RTSP/RTP tunneling lock

Returns:

RTSP/RTP tunneling lock

getRTSPTunnelingSession

```
public com.wowza.wms.rtp.RTSPTunnelingSession getRTSPTunnelingSession(String  
sessionId)
```

Get RTSP/RTP tunneling session by session id

Parameters:

sessionId - session id

Returns:

RTSP/RTP tunneling session

(continued from last page)

removeRTSPTunnelingSession

```
public com.wowza.wms.rtp.RTSPTunnelingSession removeRTSPTunnelingSession(String  
sessionId)
```

Remove RTSP/RTP tunneling session by session id

Parameters:

sessionId - session id

Returns:

RTSP/RTP tunneling session if removed

existsRTSPTunnelingSession

```
public boolean existsRTSPTunnelingSession(String sessionId)
```

Return true if session id is valid RTSP/RTP tunneling session id

Parameters:

sessionId - session id

Returns:

true if session id is valid RTSP/RTP tunneling session id

putRTSPTunnelingSession

```
public void putRTSPTunnelingSession(String sessionId,  
com.wowza.wms.rtp.RTSPTunnelingSession rtspTunnelingSession)
```

Remove RTSP/RTP tunneling session by session id

Parameters:

sessionId - session id

rtspTunnelingSession - RTSP/RTP tunneling session

shutdownRTPSession

```
public void shutdownRTPSession(String sessionId)
```

Gracefully and forcefully shutdown and RTP session

Parameters:

sessionId

shutdownRTPSession

```
public void shutdownRTPSession(RTPSession rtpSession)
```

Gracefully and forcefully shutdown and RTP session

Parameters:

rtpSession - RTP session

com.wowza.wms.rtp.model Class RTPDestination

java.lang.Object

└-com.wowza.wms.rtp.model.RTPDestination

```
public class RTPDestination
extends Object
```

RTPDestination: Fully describes an RTP destination.

Constructor Summary

public	RTPDestination()
--------	----------------------------------

Method Summary

String	getAudioHost() Get audio host
int	getAudioPort() Get audio port
String	getHost() Get the host
String	getHostType() Get host type (default IP4)
String	getName() Get name
int	getStreamPort() Get stream port
int	getTTL() Get time to live
String	getVideoHost() Get video host
int	getVideoPort() Get video port
boolean	isMulticast() Return true if multicast destination
boolean	isRTPWrapped() Is stream wrapped in RTP (MPEG-TS in RTP)
boolean	isStream() Return true if stream destination (and not native RTP destination)

void	setAudioHost (String audioHost) Set audio host
void	setAudioPort (int audioPort) Set audio port
void	setHost (String host) Set host
void	setHostType (String hostType) Set host type (default IP4)
void	setName (String name) Set name
void	setRTPWrapped (boolean isRTPWrapped) Is stream wrapped in RTP (MPEG-TS in RTP)
void	setStreamPort (int streamPort) Set stream port
void	setTTL (int ttl) Set time to live
void	setVideoHost (String videoHost) Set video host
void	setVideoPort (int videoPort) Set video port
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

RTPDestination

```
public RTPDestination()
```

Methods

toString

```
public String toString()
```

(continued from last page)

isMulticast

```
public boolean isMulticast()
```

Return true if multicast destination

Returns:

true if multicast destination

isStream

```
public boolean isStream()
```

Return true if stream destination (and not native RTP destination)

Returns:

true if stream destination

getHost

```
public String getHost()
```

Get the host

Returns:

host

setHost

```
public void setHost(String host)
```

Set host

Parameters:

host - host

getVideoPort

```
public int getVideoPort()
```

Get video port

Returns:

video port

setVideoPort

```
public void setVideoPort(int videoPort)
```

Set video port

Parameters:

videoPort - video port

getAudioPort

```
public int getAudioPort()
```

(continued from last page)

Get audio port

Returns:

audio port

setAudioPort

```
public void setAudioPort(int audioPort)
```

Set audio port

Parameters:

audioPort - audio port

getStreamPort

```
public int getStreamPort()
```

Get stream port

Returns:

stream port

setStreamPort

```
public void setStreamPort(int streamPort)
```

Set stream port

Parameters:

streamPort - stream port

getVideoHost

```
public String getVideoHost()
```

Get video host

Returns:

video host

setVideoHost

```
public void setVideoHost(String videoHost)
```

Set video host

Parameters:

videoHost - video host

getAudioHost

```
public String getAudioHost()
```

Get audio host

Returns:

audio host

setAudioHost

```
public void setAudioHost(String audioHost)
```

Set audio host

Parameters:

audioHost - audio host

getHostType

```
public String getHostType()
```

Get host type (default IP4)

Returns:

host type

setHostType

```
public void setHostType(String hostType)
```

Set host type (default IP4)

Parameters:

hostType - host type

getTTL

```
public int getTTL()
```

Get time to live

Returns:

time to live

setTTL

```
public void setTTL(int ttl)
```

Set time to live

Parameters:

ttl - time to live

isRTPWrapped

```
public boolean isRTPWrapped()
```

Is stream wrapped in RTP (MPEG-TS in RTP)

Returns:

true if stream wrapped in RTP

setRTPWrapped

```
public void setRTPWrapped(boolean isRTPWrapped)
```

(continued from last page)

Is stream wrapped in RTP (MPEG-TS in RTP)

Parameters:

isRTPWrapped - true if stream wrapped in RTP

getName

```
public String getName()
```

Get name

Returns:

name

setName

```
public void setName(String name)
```

Set name

Parameters:

name - name

com.wowza.wms.rtp.model Class RTPPort

java.lang.Object

└-com.wowza.wms.rtp.model.RTPPort

All Implemented Interfaces:

[IUDPMessageHandler](#)

```
public class RTPPort
extends Object
implements IUDPMessageHandler
```

Constructor Summary

public	RTPPort (String inIpAddress, int inPort, String outIpAddress, int outPort, boolean isMulticast) Constructor
--------	--

Method Summary

void	bind (int direction) Bind to port
int	getAddressCount () Get address count
I RTPMessageHandler	getHandler () Get the message handler
String	getInIpAddress () Get in IP address
int	getInPort () Get in port
String	getOutIpAddress () Get out IP address
int	getOutPort () Get out port
RTPTrack	getTrack () Get RTP track
int	getTTL () Get time to live (milliseconds)
IUDPTransport	getUDPTransport () Get the UDP transport
void	handleMessage (java.net.SocketAddress socketAddr, Object message)

boolean	isBlockUDPOut()
boolean	isConnected()
boolean	isInMulticast() Is in stream multicast
boolean	isMulticast() Is multicast
boolean	isOutMulticast() Is out stream multicast
void	sendMessage (byte[] message, int offset, int len) Send a message out
void	sendResponse (byte[] message) Send a response
void	sendResponse (byte[] message, int offset, int len) Send response
void	sendResponse (byte[] message, int offset, int len, java.net.SocketAddress destination, long timecode) Send response to destination
void	sessionClosed (IUDPTransportSession session)
void	sessionOpened (IUDPTransportSession session)
void	setAddressCount (int addressCount) Set address count
void	setBlockUDPOut (boolean blockUDPOut)
void	setHandler (IRTPMessageHandler handler) Set the message handler
void	setTrack (RTPTrack track) Set RTP track
void	setTTL (int ttl) Set time to live (milliseconds)
void	shutdown () Shutdown port
void	unbind () Unbind

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.rtp.transport.IUDPMessageHandler](#)

[handleMessage](#), [sessionClosed](#), [sessionOpened](#)

Constructors

RTPPort

```
public RTPPort(String inIpAddress,
               int inPort,
               String outIpAddress,
               int outPort,
               boolean isMulticast)
```

Constructor

Parameters:

inIpAddress - in ip address
inPort - in port
outIpAddress - out ip address
outPort - out port
isMulticast - true if multicast

Methods

getTrack

```
public RTPTrack getTrack()
```

Get RTP track

Returns:

RTP track

setTrack

```
public void setTrack(RTPTrack track)
```

Set RTP track

Parameters:

track - RTP track

getUDPTransport

```
public IUDPTransport getUDPTransport()
```

Get the UDP transport

Returns:

UDP transport

getInIpAddress

```
public String getInIpAddress()
```

Get in IP address

(continued from last page)

Returns:
in IP address

getOutIpAddress

```
public String getOutIpAddress()
```

Get out IP address

Returns:
out IP address

getInPort

```
public int getInPort()
```

Get in port

Returns:
in port

getOutPort

```
public int getOutPort()
```

Get out port

Returns:
out port

isConnected

```
public boolean isConnected()
```

bind

```
public void bind(int direction)
```

Bind to port

Parameters:
direction - in or out, see IUDPTransport.DIRECTION_*

unbind

```
public void unbind()
```

Unbind

shutdown

```
public void shutdown()
```

Shutdown port

(continued from last page)

getHandler

```
public IRTPMessageHandler getHandler()
```

Get the message handler

Returns:

message handler

setHandler

```
public void setHandler(IRTPMessageHandler handler)
```

Set the message handler

Parameters:

handler - message handler

sendMessage

```
public void sendMessage(byte[] message,  
    int offset,  
    int len)
```

Send a message out

Parameters:

message - message

offset - offset

len - len

sendResponse

```
public void sendResponse(byte[] message)
```

Send a response

Parameters:

message - message

sendResponse

```
public void sendResponse(byte[] message,  
    int offset,  
    int len)
```

Send response

Parameters:

message - message

offset - offset

len - len

(continued from last page)

sendResponse

```
public void sendResponse(byte[] message,  
    int offset,  
    int len,  
    java.net.SocketAddress destination,  
    long timecode)
```

Send response to destination

Parameters:

message - message
offset - offset
len - len
destination - destination address

sessionOpened

```
public void sessionOpened(IUDPTransportSession session)
```

sessionClosed

```
public void sessionClosed(IUDPTransportSession session)
```

handleMessage

```
public void handleMessage(java.net.SocketAddress socketAddr,  
    Object message)
```

isInMulticast

```
public boolean isInMulticast()
```

Is in stream multicast

Returns:

true if multicast

isOutMulticast

```
public boolean isOutMulticast()
```

Is out stream multicast

Returns:

true if multicast

isMulticast

```
public boolean isMulticast()
```

Is multicast

(continued from last page)

Returns:

true if multicast

getTTL

```
public int getTTL()
```

Get time to live (milliseconds)

Returns:

time to live (milliseconds)

setTTL

```
public void setTTL(int ttl)
```

Set time to live (milliseconds)

Parameters:

ttl - time to live (milliseconds)

getAddressCount

```
public int getAddressCount()
```

Get address count

Returns:

address count

setAddressCount

```
public void setAddressCount(int addressCount)
```

Set address count

Parameters:

addressCount - address count

isBlockUDPOut

```
public boolean isBlockUDPOut()
```

setBlockUDPOut

```
public void setBlockUDPOut(boolean blockUDPOut)
```

com.wowza.wms.rtp.model Class RTPPushPublishSession

java.lang.Object

└─com.wowza.wms.rtp.model.RTPPushPublishSession

public class **RTPPushPublishSession**
extends Object

RTPPushPublishSession: RTP push publishing session

Constructor Summary

public	RTPPushPublishSession()
--------	---

Method Summary

RTPSession	getRTPSession() Get RTP session
String	getSDPData() Get SDP data
void	setRTPSession(RTPSession rtpSession) Set RTP session
void	setSDPData(String sdpData) Set SDP data

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

RTPPushPublishSession

public **RTPPushPublishSession()**

Methods

getSDPData

public String **getSDPData()**

Get SDP data

(continued from last page)

Returns:

SDP data

setSDPData

```
public void setSDPData(String sdpData)
```

Set SDP data

Parameters:

sdpData - SDP data

getRTPSession

```
public RTPSession getRTPSession()
```

Get RTP session

Returns:

RTP session

setRTPSession

```
public void setRTPSession(RTPSession rtpSession)
```

Set RTP session

Parameters:

rtpSession - RTP session

com.wowza.wms.rtp.model Class RTPSession

java.lang.Object

└─com.wowza.wms.rtp.model.RTPSession

public class **RTPSession**
extends Object

RTPSession: RTP session

Field Summary

protected	actionListeners
protected	active
protected	appInstance
protected	appInstanceShutdown
protected	audioPacketizers
protected	authenticatePlayHandler
protected	authenticatePublishHandler
public static final	AUTHMETHOD_PLAY Value: 1
public static final	AUTHMETHOD_PUBLISH Value: 2
public static final	AUTHMETHOD_UNKNOWN Value: 0
protected	connectionHolder
protected	cookieStr
protected	debugRTSPSession
protected	elapsedTime
protected	encryptionProvider

protected	idleFrequency
protected	idleHandler
protected	ioPerformanceCounter
protected	ioSession
protected	ip
protected	isAnnounce
protected	isConnected
protected	isDescribe
protected	isSessionValid
protected	lastAuthenticateMethod
protected	lock
protected	loggedConnect
protected	properties
protected	queryStr
protected	redirectSession
protected	redirectSessionCode
protected	redirectSessionMessage
protected	redirectSessionURL
protected	referrer
protected	rtpWriteListener
protected	rtspPlayRangeStart
protected	rtspPlayRangeStop
protected	rtspTunnelingSessionId
protected	serverIp

protected	serverPort
protected	sessionId
protected	shutdownClient
protected	streamPacketizers
protected	streams
protected	streamsOrder
protected	timeCreated
protected	totalIOPerformance2Last
protected	totalIOPerformanceLast
protected	uri
protected	userAgent
protected	vhost
protected	videoPacketizers
protected	webRTCSession

Constructor Summary

public	RTPSession (String sessionId) Constructor
--------	--

Method Summary

void	acceptSession () Accept this session
void	addActionListener (IRTSPActionNotify actionListener) Add action listener
void	addIOPerformance (IOPerformanceCounter totalIOPerformanceResult) Internal use
void	addIOPerformance2 (IOPerformanceCounter totalIOPerformanceResult) Internal use
void	addRTSPStream (RTPStream stream) Add RTP stream
boolean	allPortsConnected ()

void	clearLoggingValues() Clear logging values, Internal use.
void	doIdle()
IApplicationInstance	getAppInstance() Get application instance
RTPPacketizerItem	getAudioPacketizerItem(RTPContext rtpContext, IApplicationInstance appInstance, int codecId) Get audio packetizer for a given codec id.
IAuthenticateRTSP	getAuthenticatePlayHandler() Get the authentication play handler
IAuthenticateRTSP	getAuthenticatePublishHandler() Get the RTP authentication handler
ConnectionHolder	getConnectionHolder() Get connection holder, Internal use.
String	getCookieStr() Get cookie string
ElapsedTimer	getElapsedTime() Get the elapsed timer for this RTP session
IRTPEncryptionProvider	getEncryptionProvider()
int	getIdleFrequency() Get idle frequency (milliseconds)
RTPIdleHandler	getIdleHandler() Get idle handler
IOPerformanceCounter	getIOPerformanceCounter() Get IO performance counter
org.apache.mina.common.support.BaseIoSession	getIoSession()
String	getIp() Get remote IP address
int	getLastAuthenticateMethod() Get the last method received
WMSProperties	getProperties() Get properties
String	getQueryStr() Get query string
int	getRedirectSessionCode()
String	getRedirectSessionMessage()

String	getRedirectSessionURL()
String	getReferrer() Get referrer
RTPWriteListener	getRTPWriteListener() Get the RTP write listener for this session
double	getRTSPPlayRangeStart() Get play start range, Internal use.
double	getRTSPPlayRangeStop() Get play stop range, Internal use.
RTPStream	getRTSPStream() Get the default RTP Stream (all RTP sessions have a single RTP Stream)
RTPStream	getRTSPStream(String streamId) Get RTP Stream
String	getRTSP TunnelingSessionId() Get the RTSP/RTP tunneling session id
String	getServerIp() Get the server IP address
int	getServerPort() Get server port
String	getSessionId() Get session id
RTPPacketizerItem	getStreamPacketizerItem(RTPContext rtpContext, IApplicationInstance appInstance, int codecId) Get stream packetizer for a given codec id.
String	getTimeRunning() Get the time running for this RTP session
double	getTimeRunningSeconds() Get the number of second this RTP session has been running
String	getUri() Get URI
String	getUserAgent() Get user agent
IVHost	getVHost() Get vhost
RTPPacketizerItem	getVideoPacketizerItem(RTPContext rtpContext, IApplicationInstance appInstance, int codecId) Get video packetizer for a given codec id.
com.wowza.wms.webrtc.model.WebRTCSession	getWebRTCSession()
boolean	isActive()

boolean	isAnnounce() Has ANNOUNCE command been called on this session
boolean	isAnnounceOrDescribe() Has announce or described been called
boolean	isConnected() Is session connection
boolean	isDebugRTSPSession() True if debugging RTSP session
boolean	isDescribe() Has DESCRIBE command been called on this session
boolean	isLoggedConnect() Is connect logged
boolean	isRedirectSession()
boolean	isSessionValid() Is this session valid
boolean	isShutdownClient() Is RTP session shutdown
boolean	isWebRTC()
void	onAnnounce() (com.wowza.wms.rtp.RTSPRequestMessage req, com.wowza.wms.rtp.RTSPResponseMessages resp) Invoked on ANNOUNCE command
void	onDescribe() (com.wowza.wms.rtp.RTSPRequestMessage req, com.wowza.wms.rtp.RTSPResponseMessages resp) Invoked on DESCRIBE command
void	onGetParameter() (com.wowza.wms.rtp.RTSPRequestMessage req, com.wowza.wms.rtp.RTSPResponseMessages resp) Invoked on GET_PARAMETER command
void	onOptions() (com.wowza.wms.rtp.RTSPRequestMessage req, com.wowza.wms.rtp.RTSPResponseMessages resp) Invoked on OPTIONS command
void	onPause() (com.wowza.wms.rtp.RTSPRequestMessage req, com.wowza.wms.rtp.RTSPResponseMessages resp) Invoked on PAUSE command
void	onPlay() (com.wowza.wms.rtp.RTSPRequestMessage req, com.wowza.wms.rtp.RTSPResponseMessages resp) Invoked on PLAY command
void	onRecord() (com.wowza.wms.rtp.RTSPRequestMessage req, com.wowza.wms.rtp.RTSPResponseMessages resp) Invoked on RECORD command
void	onRedirect() (com.wowza.wms.rtp.RTSPRequestMessage req, com.wowza.wms.rtp.RTSPResponseMessages resp) Invoked on REDIRECT command

void	onSetParameter (com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked on SET_PARAMETER command
void	onSetup (com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked on SETUP command
void	onTeardown (com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked on TEARDOWN command
void	putAudioPacketizerItem (int codecId, String classPath) Set the audio packetizer for a given codec id
void	putStreamPacketizerItem (int codecId, String classPath) Set the stream packetizer for a given codec id
void	putVideoPacketizerItem (int codecId, String classPath) Set the video packetizer for a given codec id
void	redirectSession (String redirectSessionURL)
void	redirectSession (String redirectSessionURL, int redirectSessionCode)
void	rejectSession () Reject this session
void	removeActionListener (IRTSPPActionNotify actionListener) Remove action listener
RTPStream	removeRTSPStream (String streamId) Remove RTP stream
void	setAnnounce (boolean isAnnounce) Set ANNOUNCE command been called on this session
void	setAppInstance (IApplicationInstance appInstance) Set application instance
void	setAuthenticatePlayHandler (IAuthenticateRTSP authenticatePlayHandler) Set the authentication play handler
void	setAuthenticatePublishHandler (IAuthenticateRTSP authenticatePublishHandler) Set the RTP authentication handler
void	setConnected (boolean isConnected) Set session is connected
void	setCookieStr (String cookieStr) Set cooking string
void	setDebugRTSPSession (boolean debugRTSPSession) Set debugging RTSP session
void	setDescribe (boolean isDescribe) Set DESCRIBE command been called on this session

void	setEncryptionProvider (IRTPEncryptionProvider encryptionProvider)
void	setIdleFrequency (int idleFrequency) Set idle frequency (milliseconds)
void	setIdleHandler (RTPIIdleHandler idleHandler) Set idle handler
void	setIOPerformanceCounter (IOPerformanceCounter ioPerformanceCounter) Set IO performance counter
void	setIoSession (org.apache.mina.common.support.BaseIoSession ioSession)
void	setIp (String ip) Set remote IP address
void	setLastAuthenticateMethod (int lastAuthenticateMethod) Set last method received
void	setLoggedConnect (boolean loggedConnect) Set connect logged
void	setQueryStr (String queryStr) Set query string
void	setRedirectSession (boolean redirectSession)
void	setRedirectSessionCode (int redirectSessionCode)
void	setRedirectSessionMessage (String redirectSessionMessage)
void	setRedirectSessionURL (String redirectSessionURL)
void	setReferrer (String referrer) Set referrer
void	setRTSPPlayRangeStart (double rtspPlayRangeStart) Set play start range, Internal use.
void	setRTSPPlayRangeStop (double rtspPlayRangeStop) Set play stop range, Internal use.
void	setRTSPTunnelingSessionId (String rtspTunnelingSessionId) Set the RTSP/RTP tunneling session id
void	setServerIp (String serverIp) Set the server IP address
void	setServerPort (int serverPort) Set server port
void	setSessionId (String sessionId) Set session id
void	setSessionValid (boolean isSessionValid) Set session valid

void	setShutdownClient (boolean shutdownClient) Set RTP session shutdown
void	setUri (String uri) Set URI
void	setUserAgent (String userAgent) Set user agent
void	setVHost (IVHost vhost) Set vhost
void	setWebRTCSession (com.wowza.wms.webrtc.model.WebRTCSession webRTCSession)
void	shutdown () shutdown RTP session, Internal use.
void	shutdown (RTPRequestStatus status) shutdown RTP session, Internal use.
void	touch () Touch the stream so it doesn't timeout
void	updateLoggingValues () Update logging values, Internal use.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

AUTHMETHOD_UNKNOWN

```
public static final int AUTHMETHOD_UNKNOWN
```

Constant value: **0**

AUTHMETHOD_PLAY

```
public static final int AUTHMETHOD_PLAY
```

Constant value: **1**

AUTHMETHOD_PUBLISH

```
public static final int AUTHMETHOD_PUBLISH
```

Constant value: **2**

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sessionId

protected java.lang.String **sessionId**

rtspTunnelingSessionId

protected java.lang.String **rtspTunnelingSessionId**

streams

protected java.util.Map **streams**

streamsOrder

protected java.util.List **streamsOrder**

vhost

protected com.wowza.wms.vhost.IVHost **vhost**

userAgent

protected java.lang.String **userAgent**

cookieStr

protected java.lang.String **cookieStr**

ip

protected java.lang.String **ip**

isSessionValid

protected boolean **isSessionValid**

authenticatePlayHandler

protected com.wowza.wms.authentication.IAuthenticateRTSP **authenticatePlayHandler**

(continued from last page)

authenticatePublishHandler

protected com.wowza.wms.authentication.IAuthenticateRTSP **authenticatePublishHandler**

lastAuthenticateMethod

protected int **lastAuthenticateMethod**

appInstance

protected com.wowza.wms.application.IApplicationInstance **appInstance**

appInstanceShutdown

protected com.wowza.wms.application.IApplicationInstance **appInstanceShutdown**

loggedConnect

protected boolean **loggedConnect**

properties

protected com.wowza.wms.application.WMSProperties **properties**

isDescribe

protected boolean **isDescribe**

isAnnounce

protected boolean **isAnnounce**

rtpWriteListener

protected com.wowza.wms.rtp.model.RTPWriteListener **rtpWriteListener**

(continued from last page)

timeCreated

protected long **timeCreated**

ioPerformanceCounter

protected com.wowza.util.IOPerformanceCounter **ioPerformanceCounter**

totalIOPerformanceLast

protected com.wowza.util.IOPerformanceCounter **totalIOPerformanceLast**

totalIOPerformance2Last

protected com.wowza.util.IOPerformanceCounter **totalIOPerformance2Last**

connectionHolder

protected com.wowza.wms.client.ConnectionHolder **connectionHolder**

isConnected

protected boolean **isConnected**

idleHandler

protected com.wowza.wms.rtp.model.RTPIdleHandler **idleHandler**

serverIp

protected java.lang.String **serverIp**

serverPort

protected int **serverPort**

uri

protected java.lang.String **uri**

(continued from last page)

referrer

protected java.lang.String **referrer**

queryStr

protected java.lang.String **queryStr**

actionListeners

protected java.util.List **actionListeners**

elapsedTime

protected com.wowza.util.ElapsedTimer **elapsedTime**

idleFrequency

protected int **idleFrequency**

debugRTSPSession

protected boolean **debugRTSPSession**

rtspPlayRangeStart

protected double **rtspPlayRangeStart**

rtspPlayRangeStop

protected double **rtspPlayRangeStop**

shutdownClient

protected boolean **shutdownClient**

(continued from last page)

audioPacketizers

protected java.util.Map **audioPacketizers**

videoPacketizers

protected java.util.Map **videoPacketizers**

streamPacketizers

protected java.util.Map **streamPacketizers**

redirectSession

protected boolean **redirectSession**

redirectSessionCode

protected int **redirectSessionCode**

redirectSessionMessage

protected java.lang.String **redirectSessionMessage**

redirectSessionURL

protected java.lang.String **redirectSessionURL**

lock

protected java.lang.Object **lock**

ioSession

protected org.apache.mina.common.support.BaseIoSession **ioSession**

encryptionProvider

protected com.wowza.wms.rtp.model.IRTPEncryptionProvider **encryptionProvider**

(continued from last page)

active

protected boolean **active**

webRTCSession

protected com.wowza.wms.webrtc.model.WebRTCSession **webRTCSession**

Constructors

RTPSession

public **RTPSession**(String sessionId)

Constructor

Parameters:

sessionId - session id

Methods

acceptSession

public void **acceptSession**()

Accept this session

rejectSession

public void **rejectSession**()

Reject this session

getSessionId

public String **getSessionId**()

Get session id

Returns:

session id

setSessionId

public void **setSessionId**(String sessionId)

Set session id

Parameters:

sessionId - session id

(continued from last page)

addRTSPStream

```
public void addRTSPStream(RTPStream stream)
```

Add RTP stream

Parameters:

stream - RTP stream

removeRTSPStream

```
public RTPStream removeRTSPStream(String streamId)
```

Remove RTP stream

Parameters:

streamId - stream id

Returns:

RTP stream

getRTSPStream

```
public RTPStream getRTSPStream(String streamId)
```

Get RTP Stream

Parameters:

streamId - stream id

Returns:

RTP Stream

getRTSPStream

```
public RTPStream getRTSPStream()
```

Get the default RTP Stream (all RTP sessions have a single RTP Stream)

Returns:

RTP stream

getVHost

```
public IVHost getVHost()
```

Get vhost

Returns:

vhost

setVHost

```
public void setVHost(IVHost vhost)
```

Set vhost

Parameters:

(continued from last page)

vhost - vhost

getUserAgent

```
public String getUserAgent()
```

Get user agent

Returns:

user agent

setUserAgent

```
public void setUserAgent(String userAgent)
```

Set user agent

Parameters:

userAgent - user agent

touch

```
public void touch()
```

Touch the stream so it doesn't timeout

shutdown

```
public void shutdown()
```

shutdown RTP session, Internal use.

shutdown

```
public void shutdown(RTPRequestStatus status)
```

shutdown RTP session, Internal use.

Parameters:

status

allPortsConnected

```
public boolean allPortsConnected()
```

isSessionValid

```
public boolean isSessionValid()
```

Is this session valid

Returns:

true if valid

(continued from last page)

setSessionValid

```
public void setSessionValid(boolean isSessionValid)
```

Set session valid

Parameters:

isSessionValid - true if valid

getAuthenticatePublishHandler

```
public IAuthenticateRTSP getAuthenticatePublishHandler()
```

Get the RTP authentication handler

Returns:

RTP authentication handler

setAuthenticatePublishHandler

```
public void setAuthenticatePublishHandler(IAuthenticateRTSP  
authenticatePublishHandler)
```

Set the RTP authentication handler

Parameters:

authenticatePublishHandler - RTP authentication handler

getAuthenticatePlayHandler

```
public IAuthenticateRTSP getAuthenticatePlayHandler()
```

Get the authentication play handler

Returns:

authentication play handler

setAuthenticatePlayHandler

```
public void setAuthenticatePlayHandler(IAuthenticateRTSP authenticatePlayHandler)
```

Set the authentication play handler

Parameters:

authenticatePlayHandler - authentication play handler

getLastAuthenticateMethod

```
public int getLastAuthenticateMethod()
```

Get the last method received

Returns:

last method received

setLastAuthenticateMethod

```
public void setLastAuthenticateMethod(int lastAuthenticateMethod)
```

(continued from last page)

Set last method received

Parameters:

lastAuthenticateMethod - last method received

getAppInstance

```
public IApplicationInstance getAppInstance()
```

Get application instance

Returns:

application instance

setAppInstance

```
public void setAppInstance(IApplicationInstance appInstance)
```

Set application instance

Parameters:

appInstance - application instance

isLoggedConnect

```
public boolean isLoggedConnect()
```

Is connect logged

Returns:

true if logged

setLoggedConnect

```
public void setLoggedConnect(boolean loggedConnect)
```

Set connect logged

Parameters:

loggedConnect - true if logged

getIp

```
public String getIp()
```

Get remote IP address

Returns:

remote IP address

setIp

```
public void setIp(String ip)
```

Set remote IP address

Parameters:

ip - remote IP address

getProperties

```
public WMSProperties getProperties()
```

Get properties

Returns:
properties

isDescribe

```
public boolean isDescribe()
```

Has DESCRIBE command been called on this session

Returns:
true if called

setDescribe

```
public void setDescribe(boolean isDescribe)
```

Set DESCRIBE command been called on this session

Parameters:
isDescribe - true if called

isAnnounce

```
public boolean isAnnounce()
```

Has ANNOUNCE command been called on this session

Returns:
true if called

setAnnounce

```
public void setAnnounce(boolean isAnnounce)
```

Set ANNOUNCE command been called on this session

Parameters:
isAnnounce - true if called

isAnnounceOrDescribe

```
public boolean isAnnounceOrDescribe()
```

Has announce or described been called

Returns:
true if either called

getRTPWriteListener

```
public RTPWriteListener getRTPWriteListener()
```

(continued from last page)

Get the RTP write listener for this session

Returns:

RTP write listener

addIOPerformance

```
public void addIOPerformance(IOPerformanceCounter totalIOPerformanceResult)
```

Internal use

Parameters:

totalIOPerformanceResult - IO performance counter

addIOPerformance2

```
public void addIOPerformance2(IOPerformanceCounter totalIOPerformanceResult)
```

Internal use

Parameters:

totalIOPerformanceResult - IO performance counter

getConnectionHolder

```
public ConnectionHolder getConnectionHolder()
```

Get connection holder, Internal use.

Returns:

connection holder

isConnected

```
public boolean isConnected()
```

Is session connection

Returns:

true if connected

setConnected

```
public void setConnected(boolean isConnected)
```

Set session is connected

Parameters:

isConnected - true if connected

getIdleHandler

```
public RTPIdleHandler getIdleHandler()
```

Get idle handler

Returns:

idle handler

setIdleHandler

```
public void setIdleHandler(RTPIIdleHandler idleHandler)
```

Set idle handler

Parameters:

idleHandler - idle handler

getServerIp

```
public String getServerIp()
```

Get the server IP address

Returns:

IP address

setServerIp

```
public void setServerIp(String serverIp)
```

Set the server IP address

Parameters:

serverIp - IP address

getServerPort

```
public int getServerPort()
```

Get server port

Returns:

server port

setServerPort

```
public void setServerPort(int serverPort)
```

Set server port

Parameters:

serverPort - server port

getUri

```
public String getUri()
```

Get URI

Returns:

URI

setUri

```
public void setUri(String uri)
```

(continued from last page)

Set URI

Parameters:

uri - URI

getReferrer

```
public String getReferrer()
```

Get referrer

Returns:

referrer

setReferrer

```
public void setReferrer(String referrer)
```

Set referrer

Parameters:

referrer - referrer

getQueryStr

```
public String getQueryStr()
```

Get query string

Returns:

query string

setQueryStr

```
public void setQueryStr(String queryStr)
```

Set query string

Parameters:

queryStr - query string

updateLoggingValues

```
public void updateLoggingValues()
```

Update logging values, Internal use.

clearLoggingValues

```
public void clearLoggingValues()
```

Clear logging values, Internal use.

addActionListener

```
public void addActionListener(IRTSPActionNotify actionListener)
```

Add action listener

(continued from last page)

Parameters:

actionListener - action listener

removeActionListener

```
public void removeActionListener(IRTSPActionNotify actionListener)
```

Remove action listener

Parameters:

actionListener - action listener

onDescribe

```
public void onDescribe(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on DESCRIBE command

Parameters:req - RTP request
resp - RTP response

onAnnounce

```
public void onAnnounce(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on ANNOUNCE command

Parameters:req - RTP request
resp - RTP response

onGetParameter

```
public void onGetParameter(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on GET_PARAMETER command

Parameters:req - RTP request
resp - RTP response

onSetParameter

```
public void onSetParameter(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on SET_PARAMETER command

Parameters:req - RTP request
resp - RTP response

(continued from last page)

onOptions

```
public void onOptions(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on OPTIONS command

Parameters:

req - RTP request
resp - RTP response

onPause

```
public void onPause(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on PAUSE command

Parameters:

req - RTP request
resp - RTP response

onPlay

```
public void onPlay(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on PLAY command

Parameters:

req - RTP request
resp - RTP response

onRecord

```
public void onRecord(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on RECORD command

Parameters:

req - RTP request
resp - RTP response

onRedirect

```
public void onRedirect(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on REDIRECT command

Parameters:

req - RTP request
resp - RTP response

onSetup

```
public void onSetup(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

(continued from last page)

Invoked on SETUP command

Parameters:

req - RTP request
resp - RTP response

onTeardown

```
public void onTeardown(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on TEARDOWN command

Parameters:

req - RTP request
resp - RTP response

getIdleFrequency

```
public int getIdleFrequency()
```

Get idle frequency (milliseconds)

Returns:

idle frequency (milliseconds)

setIdleFrequency

```
public void setIdleFrequency(int idleFrequency)
```

Set idle frequency (milliseconds)

Parameters:

idleFrequency - idle frequency (milliseconds)

isDebugRTSPSession

```
public boolean isDebugRTSPSession()
```

True if debugging RTSP session

Returns:

true if debugging RTSP session

setDebugRTSPSession

```
public void setDebugRTSPSession(boolean debugRTSPSession)
```

Set debugging RTSP session

Parameters:

debugRTSPSession - true if debugging RTSP session

getRTSPTunnelingSessionId

```
public String getRTSPTunnelingSessionId()
```

Get the RTSP/RTP tunneling session id

(continued from last page)

Returns:

RTSP/RTP tunneling session id

setRTSPTunnelingSessionId

```
public void setRTSPTunnelingSessionId(String rtspTunnelingSessionId)
```

Set the RTSP/RTP tunneling session id

Parameters:

rtspTunnelingSessionId - RTSP/RTP tunneling session id

getRTSPPlayRangeStart

```
public double getRTSPPlayRangeStart()
```

Get play start range, Internal use.

Returns:

start range

setRTSPPlayRangeStart

```
public void setRTSPPlayRangeStart(double rtspPlayRangeStart)
```

Set play start range, Internal use.

Parameters:

rtspPlayRangeStart - start range

getRTSPPlayRangeStop

```
public double getRTSPPlayRangeStop()
```

Get play stop range, Internal use.

Returns:

stop range

setRTSPPlayRangeStop

```
public void setRTSPPlayRangeStop(double rtspPlayRangeStop)
```

Set play stop range, Internal use.

Parameters:

rtspPlayRangeStop - stop range

getCookieStr

```
public String getCookieStr()
```

Get cookie string

Returns:

cookie string

setCookieStr

```
public void setCookieStr(String cookieStr)
```

Set cooking string

Parameters:

cookieStr - cooking string

getIOPerformanceCounter

```
public IOPerformanceCounter getIOPerformanceCounter()
```

Get IO performance counter

Returns:

IO performance counter

setIOPerformanceCounter

```
public void setIOPerformanceCounter(IOPerformanceCounter ioPerformanceCounter)
```

Set IO performance counter

Parameters:

ioPerformanceCounter - IO performance counter

isShutdownClient

```
public boolean isShutdownClient()
```

Is RTP session shutdown

Returns:

true if shutdown

setShutdownClient

```
public void setShutdownClient(boolean shutdownClient)
```

Set RTP session shutdown

Parameters:

shutdownClient - true if shutdown

getAudioPacketizerItem

```
public RTPPacketizerItem getAudioPacketizerItem(RTPContext rtpContext,  
IApplicationInstance appInstance,  
int codecId)
```

Get audio packetizer for a given codec id.

Parameters:

rtpContext - RTP context
appInstance - application instance
codecId - codec id

(continued from last page)

Returns:

packetizer info

getVideoPacketizerItem

```
public RTPPacketizerItem getVideoPacketizerItem(RTPContext rtpContext,  
        IApplicationInstance appInstance,  
        int codecId)
```

Get video packetizer for a given codec id.

Parameters:

rtpContext - RTP context
appInstance - application instance
codecId - codec id

Returns:

packetizer info

getStreamPacketizerItem

```
public RTPPacketizerItem getStreamPacketizerItem(RTPContext rtpContext,  
        IApplicationInstance appInstance,  
        int codecId)
```

Get stream packetizer for a given codec id.

Parameters:

rtpContext - RTP context
appInstance - application instance
codecId - codec id

Returns:

packetizer info

putAudioPacketizerItem

```
public void putAudioPacketizerItem(int codecId,  
        String classPath)
```

Set the audio packetizer for a given codec id

Parameters:

codecId - codec id
classPath - class path

putVideoPacketizerItem

```
public void putVideoPacketizerItem(int codecId,  
        String classPath)
```

Set the video packetizer for a given codec id

Parameters:

codecId - codec id
classPath - class path

(continued from last page)

putStreamPacketizerItem

```
public void putStreamPacketizerItem(int codecId,  
    String classPath)
```

Set the stream packetizer for a given codec id

Parameters:

codecId - codec id
classPath - class path

getElapsedTime

```
public ElapsedTimer getElapsedTime()
```

Get the elapsed timer for this RTP session

Returns:

elapsed timer

getTimeRunning

```
public String getTimeRunning()
```

Get the time running for this RTP session

Returns:

time running as a string

getTimeRunningSeconds

```
public double getTimeRunningSeconds()
```

Get the number of second this RTP session has been running

Returns:

number of second this RTP session has been running

isRedirectSession

```
public boolean isRedirectSession()
```

setRedirectSession

```
public void setRedirectSession(boolean redirectSession)
```

getRedirectSessionCode

```
public int getRedirectSessionCode()
```

(continued from last page)

setRedirectSessionCode

```
public void setRedirectSessionCode(int redirectSessionCode)
```

getRedirectSessionURL

```
public String getRedirectSessionURL()
```

setRedirectSessionURL

```
public void setRedirectSessionURL(String redirectSessionURL)
```

redirectSession

```
public void redirectSession(String redirectSessionURL)
```

redirectSession

```
public void redirectSession(String redirectSessionURL,  
    int redirectSessionCode)
```

getRedirectSessionMessage

```
public String getRedirectSessionMessage()
```

setRedirectSessionMessage

```
public void setRedirectSessionMessage(String redirectSessionMessage)
```

getIoSession

```
public org.apache.mina.common.support.BaseIoSession getIoSession()
```

setIoSession

```
public void setIoSession(org.apache.mina.common.support.BaseIoSession ioSession)
```

doIdle

```
public void doIdle()
```

(continued from last page)

getEncryptionProvider

```
public IRTPEncryptionProvider getEncryptionProvider()
```

setEncryptionProvider

```
public void setEncryptionProvider(IRTPEncryptionProvider encryptionProvider)
```

isActive

```
public boolean isActive()
```

getWebRTCSession

```
public com.wowza.wms.webrtc.model.WebRTCSession getWebRTCSession()
```

setWebRTCSession

```
public void setWebRTCSession(com.wowza.wms.webrtc.model.WebRTCSession webRTCSession)
```

isWebRTC

```
public boolean isWebRTC()
```

com.wowza.wms.rtp.model Class RTPSessions

java.lang.Object

└-com.wowza.wms.rtp.model.RTPSessions

public class **RTPSessions**
extends Object

RTPSessions: collection of RTP sessions

Constructor Summary

public	RTPSessions (IVHost vhost) Constructor
--------	--

Method Summary

RTPSession	addSession (RTPSession session) Add RTP session
void	addSessionListener (IRTPSessionNotify listener) Add a RTP session listener
String	getNextSessionId () Get next RTP session id for new session
RTPSession	getSession (String sessionId) Get RTP session by session id
java.util.List	getSessionIds () Get list of current RTP session ids
IVHost	getVHost () Get vhost
void	notifySessionCreate (IApplicationInstance appInstance, RTPSession rtpSession) Notify session create
void	notifySessionCreate (RTPSession rtpSession) Notify session create
void	notifySessionDestroy (IApplicationInstance appInstance, RTPSession rtpSession) Notify session destroy
void	notifySessionDestroy (RTPSession rtpSession) Notify session destroy
void	releaseSessionId (String sessionIdStr) Release an RTP session id

RTPSession	removeSession (RTPSession session) Remove RTP session by object
RTPSession	removeSession (String sessionId) Remove RTP session by session id
void	removeSessionListener (IRTPSessionNotify listener) Remove an RTP session listener

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

RTPSessions

```
public RTPSessions(IVHost vhost)
```

Constructor

Parameters:

vhost - vhost

Methods

getNextSessionId

```
public String getNextSessionId()
```

Get next RTP session id for new session

Returns:

RTP session id

getSessionIds

```
public java.util.List getSessionIds()
```

Get list of current RTP session ids

Returns:

list of current RTP session ids

releaseSessionId

```
public void releaseSessionId(String sessionIdStr)
```

Release an RTP session id

Parameters:

sessionIdStr - RTP session id

(continued from last page)

getSession

```
public RTPSession getSession(String sessionId)
```

Get RTP session by session id

Parameters:

sessionId - session id

Returns:

RTP session

removeSession

```
public RTPSession removeSession(String sessionId)
```

Remove RTP session by session id

Parameters:

sessionId - session id

Returns:

RTP session if removed

removeSession

```
public RTPSession removeSession(RTPSession session)
```

Remove RTP session by object

Parameters:

session - RTP session

Returns:

RTP session if removed

addSession

```
public RTPSession addSession(RTPSession session)
```

Add RTP session

Parameters:

session - RTP session

Returns:

RTP session added

getVHost

```
public IVHost getVHost()
```

Get vhost

Returns:

vhost

(continued from last page)

addSessionListener

```
public void addSessionListener(IRTPSessionNotify listener)
```

Add a RTP session listener

Parameters:

listener - RTP session listener

removeSessionListener

```
public void removeSessionListener(IRTPSessionNotify listener)
```

Remove an RTP session listener

Parameters:

listener - RTP session listener

notifySessionCreate

```
public void notifySessionCreate(IApplicationInstance appInstance,  
RTPSession rtpSession)
```

Notify session create

Parameters:

appInstance - application instance

rtpSession - RTP session

notifySessionDestroy

```
public void notifySessionDestroy(IApplicationInstance appInstance,  
RTPSession rtpSession)
```

Notify session destroy

Parameters:

appInstance - application instance

rtpSession - RTP session

notifySessionCreate

```
public void notifySessionCreate(RTPSession rtpSession)
```

Notify session create

Parameters:

rtpSession - RTP session

notifySessionDestroy

```
public void notifySessionDestroy(RTPSession rtpSession)
```

Notify session destroy

Parameters:

rtpSession - RTP session

com.wowza.wms.rtp.model Class RTPStream

java.lang.Object

└-com.wowza.wms.rtp.model.RTPStream

public class **RTPStream**
extends Object

RTPStream: RTP Stream class which encapsulates an IMediaStream class for RTP streaming.

Field Summary

public static final	AVSYNCMETHODS_RTPTIMECODE Value: 3
public static final	AVSYNCMETHODS_SENDERREPORT Value: 1
public static final	AVSYNCMETHODS_SYSTEMCLOCK Value: 2
public static final	AVSYNCMETHODS_UNKNOWN Value: 0
public static final	DEFAULT_RTP_TRANSPORT_STR Value: RTP/AVP
public static final	DEFAULT_RTPIGNOREPROFILELEVELID Value: false
public static final	DEFAULT_RTPIGNORESPROPPARAMETERSETS Value: false
public static final	DEFAULT_RTSPSESSIONNAME Value:
public static final	MODE_PLAY Value: 1
public static final	MODE_PUBLISH Value: 2
public static final	MODE_UNKNOWN Value: 0

public static final	SDPLOCATION_AUDIO Value: 1
public static final	SDPLOCATION_STREAM Value: 0
public static final	SDPLOCATION_VIDEO Value: 2
public static final	STREAMINFO_SESSIONATTRIBUTES Value: attributes
public static final	STREAMINFO_SESSIONBANDWIDTH Value: bandwidth
public static final	STREAMINFO_SESSIONCONNECTIONDATA Value: connectiondata
public static final	STREAMINFO_SESSIONEMAILADDRESS Value: emailaddress
public static final	STREAMINFO_SESSIONINFORMATION Value: information
public static final	STREAMINFO_SESSIONNAME Value: name
public static final	STREAMINFO_SESSIONPHONENUMBER Value: phonenumber
public static final	STREAMINFO_SESSIONPORIGIN Value: origin
public static final	STREAMINFO_SESSIONPROTOCOLVERSION Value: protocolversion
public static final	STREAMINFO_SESSIONREPEATTIMES Value: repeattimes
public static final	STREAMINFO_SESSIONTIMEZONES Value: timezones
public static final	STREAMINFO_SESSIONTIMING Value: timing
public static final	STREAMINFO_SESSIONURI Value: uri

Constructor Summary

public	RTPStream (RTPContext context, String streamId) Constructor
--------	---

Method Summary

void	addLockRepeaterStreams (String streamName, MediaCasterStreamItem mediaCasterStreamItem)
void	addStreamAttribute (String key, String value) Add a name value pair to the stream attribute collection
void	addStreamInfo (String key, String value) Add a name value pair to the stream info collection
void	addTrack (RTPTrack track) Add a track
void	addTrackId (String seq, String trackId) Add track
void	addTrackInternal (RTPTrack track) Add RTP track
void	announce (RTPRequestStatus status) Execute announce command
void	attachToWMSSession (RtmpSessionInfo wmsSessionInfo) Attach to WMS session, Internal use
static int	avSyncNameToId (String avSyncName) Get audio/video sync id from name
void	checkSendMetadata (long adjTimecode, RTPTrack rtpTrack) Check to see if we have sent onMetadata event, if not send
void	clearRTSPSessionExtraLines () Clear SDP extra lines
void	clearTracks () Clear all tracks
boolean	createStream (RTPRequestStatus status)
boolean	createStream (RTPRequestStatus status, IApplicationInstance appInstance) Create IMediaStream, Internal use.
String	describe (RTPSession rtspSession, int isStreamPacketizer, RTPRequestStatus status, int[] validCodecsAudio, int[] validCodecsVideo) Get RTP describe details
String	describe (RTPSession rtspSession, RTPRequestStatus status) Execute describe command

RTPSDPParts	describeGetDetails (RTPSession rtspSession, int isStreamPacketizer, RTPRequestStatus status, int[] validCodecsAudio, int[] validCodecsVideo) Get RTP describe details
void	detachFromWMSSession (RtmpSessionInfo wmsSessionInfo) Detach from WMS session, Internal use.
void	extractCodecConfigFromTrackInfo () Extract codec config information from SDP data
String	formatRTPInfo (long timecode, int videoSeq, int audioSeq) Format RTP info
IApplicationInstance	getAppInstance () Get application instance
String	getAppInstanceName () Get the application instance name
String	getAppName () Get the application name
RTPTrack	getAudioTrack () Get the most likely audio track
int	getAutoAllocateInterleavePorts ()
int	getAVSyncMethod () Get the audio/video sync method.
double	getDuration () Get the duration of the stream if video on demand
String	getHost () Get host
AMFPacket[]	getLastPacketsByType (IMediaReader localReader, double startTime) Analyzes stream to get information, Internal use.
AMFPacket[]	getLastPacketsByType (IMediaStream localStream) Analyzes stream to get information, Internal use.
int	getMaxRTCPWaitTime () Get max time to wait for RTCP sender reports (milliseconds)
String	getMediaCasterType () Get the media caster stream type for this stream
IMediaReader	getMediaReader () Get media reader if video on demand stream
byte[]	getMetadataPacket () Get the onMetadata packet for this RTP stream
int	getMode () Get the current play/publish mode
String	getModeName ()

int	getMPEGTSAudioBitrate()
String	getMPEGTSAudioLanguage()
int	getMPEGTSAudioPID() Get the audio PID id if MPEG-TS stream
int	getMPEGTSProgramID()
int	getMPEGTSVideoBitrate()
int	getMPEGTSVideoPID() Get the video PID id if MPEG-TS stream
long	getNormalizedNTPTimecode(long timecode) Turn a millisecond timcode into an NTP timecode
String	getOutHost() Get the out host
String	getResyncAudioVideoOnSRLogStreamSuffix() Get the stream suffixes that are set for timing information logging
RTPContext	getRTPContext() Get the RTP context
RTPDestination	getRTPDestination() Get RTP destination
RTPStream.RTPInfo	getRTPInfo(double startTime, int videoSeq, int audioSeq) Get the RTP info
RTPStreamContext	getRTPStreamContext()
String	getRTSPBindIpAddress() Get the bind RTSP bind IP address
String	getRTSPConnectionAddressType() Get the connection address type
String	getRTSPConnectionIpAddress() Get the connection IP address
int	getRTSPMaximumPendingWriteBytes() Get the maximum number of waiting bytes allow for this RTSP session
String	getRTSPOriginAddressType() Get the origin address type
String	getRTSPOriginIpAddress() Get the origin IP address
String	getRTSPSessionDescription() Get session description
java.util.List	getRTSPSessionExtraLines() Get extra SDP lines

String	getRTSPSessionName() Get session name
int	getRTSPSessionTimeout() Get RTP session timeout (milliseconds)
String	getSDPLang() Get the SDP language
String	getSDPTransportStr()
RTPSession	getSession() Get the RTP session
IMediaStream	getStream() Get the IMediaStream
java.util.Map	getStreamAttributes() Get all name/value pairs in the stream attributes collection
String	getStreamExt() Get the stream extension
String	getStreamId() Get the stream id
java.util.Map	getStreamInfo() Get all name/value pairs in the stream info collection
String	getStreamInfo(String key) Get stream info by name
Object	getStreamLock() Get the synchronization lock for this stream
String	getStreamName() Get stream name
String	getStreamNameLogging() Get the stream name used for logging
String	getStreamQueryStr() Get the stream query string
long	getStreamSessionId() Get the stream session id
String	getStreamSessionIp() Get the stream session ip
long	getStreamSessionVersion() Get the stream session version
RTPTrack	getStreamTrack() Get the most likely stream track
String	getStreamType() Get the stream type

RTPTrack	getTrack (String trackId) Get track by id
String	getTrackId (String seq) Get track by sequence number
java.util.List	getTrackNames () Get a list of track ids
String	getTransportMode () Get the transport mode
int	getUDPManagedDeliveryCount ()
int	getUDPManagedDeliveryDelay ()
IUDPTransport	getUDPTransport (boolean isMulticast) Get the UDP transport for this stream
IVHost	getVHost () Get vhost
RTPTrack	getVideoTrack () Get the most likely video track
long	getVODLastTimeTC () Get the last timecode (milliseconds) sent for video on demand
long	getVODPlayLen () Get the video on demand play duration (milliseconds)
long	getVODStartTimeTC () Get the video on demand start time (milliseconds)
void	idle (org.apache.mina.common.IoSession session, RtmpResponseMessage resp) Process idle event
void	incrementMediaInBytes (long bytes) Increment the media bytes in, Internal use.
void	initProperties (IApplicationInstance appInstance)
boolean	isAVSyncNonSR () Is sync method based on RTCP packets (sender report)
boolean	isBlockUDPOut ()
boolean	isCheckIpAddr () Are we checking the ip address of each incoming RTP packet
boolean	isCheckSSRC () Are we checking the ssrc values of each incoming RTP packet
boolean	isForceMPEGTSOut ()

boolean	<u>isForceRTSPInterleaved()</u> True if forcing RTSP interleaved
boolean	<u>isLive()</u> Is live stream
boolean	<u>isModePlay()</u> Is this a play stream
boolean	<u>isModePublish()</u> Is this a publish stream
boolean	<u>isModeUnknown()</u> Is the stream mode unknown (publish vs play)
boolean	<u>isMPEGTSOut()</u> Is MPEG-TS out
boolean	<u>isPaused()</u> Is stream paused
boolean	<u>isPublishStreamReady()</u> See if a publishing stream has enough data to start playback
boolean	<u>isRefuseIncomingUDPConnections()</u>
boolean	<u>isRefuseOutgoingUDPConnections()</u>
boolean	<u>isResetPlayStream()</u> Is reset stream trigger, Internal use.
boolean	<u>isResyncAudioVideoOnSR()</u> Reset audio/video sync on new RTCP packets (not just first packet)
boolean	<u>isResyncAudioVideoOnSRLog()</u> Log audio/video sync on new RTCP packets (not just first packet)
boolean	<u>isRTPIgnoreProfileLevelId()</u>
boolean	<u>isRTPIgnoreSPropParameterSets()</u>
boolean	<u>isRTSP()</u> Is this RTP Stream managed by RTSP session
boolean	<u>isRTSPAlwaysUseSDPPorts()</u> Force RTSP to use ports in SDP data
boolean	<u>isRTSPPull()</u> Is this RTP Stream managed by RTSP session
boolean	<u>isSendSDESEvents()</u> Send RTCP SDES events
boolean	<u>isStreamStarted()</u> Is stream started
boolean	<u>isTimeout(long currTime, int timeout)</u> Is the stream timeout out

boolean	isUDPTransportOverride()
boolean	isWebRTC()
void	lockRepeaterStreams(java.util.List streamNames) Lock a list of live repeater stream names, Internal use.
void	notifyEncryptionProvider(RTPTrack rtpTrack)
void	notifyEncryptionProviderAllTracks()
void	pause(RTPRequestStatus status) Execute pause
RTPStreamPlayResult	play(RTPRequestStatus status) Execute play
RTPStreamPlayResult	play(RTPRequestStatus status, double startTime, double stopTime) Execute play
void	putRTSPSessionExtraLine(int location, String line) Add an extra line to the SDP data
RTPStreamPlayResult	record(RTPRequestStatus status) Execute record
RTPStreamPlayResult	record(RTPRequestStatus status, double startTime, double stopTime) Execute record
RTPTrack	removeTrack(String trackId) Remove a track by id
RTPTrack	removeTrackInternal(String trackId) Remove track by track id
void	resetSentMetadataFlag() Reset sendMetadata flag
void	setAppInstanceName(String appInstanceName) Set the application instance name
void	setAppName(String appName) Get the application name
void	setAVSyncMethod(int avSyncMethod) Set the audio/video sync method.
void	setBlockUDPOut(boolean blockUDPOut)
void	setCheckIpAddr(boolean checkIpAddr) Are we checking the ip address of each incoming RTP packet
void	setCheckSSRC(boolean checkSSRC) Are we checking the ssrc values of each incoming RTP packet
void	setForceMPEGTSOut(boolean isForceMPEGTSOut)

void	setForceRTSPInterleaved (boolean isForceRTSPInterleaved) True if forcing RTSP interleaved
void	setHost (String host) Set host
void	setLive (boolean isLive) Is live stream
void	setMaxRTCPWaitTime (int maxRTCPWaitTime) Set max time to wait for RTCP sender reports (milliseconds)
void	setMode (int mode) Set the play/publish mode
void	setMPEGTSAudioBitrate (int mpegtsAudioBitrate)
void	setMPEGTSAudioLanguage (String mpegtsAudioLanguage)
void	setMPEGTSAudioPID (int mpegtsAudioPID) Set the audio PID id if MPEG-TS stream
void	setMPEGTSOut (boolean isMPEGTSOut) Is MPEG-TS out
void	setMPEGTSProgramID (int mpegtsProgramId)
void	setMPEGTSVideoBitrate (int mpegtsVideoBitrate)
void	setMPEGTSVideoPID (int mpegtsVideoPID) Set the video PID id if MPEG-TS stream
void	setOutHost (String outHost) Set out host
void	setRefuseIncomingUDPConnections (boolean refuseIncomingUDPConnections)
void	setRefuseOutgoingUDPConnections (boolean refuseOutgoingUDPConnections)
void	setResetPlayStream (boolean doResetPlayStream) Set reset stream trigger
void	setResyncAudioVideoOnSR (boolean resyncAudioVideoOnSR) Reset audio/video sync on new RTCP packets (not just first packet)
void	setResyncAudioVideoOnSRLog (boolean resyncAudioVideoOnSRLog) Log audio/video sync on new RTCP packets (not just first packet)
void	setResyncAudioVideoOnSRLogStreamSuffix (String names) Set the stream names that require to be logged for timing information
void	setRTPDestination (RTPDestination rtpDestination) Set RTP destination
void	setRTPIgnoreProfileLevelId (boolean rtpIgnoreProfileLevelId)

void	<u>setRTPIgnoreSPropParameterSets</u> (boolean rtpIgnoreSPropParameterSets)
void	<u>setRTPStreamContext</u> (RTPStreamContext rtpStreamContext)
void	<u>setRTSP</u> (boolean isRTSP) Is this RTP Stream managed by RTSP session
void	<u>setRTSPAlwaysUseSDPPorts</u> (boolean rtspAlwaysUseSDPPorts) Force RTSP to use ports in SDP data
void	<u>setRTSPBindIpAddress</u> (String rtspBindIpAddress) Set the bind RTSP bind IP address
void	<u>setRTSPConnectionAddressType</u> (String rtspConnectionAddressType) Set the connection address type
void	<u>setRTSPConnectionIpAddress</u> (String rtspConnectionIpAddress) Set the connection IP address
void	<u>setRTSPMaximumPendingWriteBytes</u> (int rtspMaximumPendingWriteBytes) Set the maximum number of waiting bytes allow for this RTSP session
void	<u>setRTSPOriginAddressType</u> (String rtspOriginAddressType) Set the origin address type
void	<u>setRTSPOriginIpAddress</u> (String rtspOriginIpAddress) Set the origin IP address
void	<u>setRTSPPull</u> (boolean isRTSPPull) Is this RTP Stream managed by RTSP session
void	<u>setRTSPSessionDescription</u> (String rtspSessionDescription) Get session description
void	<u>setRTSPSessionName</u> (String rtspSessionName) Set session name
void	<u>setRTSPSessionTimeout</u> (int rtspSessionTimeout) Set RTP session timeout (milliseconds)
void	<u>setSDPLang</u> (String sdpLang) Set the SDP language
void	<u>setSDPTransportStr</u> (String sdpTransportStr)
void	<u>setSendSDESEvents</u> (boolean sendSDESEvents) Send RTCP SDES events
void	<u>setSession</u> (<u>RTPSession</u> session) Set the RTP session
void	<u>setStreamExt</u> (String streamExt) Set the stream extension
void	<u>setStreamName</u> (String streamName) Set stream name

void	setStreamNameLogging (String streamNameLogging) Set the stream name used for logging
void	setStreamQueryStr (String streamQueryStr) Set the stream query string
void	setStreamSessionId (long streamSessionId) Set the stream session id
void	setStreamSessionIp (String streamSessionIp) Set the stream session ip
void	setStreamSessionVersion (long streamSessionVersion) Set the stream session version
void	setStreamType (String streamType) Set the stream type
void	setTransportMode (String transportMode) Set the transport mode
void	setUDPManagedDeliveryCount (int udpManagedDeliveryCount)
void	setUDPManagedDeliveryDelay (int udpManagedDeliveryDelay)
void	setUDPTransport (IUDPTransport udpTransport)
void	setVODLastTimeTC (long vodLastTimeTC) Set the last timecode (milliseconds) sent for video on demand
void	setVODPlayLen (long vodPlayLen) Set the video on demand play duration (milliseconds)
void	setVODStartTimeTC (long vodStartTimeTC) Set the video on demand start time (milliseconds)
void	setWebRTC (boolean isWebRTC)
void	shutdown (RTPRequestStatus status) shutdown RTP stream, Internal use.
RTPTrack	sloppyGetTrack (String trackId) Sloppy method for finding track by name, Internal use.
boolean	streamExists () Return true if RTP stream contains a IMediaStream
void	switchSetupToMPEGTS () Switch a stream to MPEG-TS, Internal use.
void	touch () Touch the stream so that it does not timeout
String	transportFindBestMatch (String transport) Based on a trasport string from SETUP command find best match
void	unlockRepeaterStreams () Unlock live repeater streams

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields**SDPLOCATION_STREAM**

```
public static final int SDPLOCATION_STREAM
```

Constant value: **0**

SDPLOCATION_AUDIO

```
public static final int SDPLOCATION_AUDIO
```

Constant value: **1**

SDPLOCATION_VIDEO

```
public static final int SDPLOCATION_VIDEO
```

Constant value: **2**

MODE_UNKNOWN

```
public static final int MODE_UNKNOWN
```

Constant value: **0**

MODE_PLAY

```
public static final int MODE_PLAY
```

Constant value: **1**

MODE_PUBLISH

```
public static final int MODE_PUBLISH
```

Constant value: **2**

AVSYNCMETHODS_UNKNOWN

```
public static final int AVSYNCMETHODS_UNKNOWN
```

Constant value: **0**

AVSYNCMETHODS_SENDERREPORT

```
public static final int AVSYNCMETHODS_SENDERREPORT
```

Constant value: **1**

AVSYNCMETHODS_SYSTEMCLOCK

```
public static final int AVSYNCMETHODS_SYSTEMCLOCK
```

Constant value: **2**

AVSYNCMETHODS_RTPTIMECODE

```
public static final int AVSYNCMETHODS_RTPTIMECODE
```

Constant value: **3**

STREAMINFO_SESSIONPROTOCOLVERSION

```
public static final java.lang.String STREAMINFO_SESSIONPROTOCOLVERSION
```

Constant value: **protocolversion**

STREAMINFO_SESSIONPORIGIN

```
public static final java.lang.String STREAMINFO_SESSIONPORIGIN
```

Constant value: **origin**

STREAMINFO_SESSIONNAME

```
public static final java.lang.String STREAMINFO_SESSIONNAME
```

Constant value: **name**

STREAMINFO_SESSIONINFORMATION

```
public static final java.lang.String STREAMINFO_SESSIONINFORMATION
```

Constant value: **information**

STREAMINFO_SESSIONURI

```
public static final java.lang.String STREAMINFO_SESSIONURI
```

Constant value: **uri**

STREAMINFO_SESSIONEMAILADDRESS

```
public static final java.lang.String STREAMINFO_SESSIONEMAILADDRESS
```

(continued from last page)

Constant value: **emailaddress**

STREAMINFO_SESSIONPHONENUMBERpublic static final java.lang.String **STREAMINFO_SESSIONPHONENUMBER**Constant value: **phonenumber**

STREAMINFO_SESSIONCONNECTIONDATApublic static final java.lang.String **STREAMINFO_SESSIONCONNECTIONDATA**Constant value: **connectiondata**

STREAMINFO_SESSIONBANDWIDTHpublic static final java.lang.String **STREAMINFO_SESSIONBANDWIDTH**Constant value: **bandwidth**

STREAMINFO_SESSIONTIMINGpublic static final java.lang.String **STREAMINFO_SESSIONTIMING**Constant value: **timing**

STREAMINFO_SESSIONREPEATTIMESpublic static final java.lang.String **STREAMINFO_SESSIONREPEATTIMES**Constant value: **repeattimes**

STREAMINFO_SESSIONTIMEZONESpublic static final java.lang.String **STREAMINFO_SESSIONTIMEZONES**Constant value: **timezones**

STREAMINFO_SESSIONATTRIBUTESpublic static final java.lang.String **STREAMINFO_SESSIONATTRIBUTES**Constant value: **attributes**

DEFAULT_RTSPSESSIONNAMEpublic static final java.lang.String **DEFAULT_RTSPSESSIONNAME**

Constant value:

DEFAULT_RTPIGNOREPROFILELEVELID

```
public static final boolean DEFAULT_RTPIGNOREPROFILELEVELID
```

Constant value: **false**

DEFAULT_RTPIGNORESPROPPARAMETERSETS

```
public static final boolean DEFAULT_RTPIGNORESPROPPARAMETERSETS
```

Constant value: **false**

DEFAULT_RTP_TRANSPORT_STR

```
public static final java.lang.String DEFAULT_RTP_TRANSPORT_STR
```

Constant value: **RTP/AVP**

Constructors

RTPStream

```
public RTPStream(RTPContext context,  
                String streamId)
```

Constructor

Parameters:

context - RTP context
streamId - stream id

Methods

getRTPContext

```
public RTPContext getRTPContext()
```

Get the RTP context

Returns:

RTP context

getStreamLock

```
public Object getStreamLock()
```

Get the synchronization lock for this stream

Returns:

synchronization lock for this stream

addTrack

```
public void addTrack(RTPTrack track)
```

(continued from last page)

Add a track

Parameters:

track - RTP track

removeTrack

```
public RTPTrack removeTrack(String trackId)
```

Remove a track by id

Parameters:

trackId - track id

Returns:

RTP track

addTrackInternal

```
public void addTrackInternal(RTPTrack track)
```

Add RTP track

Parameters:

track - RTP track

removeTrackInternal

```
public RTPTrack removeTrackInternal(String trackId)
```

Remove track by track id

Parameters:

trackId - track id

Returns:

RTP track that was removed

clearTracks

```
public void clearTracks()
```

Clear all tracks

incrementMediaInBytes

```
public void incrementMediaInBytes(long bytes)
```

Increment the media bytes in, Internal use.

Parameters:

bytes

sloppyGetTrack

```
public RTPTrack sloppyGetTrack(String trackId)
```

Sloppy method for finding track by name, Internal use.

(continued from last page)

Parameters:

trackId - track name

Returns:

RTP track

getTrack

```
public RTPTrack getTrack(String trackId)
```

Get track by id

Parameters:

trackId - track id

Returns:

RTP track

addTrackId

```
public void addTrackId(String seq,  
String trackId)
```

Add track

Parameters:seq - sequence number
trackId - track id

getTrackId

```
public String getTrackId(String seq)
```

Get track by sequence number

Parameters:

seq - sequence number

Returns:

RTP track

getTrackNames

```
public java.util.List getTrackNames()
```

Get a list of track ids

Returns:

list of track ids

getSession

```
public RTPSession getSession()
```

Get the RTP session

Returns:

RTP session

setSession

```
public void setSession(RTPSession session)
```

Set the RTP session

Parameters:

session - RTP session

getStreamId

```
public String getStreamId()
```

Get the stream id

Returns:

stream id

getStream

```
public IMediaStream getStream()
```

Get the IMediaStream

Returns:

stream (IMediaStream) interface

getAudioTrack

```
public RTPTrack getAudioTrack()
```

Get the most likely audio track

Returns:

RTP track

getVideoTrack

```
public RTPTrack getVideoTrack()
```

Get the most likely video track

Returns:

RTP track

getStreamTrack

```
public RTPTrack getStreamTrack()
```

Get the most likely stream track

Returns:

RTP track

(continued from last page)

addStreamInfo

```
public void addStreamInfo(String key,  
    String value)
```

Add a name value pair to the stream info collection

Parameters:

key - name
value - value

getStreamInfo

```
public String getStreamInfo(String key)
```

Get stream info by name

Parameters:

key - name

Returns:

value

addStreamAttribute

```
public void addStreamAttribute(String key,  
    String value)
```

Add a name value pair to the stream attribute collection

Parameters:

key - name
value - value

getVHost

```
public IVHost getVHost()
```

Get vhost

Returns:

vhost

getHost

```
public String getHost()
```

Get host

Returns:

host

setHost

```
public void setHost(String host)
```

Set host

Parameters:

(continued from last page)

host - host

streamExists

```
public boolean streamExists()
```

Return true if RTP stream contains a IMediaStream

Returns:

true if RTP stream contains a IMediaStream

isPublishStreamReady

```
public boolean isPublishStreamReady()
```

See if a publishing stream has enough data to start playback

Returns:

true, if the stream is ready for playback

lockRepeaterStreams

```
public void lockRepeaterStreams(java.util.List streamNames)
```

Lock a list of live repeater stream names, Internal use.

Parameters:

streamNames - stream names

addLockRepeaterStreams

```
public void addLockRepeaterStreams(String streamName,  
    MediaCasterStreamItem mediaCasterStreamItem)
```

unlockRepeaterStreams

```
public void unlockRepeaterStreams()
```

Unlock live repeater streams

getMediaCasterType

```
public String getMediaCasterType()
```

Get the media caster stream type for this stream

Returns:

media caster stream type

createStream

```
public boolean createStream(RTPRequestStatus status)
```

(continued from last page)

createStream

```
public boolean createStream(RTPRequestStatus status,  
    IApplicationInstance appInstance)
```

Create IMediaStream, Internal use.

Parameters:

status - status

Returns:

true if successful

shutdown

```
public void shutdown(RTPRequestStatus status)
```

shutdown RTP stream, Internal use.

Parameters:

status - status

initProperties

```
public void initProperties(IApplicationInstance appInstance)
```

getAppInstance

```
public IApplicationInstance getAppInstance()
```

Get application instance

Returns:

application instance

isPaused

```
public boolean isPaused()
```

Is stream paused

Returns:

true if stream is paused

getDuration

```
public double getDuration()
```

Get the duration of the stream if video on demand

Returns:

duration in seconds

isResetPlayStream

```
public boolean isResetPlayStream()
```

(continued from last page)

Is reset stream trigger, Internal use.

Returns:

true if reset trigger

setResetPlayStream

```
public void setResetPlayStream(boolean doResetPlayStream)
```

Set reset stream trigger

Parameters:

doResetPlayStream - true if reset trigger

record

```
public RTPStreamPlayResult record(RTPRequestStatus status)
```

Execute record

Parameters:

status - RTP status

Returns:

status

record

```
public RTPStreamPlayResult record(RTPRequestStatus status,  
    double startTime,  
    double stopTime)
```

Execute record

Parameters:

status - RTP status
startTime - playback start time
stopTime - playback stop time

Returns:

status

play

```
public RTPStreamPlayResult play(RTPRequestStatus status)
```

Execute play

Parameters:

status - RTP status

Returns:

status

(continued from last page)

play

```
public RTPStreamPlayResult play(RTPRequestStatus status,  
    double startTime,  
    double stopTime)
```

Execute play

Parameters:

status - RTP status
startTime - playback start time
stopTime - playback stop time

Returns:

status

attachToWMSsession

```
public void attachToWMSsession(RtmpSessionInfo wmsSessionInfo)
```

Attach to WMS session, Internal use

Parameters:

wmsSessionInfo - session info

detachFromWMSsession

```
public void detachFromWMSsession(RtmpSessionInfo wmsSessionInfo)
```

Detach from WMS session, Internal use.

Parameters:

wmsSessionInfo - session info

pause

```
public void pause(RTPRequestStatus status)
```

Execute pause

Parameters:

status - RTP status

announce

```
public void announce(RTPRequestStatus status)
```

Execute announce command

Parameters:

status - RTP status

isResyncAudioVideoOnSR

```
public boolean isResyncAudioVideoOnSR()
```

Reset audio/video sync on new RTCP packets (not just first packet)

Returns:

(continued from last page)

true if resetting audio/video on new RTCP packets

setResyncAudioVideoOnSR

```
public void setResyncAudioVideoOnSR(boolean resyncAudioVideoOnSR)
```

Reset audio/video sync on new RTCP packets (not just first packet)

Parameters:

resyncAudioVideoOnSR - true if resetting audio/video on new RTCP packets

isResyncAudioVideoOnSRLog

```
public boolean isResyncAudioVideoOnSRLog()
```

Log audio/video sync on new RTCP packets (not just first packet)

Returns:

true if logging audio/video on new RTCP packets

setResyncAudioVideoOnSRLog

```
public void setResyncAudioVideoOnSRLog(boolean resyncAudioVideoOnSRLog)
```

Log audio/video sync on new RTCP packets (not just first packet)

Parameters:

resyncAudioVideoOnSRLog - true if logging audio/video on new RTCP packets

setResyncAudioVideoOnSRLogStreamSuffix

```
public void setResyncAudioVideoOnSRLogStreamSuffix(String names)
```

Set the stream names that require to be logged for timing information

Parameters:

names

getResyncAudioVideoOnSRLogStreamSuffix

```
public String getResyncAudioVideoOnSRLogStreamSuffix()
```

Get the stream suffixes that are set for timing information logging

Returns:

resyncAudioVideoOnSRLogStreamNames

getMetadataPacket

```
public byte[] getMetadataPacket()
```

Get the onMetadata packet for this RTP stream

Returns:

onMetadata packet

(continued from last page)

resetSentMetadataFlag

```
public void resetSentMetadataFlag()
```

Reset sendMetadata flag

checkSendMetadata

```
public void checkSendMetadata(long adjTimecode,  
    RTPTrack rtpTrack)
```

Check to see if we have sent onMetadata event, if not send

Parameters:

adjTimecode - timecode (milliseconds)

extractCodecConfigFromTrackInfo

```
public void extractCodecConfigFromTrackInfo()
```

Extract codec config information from SDP data

getStreamType

```
public String getStreamType()
```

Get the stream type

Returns:

stream type

setStreamType

```
public void setStreamType(String streamType)
```

Set the stream type

Parameters:

streamType - stream type

getAppName

```
public String getAppName()
```

Get the application name

Returns:

application name

setAppName

```
public void setAppName(String appName)
```

Get the application name

Parameters:

appName - application name

getAppInstanceName

```
public String getAppInstanceName()
```

Get the application instance name

Returns:

application instance name

setAppInstanceName

```
public void setAppInstanceName(String appInstanceName)
```

Set the application instance name

Parameters:

appInstanceName - application instance name

getStreamExt

```
public String getStreamExt()
```

Get the stream extension

Returns:

stream extension

setStreamExt

```
public void setStreamExt(String streamExt)
```

Set the stream extension

Parameters:

streamExt - stream extension

getStreamName

```
public String getStreamName()
```

Get stream name

Returns:

stream name

setStreamName

```
public void setStreamName(String streamName)
```

Set stream name

Parameters:

streamName - stream name

getStreamNameLogging

```
public String getStreamNameLogging()
```

(continued from last page)

Get the stream name used for logging

Returns:

stream name used for logging

setStreamNameLogging

```
public void setStreamNameLogging(String streamNameLogging)
```

Set the stream name used for logging

Parameters:

streamNameLogging - stream name used for logging

getStreamSessionId

```
public long getStreamSessionId()
```

Get the stream session id

Returns:

stream session id

setStreamSessionId

```
public void setStreamSessionId(long streamSessionId)
```

Set the stream session id

Parameters:

streamSessionId - stream session id

getStreamSessionVersion

```
public long getStreamSessionVersion()
```

Get the stream session version

Returns:

stream session version

setStreamSessionVersion

```
public void setStreamSessionVersion(long streamSessionVersion)
```

Set the stream session version

Parameters:

streamSessionVersion - stream session version

getStreamSessionIp

```
public String getStreamSessionIp()
```

Get the stream session ip

Returns:

stream session ip

setStreamSessionIp

```
public void setStreamSessionIp(String streamSessionIp)
```

Set the stream session ip

Parameters:

streamSessionIp - stream session ip

isCheckSSRC

```
public boolean isCheckSSRC()
```

Are we checking the ssrc values of each incoming RTP packet

Returns:

true if checking

setCheckSSRC

```
public void setCheckSSRC(boolean checkSSRC)
```

Are we checking the ssrc values of each incoming RTP packet

Parameters:

checkSSRC - true if checking

isCheckIpAddr

```
public boolean isCheckIpAddr()
```

Are we checking the ip address of each incoming RTP packet

Returns:

true if checking ip address of each incoming RTP packet

setCheckIpAddr

```
public void setCheckIpAddr(boolean checkIpAddr)
```

Are we checking the ip address of each incoming RTP packet

Parameters:

checkIpAddr - true if checking ip address of each incoming RTP packet

getUDPTransport

```
public IUDPTransport getUDPTransport(boolean isMulticast)
```

Get the UDP transport for this stream

Parameters:

isMulticast - true if multicast

Returns:

UDP transport

getAVSyncMethod

```
public int getAVSyncMethod()
```

Get the audio/video sync method. See AVSYNCMETHODS_*

Returns:

audio/video sync method. See AVSYNCMETHODS_*

setAVSyncMethod

```
public void setAVSyncMethod(int avSyncMethod)
```

Set the audio/video sync method. See AVSYNCMETHODS_*

Parameters:

avSyncMethod - audio/video sync method. See AVSYNCMETHODS_*

isAVSyncNonSR

```
public boolean isAVSyncNonSR()
```

Is sync method based on RTCP packets (sender report)

Returns:

true if based in RTCP sender reports

getMaxRTCPWaitTime

```
public int getMaxRTCPWaitTime()
```

Get max time to wait for RTCP sender reports (milliseconds)

Returns:

max time to wait for RTCP sender reports (milliseconds)

setMaxRTCPWaitTime

```
public void setMaxRTCPWaitTime(int maxRTCPWaitTime)
```

Set max time to wait for RTCP sender reports (milliseconds)

Parameters:

maxRTCPWaitTime - max time to wait for RTCP sender reports (milliseconds)

getStreamInfo

```
public java.util.Map getStreamInfo()
```

Get all name/value pairs in the stream info collection

Returns:

map of name/value pairs

getStreamAttributes

```
public java.util.Map getStreamAttributes()
```

(continued from last page)

Get all name/value pairs in the stream attributes collection

Returns:

map of name/value pairs

avSyncNameToId

```
public static int avSyncNameToId(String avSyncName)
```

Get audio/video sync id from name

Parameters:

avSyncName - audio/video sync name

Returns:

audio/video sync id, see AVSYNCMETHODS_*

getMPEGTSAudioLanguage

```
public String getMPEGTSAudioLanguage()
```

setMPEGTSAudioLanguage

```
public void setMPEGTSAudioLanguage(String mpegtsAudioLanguage)
```

getMPEGTSProgramID

```
public int getMPEGTSProgramID()
```

setMPEGTSProgramID

```
public void setMPEGTSProgramID(int mpegtsProgramId)
```

getMPEGTSVideoPID

```
public int getMPEGTSVideoPID()
```

Get the video PID id if MPEG-TS stream

Returns:

video PID id if MPEG-TS stream

setMPEGTSVideoPID

```
public void setMPEGTSVideoPID(int mpegtsVideoPID)
```

Set the video PID id if MPEG-TS stream

Parameters:

mpegtsVideoPID - video PID id if MPEG-TS stream

getMPEGTSAudioPID

```
public int getMPEGTSAudioPID()
```

Get the audio PID id if MPEG-TS stream

Returns:

audio PID id if MPEG-TS stream

setMPEGTSAudioPID

```
public void setMPEGTSAudioPID(int mpegtsAudioPID)
```

Set the audio PID id if MPEG-TS stream

Parameters:

mpegtsAudioPID - audio PID id if MPEG-TS stream

isRTSP

```
public boolean isRTSP()
```

Is this RTP Stream managed by RTSP session

Returns:

true if managed by RTSP session

setRTSP

```
public void setRTSP(boolean isRTSP)
```

Is this RTP Stream managed by RTSP session

Parameters:

isRTSP - true if managed by RTSP session

isRTSPPull

```
public boolean isRTSPPull()
```

Is this RTP Stream managed by RTSP session

Returns:

true if managed by RTSP session

setRTSPPull

```
public void setRTSPPull(boolean isRTSPPull)
```

Is this RTP Stream managed by RTSP session

Parameters:

isRTSPPull - true if managed by RTSP session

getStreamQueryStr

```
public String getStreamQueryStr()
```

(continued from last page)

Get the stream query string

Returns:

stream query string

setStreamQueryStr

```
public void setStreamQueryStr(String streamQueryStr)
```

Set the stream query string

Parameters:

streamQueryStr - stream query string

getModeName

```
public String getModeName()
```

isModePublish

```
public boolean isModePublish()
```

Is this a publish stream

Returns:

true if publish stream

isModePlay

```
public boolean isModePlay()
```

Is this a play stream

Returns:

true if play stream

isModeUnknown

```
public boolean isModeUnknown()
```

Is the stream mode unknown (publish vs play)

Returns:

true if stream mode is unknown

getOutHost

```
public String getOutHost()
```

Get the out host

Returns:

out host

(continued from last page)

setOutHost

```
public void setOutHost(String outHost)
```

Set out host

Parameters:

outHost - out host

idle

```
public void idle(org.apache.mina.common.IoSession session,  
RtmpResponseMessage resp)
```

Process idle event

Parameters:

session - io session

resp - idle request

getLastPacketsByType

```
public AMFPacket\[\] getLastPacketsByType(IMediaStream localStream)
```

Analyzes stream to get information, Internal use.

Parameters:

localStream - local stream

Returns:

important packets

getLastPacketsByType

```
public AMFPacket\[\] getLastPacketsByType(IMediaReader localReader,  
double startTime)
```

Analyzes stream to get information, Internal use.

Parameters:

localReader - media reader

startTime - start time

Returns:

important packets

switchSetupToMPEGTS

```
public void switchSetupToMPEGTS()
```

Switch a stream to MPEG-TS, Internal use.

describe

```
public String describe(RTPSession rtspSession,  
RTPRequestStatus status)
```

Execute describe command

(continued from last page)

Parameters:

rtspSession - RTP session
status - RTP status

Returns:

describe response

describe

```
public String describe(RTPSession rtspSession,  
    int isStreamPacketizer,  
    RTPRequestStatus status,  
    int[] validCodecsAudio,  
    int[] validCodecsVideo)
```

Get RTP describe details

Parameters:

rtspSession - rtp session
isStreamPacketizer - is packetizing as a stream
status - status
validCodecsAudio - list of valid audio codecs
validCodecsVideo - list of valid video codecs

Returns:

SDP info as a string

describeGetDetails

```
public RTPSDPParts describeGetDetails(RTPSession rtspSession,  
    int isStreamPacketizer,  
    RTPRequestStatus status,  
    int[] validCodecsAudio,  
    int[] validCodecsVideo)
```

Get RTP describe details

Parameters:

rtspSession - rtp session
isStreamPacketizer - is packetizing as a stream
status - status
validCodecsAudio - list of valid audio codecs
validCodecsVideo - list of valid video codecs

Returns:

SDP parts

getMode

```
public int getMode()
```

Get the current play/publish mode

Returns:

play/publish mode

setMode

```
public void setMode(int mode)
```

(continued from last page)

Set the play/publish mode

Parameters:

mode - play/publish mode

getTransportMode

```
public String getTransportMode()
```

Get the transport mode

Returns:

transport mode

setTransportMode

```
public void setTransportMode(String transportMode)
```

Set the transport mode

Parameters:

transportMode - transport mode

getNormalizedNTPTimecode

```
public long getNormalizedNTPTimecode(long timecode)
```

Turn a millisecond timecode into an NTP timecode

Parameters:

timecode - timecode (milliseconds)

Returns:

NTP timecode

isForceRTSPInterleaved

```
public boolean isForceRTSPInterleaved()
```

True if forcing RTSP interleaved

Returns:

true if forcing RTSP interleaved

setForceRTSPInterleaved

```
public void setForceRTSPInterleaved(boolean isForceRTSPInterleaved)
```

True if forcing RTSP interleaved

Parameters:

isForceRTSPInterleaved - true if forcing RTSP interleaved

getRTPInfo

```
public RTPStream.RTPInfo getRTPInfo(double startTime,  
    int videoSeq,  
    int audioSeq)
```

(continued from last page)

Get the RTP info

Parameters:

startTime - start time
videoSeq - video sequence number
audioSeq - audio sequence number

Returns:

RTP info string

formatRTPInfo

```
public String formatRTPInfo(long timecode,  
    int videoSeq,  
    int audioSeq)
```

Format RTP info

Parameters:

timecode - timecode
videoSeq - video sequence number
audioSeq - audio sequence number

Returns:

RTP Info string

getRTSPSessionName

```
public String getRTSPSessionName()
```

Get session name

Returns:

session name

setRTSPSessionName

```
public void setRTSPSessionName(String rtspSessionName)
```

Set session name

Parameters:

rtspSessionName - session name

getRTSPSessionDescription

```
public String getRTSPSessionDescription()
```

Get session description

Returns:

session description

setRTSPSessionDescription

```
public void setRTSPSessionDescription(String rtspSessionDescription)
```

Get session description

(continued from last page)

Parameters:

rtspSessionDescription - session description

isSendSDESEventspublic boolean **isSendSDESEvents**()

Send RTCP SDES events

Returns:

true if sending RTCP SDES events

setSendSDESEventspublic void **setSendSDESEvents**(boolean sendSDESEvents)

Send RTCP SDES events

Parameters:

sendSDESEvents - true if sending RTCP SDES events

isMPEGTSOutpublic boolean **isMPEGTSOut**()

Is MPEG-TS out

Returns:

true if MPEG-TS out

setMPEGTSOutpublic void **setMPEGTSOut**(boolean isMPEGTSOut)

Is MPEG-TS out

Parameters:

isMPEGTSOut - true if MPEG-TS out

transportFindBestMatchpublic String **transportFindBestMatch**(String transport)

Based on a transport string from SETUP command find best match

Parameters:

transport - transport string

Returns:

best match

getAutoAllocateInterleavePortspublic int **getAutoAllocateInterleavePorts**()

(continued from last page)

isLive

```
public boolean isLive()
```

Is live stream

Returns:

true if live

setLive

```
public void setLive(boolean isLive)
```

Is live stream

Parameters:

isLive - true if live

getMediaReader

```
public IMediaReader getMediaReader()
```

Get media reader if video on demand stream

Returns:

media reader

getRTSPSessionTimeout

```
public int getRTSPSessionTimeout()
```

Get RTP session timeout (milliseconds)

Returns:

RTP session timeout (milliseconds)

setRTSPSessionTimeout

```
public void setRTSPSessionTimeout(int rtspSessionTimeout)
```

Set RTP session timeout (milliseconds)

Parameters:

rtspSessionTimeout - RTP session timeout (milliseconds)

getRTSPMaximumPendingWriteBytes

```
public int getRTSPMaximumPendingWriteBytes()
```

Get the maximum number of waiting bytes allow for this RTSP session

Returns:

maximum number of waiting bytes allow for this RTSP session

setRTSPMaximumPendingWriteBytes

```
public void setRTSPMaximumPendingWriteBytes(int rtspMaximumPendingWriteBytes)
```

(continued from last page)

Set the maximum number of waiting bytes allow for this RTSP session

Parameters:

`rtspMaximumPendingWriteBytes` - maximum number of waiting bytes allow for this RTSP session

isTimeout

```
public boolean isTimeout(long currTime,  
    int timeout)
```

Is the stream timeout out

Parameters:

`currTime` - current time

`timeout` - timeout value

Returns:

true if timed out

touch

```
public void touch()
```

Touch the stream so that it does not timeout

getRTSPBindIpAddress

```
public String getRTSPBindIpAddress()
```

Get the bind RTSP bind IP address

Returns:

bind RTSP bind IP address

setRTSPBindIpAddress

```
public void setRTSPBindIpAddress(String rtspBindIpAddress)
```

Set the bind RTSP bind IP address

Parameters:

`rtspBindIpAddress` - bind RTSP bind IP address

getRTSPConnectionIpAddress

```
public String getRTSPConnectionIpAddress()
```

Get the connection IP address

Returns:

connection IP address

setRTSPConnectionIpAddress

```
public void setRTSPConnectionIpAddress(String rtspConnectionIpAddress)
```

Set the connection IP address

Parameters:

(continued from last page)

rtspConnectionIpAddress - connection IP address

getRTSPConnectionAddressType

```
public String getRTSPConnectionAddressType()
```

Get the connection address type

Returns:

connection address type

setRTSPConnectionAddressType

```
public void setRTSPConnectionAddressType(String rtspConnectionAddressType)
```

Set the connection address type

Parameters:

rtspConnectionAddressType - connection address type

getRTSPOriginIpAddress

```
public String getRTSPOriginIpAddress()
```

Get the origin IP address

Returns:

origin IP address

setRTSPOriginIpAddress

```
public void setRTSPOriginIpAddress(String rtspOriginIpAddress)
```

Set the origin IP address

Parameters:

rtspOriginIpAddress - origin IP address

getRTSPOriginAddressType

```
public String getRTSPOriginAddressType()
```

Get the origin address type

Returns:

origin address type

setRTSPOriginAddressType

```
public void setRTSPOriginAddressType(String rtspOriginAddressType)
```

Set the origin address type

Parameters:

rtspOriginAddressType - origin address type

(continued from last page)

getVODStartTimeTC

```
public long getVODStartTimeTC()
```

Get the video on demand start time (milliseconds)

Returns:

video on demand start time (milliseconds)

setVODStartTimeTC

```
public void setVODStartTimeTC(long vodStartTimeTC)
```

Set the video on demand start time (milliseconds)

Parameters:

vodStartTimeTC - video on demand start time (milliseconds)

getVODLastTimeTC

```
public long getVODLastTimeTC()
```

Get the last timecode (milliseconds) sent for video on demand

Returns:

last timecode (milliseconds) sent for video on demand

setVODLastTimeTC

```
public void setVODLastTimeTC(long vodLastTimeTC)
```

Set the last timecode (milliseconds) sent for video on demand

Parameters:

vodLastTimeTC - last timecode (milliseconds) sent for video on demand

getVODPlayLen

```
public long getVODPlayLen()
```

Get the video on demand play duration (milliseconds)

Returns:

video on demand play duration (milliseconds)

setVODPlayLen

```
public void setVODPlayLen(long vodPlayLen)
```

Set the video on demand play duration (milliseconds)

Parameters:

vodPlayLen - video on demand play duration (milliseconds)

isStreamStarted

```
public boolean isStreamStarted()
```

(continued from last page)

Is stream started

Returns:

true if stream has started playback

isRTSPAlwaysUseSDPPorts

```
public boolean isRTSPAlwaysUseSDPPorts()
```

Force RTSP to use ports in SDP data

Returns:

true if using ports in SDP data

setRTSPAlwaysUseSDPPorts

```
public void setRTSPAlwaysUseSDPPorts(boolean rtspAlwaysUseSDPPorts)
```

Force RTSP to use ports in SDP data

Parameters:

rtspAlwaysUseSDPPorts - true if using ports in SDP data

putRTSPSessionExtraLine

```
public void putRTSPSessionExtraLine(int location,  
String line)
```

Add an extra line to the SDP data

Parameters:

location - location of line, see SDPLOCATION_

line - line to add

clearRTSPSessionExtraLines

```
public void clearRTSPSessionExtraLines()
```

Clear SDP extra lines

getRTSPSessionExtraLines

```
public java.util.List getRTSPSessionExtraLines()
```

Get extra SDP lines

Returns:

extra SDP lines

getRTPDestination

```
public RTPDestination getRTPDestination()
```

Get RTP destination

Returns:

RTP destination

(continued from last page)

setRTPDestination

```
public void setRTPDestination(RTPDestination rtpDestination)
```

Set RTP destination

Parameters:

rtpDestination - RTP destination

getSDPLang

```
public String getSDPLang()
```

Get the SDP language

Returns:

SDP language

setSDPLang

```
public void setSDPLang(String sdpLang)
```

Set the SDP language

Parameters:

sdpLang - SDP language

isRTPIgnoreProfileLevelId

```
public boolean isRTPIgnoreProfileLevelId()
```

setRTPIgnoreProfileLevelId

```
public void setRTPIgnoreProfileLevelId(boolean rtpIgnoreProfileLevelId)
```

getUDPManagedDeliveryDelay

```
public int getUDPManagedDeliveryDelay()
```

setUDPManagedDeliveryDelay

```
public void setUDPManagedDeliveryDelay(int udpManagedDeliveryDelay)
```

getUDPManagedDeliveryCount

```
public int getUDPManagedDeliveryCount()
```

(continued from last page)

setUDPManagedDeliveryCount

```
public void setUDPManagedDeliveryCount(int udpManagedDeliveryCount)
```

isForceMPEGTSOut

```
public boolean isForceMPEGTSOut()
```

setForceMPEGTSOut

```
public void setForceMPEGTSOut(boolean isForceMPEGTSOut)
```

isBlockUDPOut

```
public boolean isBlockUDPOut()
```

setBlockUDPOut

```
public void setBlockUDPOut(boolean blockUDPOut)
```

getMPEGTSAudioBitrate

```
public int getMPEGTSAudioBitrate()
```

setMPEGTSAudioBitrate

```
public void setMPEGTSAudioBitrate(int mpegtsAudioBitrate)
```

getMPEGTSVideoBitrate

```
public int getMPEGTSVideoBitrate()
```

setMPEGTSVideoBitrate

```
public void setMPEGTSVideoBitrate(int mpegtsVideoBitrate)
```

isRTPIgnoreSPropParameterSets

```
public boolean isRTPIgnoreSPropParameterSets()
```

(continued from last page)

setRTPIgnoreSPropParameterSets

```
public void setRTPIgnoreSPropParameterSets(boolean rtpIgnoreSPropParameterSets)
```

getRTPStreamContext

```
public RTPStreamContext getRTPStreamContext()
```

setRTPStreamContext

```
public void setRTPStreamContext(RTPStreamContext rtpStreamContext)
```

isRefuseIncomingUDPConnections

```
public boolean isRefuseIncomingUDPConnections()
```

setRefuseIncomingUDPConnections

```
public void setRefuseIncomingUDPConnections(boolean refuseIncomingUDPConnections)
```

isRefuseOutgoingUDPConnections

```
public boolean isRefuseOutgoingUDPConnections()
```

setRefuseOutgoingUDPConnections

```
public void setRefuseOutgoingUDPConnections(boolean refuseOutgoingUDPConnections)
```

notifyEncryptionProviderAllTracks

```
public void notifyEncryptionProviderAllTracks()
```

notifyEncryptionProvider

```
public void notifyEncryptionProvider(RTPTrack rtpTrack)
```

(continued from last page)

isUDPTransportOverride

```
public boolean isUDPTransportOverride()
```

setUDPTransport

```
public void setUDPTransport(IUDPTransport udpTransport)
```

getSDPTransportStr

```
public String getSDPTransportStr()
```

setSDPTransportStr

```
public void setSDPTransportStr(String sdpTransportStr)
```

isWebRTC

```
public boolean isWebRTC()
```

setWebRTC

```
public void setWebRTC(boolean isWebRTC)
```

Package

com.wowza.wms.rtp.transport

com.wowza.wms.rtp.transport Interface IUDPMessageHandler

All Known Implementing Classes:

[RTPPort](#)

public interface **IUDPMessageHandler**
extends

Method Summary

void	handleMessage (java.net.SocketAddress socketAddr, Object message)
void	sessionClosed (IUDPTransportSession session)
void	sessionOpened (IUDPTransportSession session)

Methods

handleMessage

```
public void handleMessage(java.net.SocketAddress socketAddr,  
    Object message)
```

sessionOpened

```
public void sessionOpened(IUDPTransportSession session)
```

sessionClosed

```
public void sessionClosed(IUDPTransportSession session)
```

com.wowza.wms.rtp.transport Interface IUDPTransport

public interface **IUDPTransport**
extends

Field Summary

public static final	DIRECTION_IN Value: 1
public static final	DIRECTION_OUT Value: 2

Method Summary

java.net.InetSocketAddress	bind (RTPUDPDatagramConfig datagramConfig, IUDPMessageHandler handler, String inIPAddress, int inPort, String outIPAddress, int outPort, int direction)
void	copyContext (IUDPTransport transport)
String	getLoggingContextStr ()
java.net.InetAddress	getMulticastInterfaceAddress ()
long	getReceivedPacketCount (java.net.InetSocketAddress socketAddress)
RTPContext	getRTPContext ()
long	getSentPacketCount (java.net.InetSocketAddress socketAddress)
int	getTimeToLive ()
void	setLoggingContextStr (String loggingContextStr)
void	setMulticastInterfaceAddress (java.net.InetAddress multicastInterfaceAddress)
void	setRTPContext (RTPContext rtpContext)
void	setTimeToLive (int timeToLive)
void	unbind (java.net.InetSocketAddress socketAddress)
void	unbindAll ()

Fields

DIRECTION_IN

```
public static final int DIRECTION_IN
```

Constant value: **1**

DIRECTION_OUT

```
public static final int DIRECTION_OUT
```

Constant value: **2**

Methods

bind

```
public java.net.InetSocketAddress bind(RTPUDPDatagramConfig datagramConfig,  
    IUDPMessageHandler handler,  
    String inIPAddress,  
    int inPort,  
    String outIPAddress,  
    int outPort,  
    int direction)
```

unbindAll

```
public void unbindAll()
```

unbind

```
public void unbind(java.net.InetSocketAddress socketAddress)
```

setRTPContext

```
public void setRTPContext(RTPContext rtpContext)
```

getRTPContext

```
public RTPContext getRTPContext()
```

(continued from last page)

setTimeToLive

```
public void setTimeToLive(int timeToLive)
```

getTimeToLive

```
public int getTimeToLive()
```

setMulticastInterfaceAddress

```
public void setMulticastInterfaceAddress(java.net.InetAddress  
multicastInterfaceAddress)
```

getLoggingContextStr

```
public String getLoggingContextStr()
```

setLoggingContextStr

```
public void setLoggingContextStr(String loggingContextStr)
```

getMulticastInterfaceAddress

```
public java.net.InetAddress getMulticastInterfaceAddress()
```

copyContext

```
public void copyContext(IUDPTransport transport)
```

getReceivedPacketCount

```
public long getReceivedPacketCount(java.net.InetSocketAddress socketAddress)
```

getSentPacketCount

```
public long getSentPacketCount(java.net.InetSocketAddress socketAddress)
```

com.wowza.wms.rtp.transport Interface IUDPTransportSession

public interface **IUDPTransportSession**
extends

Method Summary

void	write (byte[] buffer, int offset, int len, java.net.SocketAddress destination, long timecode)
------	---

Methods

write

```
public void write(byte[] buffer,  
    int offset,  
    int len,  
    java.net.SocketAddress destination,  
    long timecode)
```

Package

com.wowza.wms.server

com.wowza.wms.server
Interface ICommandInterfaceCommand

public interface **ICommandInterfaceCommand**
extends

Method Summary

boolean	canHandle (CommandInterfaceRequestMessage req)
void	invoke (CommandInterfaceRequestMessage req, CommandInterfaceResponseMessage resp)

Methods**invoke**

```
public void invoke(CommandInterfaceRequestMessage req,  
CommandInterfaceResponseMessage resp)
```

canHandle

```
public boolean canHandle(CommandInterfaceRequestMessage req)
```

com.wowza.wms.server Interface ICompilerDirectives

public interface **ICompilerDirectives**
extends

Field Summary

public static final	RTMPENABLED Value: true
---------------------	---

Fields

RTMPENABLED

public static final boolean **RTMPENABLED**

Constant value: **true**

com.wowza.wms.server
Interface IResponseListener

public interface **IResponseListener**
extends

IResponseListener: Internal use.

Method Summary

void	onResponseWriteStart (RtmpResponseMessage response)
void	onResponseWriteStop (RtmpResponseMessage response)

Methods**onResponseWriteStart**

public void **onResponseWriteStart**(RtmpResponseMessage response)

onResponseWriteStop

public void **onResponseWriteStop**(RtmpResponseMessage response)

com.wowza.wms.server Interface IServer

public interface **IServer**
extends

IServer: public interface to Server object.

Field Summary

public static final	SERVER_DEFAULT Value: <code>_defaultServer_</code>
---------------------	---

Method Summary

boolean	addAuthorizedRESTAPI (Class classType) Returns true if the class has been added to the REST API.
boolean	addAuthorizedRESTAPI (Class classType, String url) Returns true if the class has been added to the REST API at the specified URL
void	addServerListener (IServerNotify serverListener) Add server listener
boolean	addUnauthorizedRESTAPI (Class classType) Returns true if the class has been added to the REST API.
boolean	addUnauthorizedRESTAPI (Class classType, String url) Returns true if the class has been added to the REST API at the specified URL
com.wowza.wms.admin.AdminAgent	getAdminAgent () Get the JMX interface
String	getAdminGUID () Get the admin guid
java.util.List	getAdminInterfaceObjectList () Get the list of objects exposed through JMX interface
RandomIdGenerator	getClientIdGenerator () Get the client id generator for the server
int	getClientIdGeneratorRecycleDelaySize () Get the client ID generator recycle delay size
int	getClientIdGeneratorRecycleSize () Get the client ID generator recycle size
long	getClientIdGeneratorTimeout () Get the client ID generator timeout
CommandInterfaceCommandHandler	getCommandInterfaceCommandHandler () Get the command interface command handler

HostPort	getCommandInterfaceHostPort() Get the definition of the command interface
long	getCommittedVirtualMemory() Get the committed virtual memory
ConnectionCounter	getConnectionCounter() Get the server connection counter.
ConnectionCounterSimple	getConnectionCounter(int counterIndex) Get the server connection counter for a specific technology (see IVHost.COUNTER_*)
long	getConnectionsMaximum() Returns maximum number of connections allowed to the server (-1 means unlimited)
int	getCoreHandlerPoolSize() Get the handler core thread pool size.
int	getCoreTransportPoolSize() Get the transport core thread pool size.
long	getCurrentHeapSize() Get the current heap size
String	getDateStarted() Get the date and time the server was started.
String	getDefaultStreamPrefix() Get the default stream prefix used if the stream name does not include a prefix (default is mp4)
java.util.Properties	getDynamicLogProperties() Get the dynamic log properties defined at the server level in conf/log4j.properties
String	getGUID() Get the base guid
ThreadPool	getHandlerThreadPool() Get the server handler thread pool.
String	getHTTPHeaderServer() Get the Server header used for HTTP responses
IOPerformanceCounter	getIoPerformanceCounter() Get the server performance counter.
IOPerformanceCounter	getIoPerformanceCounter(int counterIndex) Get the server performance counter for a specific technology (see IVHost.COUNTER_*)
long	getLiveStreamTranscoderSessionCount() Get the current number of live stream transcoder sessions.
long	getLiveThreads() Get the count of live threads
WMSProperties	getManagerProperties() Get server's manager's properties collection
long	getMaxHeapSize() Get the max heap size

long	getPeakThreads() Get the count of peak threads
WMSProperties	getProperties() Get server level properties collection
Server.ProtocolUsageSessionTracker	getProtocolUsageTracker() Get the server level protocol usage tracker
long	getPublishersMaximum() Get the maximum number of streams that can be published to the server
PushPublishUsageTracker	getPushPublishUsageTracker() Get the server level push publishing usage tracker
com.wowza.wms.rest.restserver.RESTUsageTracker	getRESTUsageTracker() Get the server level REST usage tracker
String	getRTMPTHeaderServer() Get the Server header used for RTMPT responses
String	getServerGUID() Get the server guid
String	getSessionGUID() Get the session guid
ThreadPool	getThreadPool() Get the server handler thread pool.
com.wowza.wms.transcoder.thumbnailer.ThumbnailerUsageTracker	getThumbnailerUsageTracker() Get the server level thumbnail usage tracker
String	getTimeRunning() Get a formatted String of how long the server has been running.
double	getTimeRunningSeconds() Get time running in seconds
TranscoderContextServer	getTranscoderContextServer() Get the server level transcoder context
long	getTranscoderLicenseInUse() Get the total number of transcoder licenses in use.
long	getTranscoderLicenseTotal() Get the total number of transcoder licenses (-1 means unlimited - subscription)
TranscoderUsageTracker	getTranscoderUsageTracker() Get the server level live transcoder usage tracker
com.wowza.wms.transcoder.vod.TranscoderVODUsageTracker	getTranscoderVODUsageTracker() Get the server level VOD transcoder usage tracker
ThreadPool	getTransportThreadPool() Get the server transport thread pool.

ServerTuningHandler	getTuningHandler() Get the handler that control automatic server tuning
com.wowza.wms.transport.udp.UDPPortManager	getUDPPortManager() Get the UDP port manager which manages the allocation of incoming UDP port binding to be sure there are not port conflicts
com.wowza.wms.transport.udp.UDPPortSharingManager	getUDPPortSharingManager() Get the UDP port sharing manager.
String[]	getUserAgents() Get a pipe " " delimited list of user agents that the server recognizes as RTMPT client.
String	getVersion() Get server version number.
VHostList	getVHostList() Returns the interface to the VHostList for the server
boolean	isAcceptWOWZConnections() If true, WOWZ connections will use the WOWZ protocol.
boolean	isDRMAvailable() Returns true if DRM is properly licensed.
boolean	isDRMInUse() Returns true if DRM is in-use.
boolean	isDVRAvailable() Returns true if nDVR is properly licensed.
boolean	isDVRInUse() Returns true if nDVR is in-use.
boolean	isDynamicLogContextLoaded(String logContext) Returns true of the given dynamic log context is already loaded.
boolean	isHTTPOriginAvailable() Returns true if HTTP origin is properly licensed.
boolean	isInitiateWOWZConnections() If true, NetConnection attempts will use the WOWZ protocol when possible.
boolean	isLoggingRemoveStdoutIfRunningAsService() If true, stdout log4j appender is removed from logging configuration if running as a service.
boolean	isPushPublishAvailable() Returns true if Push Publish is properly licensed.
boolean	isRESTAPIAvailable() Returns true if REST API is properly licensed.
boolean	isRestDocumentationServerEnabled() Returns true if REST API documentation server is enabled
boolean	isRestServerEnabled() Returns true if REST API is enabled

boolean	isSuspended() Is the server current suspended
boolean	isTranscoderWatermark() Return true if transcoder has a watermark
boolean	isVHostRunning(String name) Returns true if the name provided is a running VHost name
String	readConfig(String sName) Method to read xml config file..
void	reloadVHostConfig() Reload the VHosts.xml file.
void	removeServerListener(IIServerNotify serverListener) Remove server listener
void	setAcceptWOWZConnections(boolean acceptWOWZConnections) If true, WOWZ connections will use the WOWZ protocol.
void	setCommandInterfaceHostPort(HostPort commandInterfaceHostPort) Set the definition for the command interface.
void	setCoreHandlerPoolSize(int corePoolSize) Set the handler core thread pool size.
void	setCoreTransportPoolSize(int corePoolSize) Set the transport core thread pool size.
void	setDefaultStreamPrefix(String defaultStreamPrefix) Set the default stream prefix used if the stream name does not include a prefix (default is mp4)
void	setDynamicLogProperties(java.util.Properties dynamicLogProperties) Set the dynamic log properties set at the server level
void	setHTTPHeaderServer(String httpHeaderServer) Set the Server header used for HTTP responses
void	setInitiateWOWZConnections(boolean initiateWOWZConnections) If true, NetConnection attempts will use the WOWZ protocol when possible.
void	setLoggingRemoveStdoutIfRunningAsService(boolean loggingRemoveStdoutIfRunningAsService) If true, stdout log4j appender is removed from logging configuration if running as a service.
void	setRestDocumentationServerEnabled(boolean restDocumentationServerEnabled) Sets if REST API documentation server will be enabled
void	setRestServerEnabled(boolean restServerEnabled) Sets if REST API server will be enabled
void	setRTMPTHeaderServer(String rtmptHeaderServer) Set the Server header used for RTMPT responses
void	setUserAgents(String[] userAgents) Set a pipe " " delimited list of user agents that the server recognizes as RTMPT client.

void	startCommandInterface() Start the command interface as defined in Server.xml.
void	startStats() Starts the statistics manager to collect server and application statistics
void	startVHost(String vhostName) Start a vHost by name.
void	startVHosts() Start all vHosts
void	stopAdminAgent() Stop the JMX interface
void	stopCommandInterface() Stop the command interface as defined in Server.xml.
void	stopStats() Stops the statistics manager
void	stopVHost(String vhostName) Stop a vHost by name.
void	stopVHosts() Stop all vHosts
void	suspendAllVHosts() Suspend all virtual hosts (Calls IVHost.suspendAllHostPorts for each vhost)
void	suspendCommandInterface() Suspend the command interface as defined in Server.xml.
void	suspendServer() Suspend all virtual hosts and the command interface
void	unbindAllVHosts() Unbind all virtual hosts (Calls IVHost.unbindAllHostPorts for each vhost)
boolean	writeConfig(String sName, String data) Method to write xml config file..

Fields

SERVER_DEFAULT

```
public static final java.lang.String SERVER_DEFAULT
```

Constant value: `_defaultServer_`

Methods

startCommandInterface

```
public void startCommandInterface()
```

(continued from last page)

Start the command interface as defined in Server.xml. The command interface is used by shutdown.sh script to stop the server. It is also used by ant task to stop and start the server on build events.

stopCommandInterface

```
public void stopCommandInterface()
```

Stop the command interface as defined in Server.xml. The command interface is used by shutdown.sh script to stop the server. It is also used by ant task to stop and start the server on build events.

suspendCommandInterface

```
public void suspendCommandInterface()
```

Suspend the command interface as defined in Server.xml. The command interface is used by shutdown.sh script to stop the server. It is also used by ant task to stop and start the server on build events.

getVersion

```
public String getVersion()
```

Get server version number.

Returns:

server version number

reloadVHostConfig

```
public void reloadVHostConfig()
```

Reload the VHosts.xml file. This method can be invoked through the JMX interface to manage vHosts while the server is running.

stopVHost

```
public void stopVHost(String vhostName)
```

Stop a vHost by name.

Parameters:

vhostName - vHost name

stopVHosts

```
public void stopVHosts()
```

Stop all vHosts

isVHostRunning

```
public boolean isVHostRunning(String name)
```

Returns true if the name provided is a running VHost name

Parameters:

name - of a running VHost

Returns:

true if the name provided is a running VHost name

startVHost

```
public void startVHost(String vhostName)
```

Start a vHost by name.

Parameters:

vhostName - vHost name

startVHosts

```
public void startVHosts()
```

Start all vHosts

getIoPerformanceCounter

```
public IoPerformanceCounter getIoPerformanceCounter()
```

Get the server performance counter.

Returns:

io performance counter

getIoPerformanceCounter

```
public IoPerformanceCounter getIoPerformanceCounter(int counterIndex)
```

Get the server performance counter for a specific technology (see IVHost.COUNTER_*)

Parameters:

counterIndex - counter index (see IVHost.COUNTER_*)

Returns:

io performance counter

getConnectionCounter

```
public ConnectionCounter getConnectionCounter()
```

Get the server connection counter.

Returns:

connection counter

getPublishersMaximum

```
public long getPublishersMaximum()
```

Get the maximum number of streams that can be published to the server

Returns:

maximum number of streams that can be published to the server

getConnectionCounter

```
public ConnectionCounterSimple getConnectionCounter(int counterIndex)
```

(continued from last page)

Get the server connection counter for a specific technology (see IVHost.COUNTER_*)

Parameters:

counterIndex - counter index (see IVHost.COUNTER_*)

Returns:

connection counter

getDateStarted

```
public String getDateStarted()
```

Get the date and time the server was started.

Returns:

date and time the server was started

getTimeRunning

```
public String getTimeRunning()
```

Get a formatted String of how long the server has been running.

Returns:

formatted String of how long the server has been running

getTimeRunningSeconds

```
public double getTimeRunningSeconds()
```

Get time running in seconds

Returns:

time running in seconds

getCommandInterfaceHostPort

```
public HostPort getCommandInterfaceHostPort()
```

Get the definition of the command interface

Returns:

host port definition of command interface

setCommandInterfaceHostPort

```
public void setCommandInterfaceHostPort(HostPort commandInterfaceHostPort)
```

Set the definition for the command interface.

Parameters:

commandInterfaceHostPort - host port definition of command interface

getUserAgents

```
public String[] getUserAgents()
```

Get a pipe "|" delimited list of user agents that the server recognizes as RTMPT client.

(continued from last page)

Returns:

pipe "|" delimited list of user agents that the server recognizes as RTMPT client

setUserAgents

```
public void setUserAgents(String[] userAgents)
```

Set a pipe "|" delimited list of user agents that the server recognizes as RTMPT client.

Parameters:

userAgents - pipe "|" delimited list of user agents that the server recognizes as RTMPT client

addServerListener

```
public void addServerListener(IServerNotify serverListener)
```

Add server listener

Parameters:

serverListener - server listener

removeServerListener

```
public void removeServerListener(IServerNotify serverListener)
```

Remove server listener

Parameters:

serverListener - server listener

getAdminInterfaceObjectList

```
public java.util.List getAdminInterfaceObjectList()
```

Get the list of objects exposed through JMX interface

Returns:

list of objects exposed through JMX interface

getCoreTransportPoolSize

```
public int getCoreTransportPoolSize()
```

Get the transport core thread pool size.

Returns:

default core thread pool size

setCoreTransportPoolSize

```
public void setCoreTransportPoolSize(int corePoolSize)
```

Set the transport core thread pool size.

Parameters:

corePoolSize - core thread pool size

getCoreHandlerPoolSize

```
public int getCoreHandlerPoolSize()
```

Get the handler core thread pool size.

Returns:

default core thread pool size

setCoreHandlerPoolSize

```
public void setCoreHandlerPoolSize(int corePoolSize)
```

Set the handler core thread pool size.

Parameters:

corePoolSize - core thread pool size

getThreadPool

```
public ThreadPool getThreadPool()
```

Get the server handler thread pool. Same as getHandlerThreadPool.

Returns:

server handler thread pool

getTransportThreadPool

```
public ThreadPool getTransportThreadPool()
```

Get the server transport thread pool. This thread pool is used to read/write data from the transports sockets.

Returns:

server transport thread pool

getHandlerThreadPool

```
public ThreadPool getHandlerThreadPool()
```

Get the server handler thread pool. This thread pool is used to process the incoming events.

Returns:

server handler thread pool

getProperties

```
public WMSProperties getProperties()
```

Get server level properties collection

Returns:

server level properties collection

getManagerProperties

```
public WMSProperties getManagerProperties()
```

(continued from last page)

Get server's manager's properties collection

Returns:

manager's property collection

getClientIdGenerator

```
public RandomIdGenerator getClientIdGenerator()
```

Get the client id generator for the server

Returns:

client id generator for the server

getDynamicLogProperties

```
public java.util.Properties getDynamicLogProperties()
```

Get the dynamic log properties defined at the server level in conf/log4j.properties

Returns:

dynamic log properties defined at the server level

setDynamicLogProperties

```
public void setDynamicLogProperties(java.util.Properties dynamicLogProperties)
```

Set the dynamic log properties set at the server level

Parameters:

`dynamicLogProperties` - dynamic log properties defined at the server level

isDynamicLogContextLoaded

```
public boolean isDynamicLogContextLoaded(String logContext)
```

Returns true if the given dynamic log context is already loaded. If not loaded it will return false and add it to the a Set of loaded log context. Log context is [VHost],[Application],[AppInstance]

getVHostList

```
public VHostList getVHostList()
```

Returns the interface to the VHostList for the server

Returns:

vhostList

suspendAllVHosts

```
public void suspendAllVHosts()
```

Suspend all virtual hosts (Calls IVHost.suspendAllHostPorts for each vhost)

unbindAllVHosts

```
public void unbindAllVHosts()
```

(continued from last page)

Unbind all virtual hosts (Calls IVHost.unbindAllHostPorts for each vhost)

suspendServer

```
public void suspendServer()
```

Suspend all virtual hosts and the command interface

isSuspended

```
public boolean isSuspended()
```

Is the server current suspended

stopAdminAgent

```
public void stopAdminAgent()
```

Stop the JMX interface

getAdminAgent

```
public com.wowza.wms.admin.AdminAgent getAdminAgent()
```

Get the JMX interface

Returns:JMX Admin agent

getSessionGUID

```
public String getSessionGUID()
```

Get the session guid

Returns:session guid

getServerGUID

```
public String getServerGUID()
```

Get the server guid

Returns:server guid

getGUID

```
public String getGUID()
```

Get the base guid

Returns:base guid

(continued from last page)

getAdminGUID

```
public String getAdminGUID()
```

Get the admin guid

Returns:

admin guid

getUDPPortManager

```
public com.wowza.wms.transport.udp.UDPPortManager getUDPPortManager()
```

Get the UDP port manager which manages the allocation of incoming UDP port binding to be sure there are not port conflicts

Returns:

UDP port manager

getUDPPortSharingManager

```
public com.wowza.wms.transport.udp.UDPPortSharingManager getUDPPortSharingManager()
```

Get the UDP port sharing manager.

Returns:

UDP port sharing manager

getLiveThreads

```
public long getLiveThreads()
```

Get the count of live threads

Returns:

count of live threads

getPeakThreads

```
public long getPeakThreads()
```

Get the count of peak threads

Returns:

count of peak threads

getCurrentHeapSize

```
public long getCurrentHeapSize()
```

Get the current heap size

Returns:

current heap size

getMaxHeapSize

```
public long getMaxHeapSize()
```

(continued from last page)

Get the max heap size

Returns:

map heap size

getCommittedVirtualMemory

```
public long getCommittedVirtualMemory()
```

Get the committed virtual memory

Returns:

committed virtual memory

readConfig

```
public String readConfig(String sName)
```

Method to read xml config file..

writeConfig

```
public boolean writeConfig(String sName,  
String data)
```

Method to write xml config file..

getClientIdGeneratorTimeout

```
public long getClientIdGeneratorTimeout()
```

Get the client ID generator timeout

Returns:

client ID generator timeout

getClientIdGeneratorRecycleSize

```
public int getClientIdGeneratorRecycleSize()
```

Get the client ID generator recycle size

Returns:

client ID generator recycle size

getClientIdGeneratorRecycleDelaySize

```
public int getClientIdGeneratorRecycleDelaySize()
```

Get the client ID generator recycle delay size

Returns:

client ID generator recycle delay size

getCommandInterfaceCommandHandler

```
public CommandInterfaceCommandHandler getCommandInterfaceCommandHandler()
```

Get the command interface command handler

(continued from last page)

Returns:

command interface command handler

getProtocolUsageTracker

```
public Server.ProtocolUsageSessionTracker getProtocolUsageTracker()
```

Get the server level protocol usage tracker

Returns:

server level protocol usage tracker

isAcceptWOWZConnections

```
public boolean isAcceptWOWZConnections()
```

If true, WOWZ connections will use the WOWZ protocol. If false, WOWZ connection attempts will fall back to RTMP.

Returns:

true, WOWZ connections will use the WOWZ protocol

setAcceptWOWZConnections

```
public void setAcceptWOWZConnections(boolean acceptWOWZConnections)
```

If true, WOWZ connections will use the WOWZ protocol. If false, WOWZ connection attempts will fall back to RTMP.

Parameters:

acceptWOWZConnections - true, WOWZ connections will use the WOWZ protocol

isInitiateWOWZConnections

```
public boolean isInitiateWOWZConnections()
```

If true, NetConnection attempts will use the WOWZ protocol when possible.

Returns:

true, NetConnection attempts will use the WOWZ protocol when possible.

setInitiateWOWZConnections

```
public void setInitiateWOWZConnections(boolean initiateWOWZConnections)
```

If true, NetConnection attempts will use the WOWZ protocol when possible.

Parameters:

initiateWOWZConnections - true, NetConnection attempts will use the WOWZ protocol when possible.

getLiveStreamTranscoderSessionCount

```
public long getLiveStreamTranscoderSessionCount()
```

Get the current number of live stream transcoder sessions.

Returns:

current number of live stream transcoder sessions

getTuningHandler

```
public ServerTuningHandler getTuningHandler()
```

Get the handler that control automatic server tuning

Returns:

handler that control automatic server tuning

getTranscoderLicenseInUse

```
public long getTranscoderLicenseInUse()
```

Get the total number of transcoder licenses in use.

Returns:

total number of transcoder licenses in use.

getTranscoderLicenseTotal

```
public long getTranscoderLicenseTotal()
```

Get the total number of transcoder licenses (-1 means unlimited - subscription)

Returns:

total number of transcoder licenses

isTranscoderWatermark

```
public boolean isTranscoderWatermark()
```

Return true if transcoder has a watermark

Returns:

true if transcoder has a watermark

isDVRAvailable

```
public boolean isDVRAvailable()
```

Returns true if nDVR is properly licensed.

Returns:

true if nDVR is properly licensed

isDVRInUse

```
public boolean isDVRInUse()
```

Returns true if nDVR is in-use.

Returns:

true if nDVR is in-use

isDRMAvailable

```
public boolean isDRMAvailable()
```

(continued from last page)

Returns true if DRM is properly licensed.

Returns:

true if DRM is properly licensed

isDRMInUse

```
public boolean isDRMInUse()
```

Returns true if DRM is in-use.

Returns:

true if DRM is in-use

isHTTPOriginAvailable

```
public boolean isHTTPOriginAvailable()
```

Returns true if HTTP origin is properly licensed.

Returns:

true if HTTP origin is properly licensed

isRESTAPIAvailable

```
public boolean isRESTAPIAvailable()
```

Returns true if REST API is properly licensed.

Returns:

true if REST API is properly licensed

isPushPublishAvailable

```
public boolean isPushPublishAvailable()
```

Returns true if Push Publish is properly licensed.

Returns:

true if Push Publish is properly licensed.

setRestServerEnabled

```
public void setRestServerEnabled(boolean restServerEnabled)
```

Sets if REST API server will be enabled

Parameters:

restServerEnabled - if the REST API server will be enabled

isRestServerEnabled

```
public boolean isRestServerEnabled()
```

Returns true if REST API is enabled

Returns:

true if REST API is enabled

setRestDocumentationServerEnabled

```
public void setRestDocumentationServerEnabled(boolean restDocumentationServerEnabled)
```

Sets if REST API documentation server will be enabled

Parameters:

restDocumentationServerEnabled - if the REST API server will be enabled

isRestDocumentationServerEnabled

```
public boolean isRestDocumentationServerEnabled()
```

Returns true if REST API documentation server is enabled

Returns:

true if REST API documentation server is enabled

addAuthorizedRESTAPI

```
public boolean addAuthorizedRESTAPI(Class classType)
```

Returns true if the class has been added to the REST API.

Returns:

true if the class has been added to the REST API

addUnauthorizedRESTAPI

```
public boolean addUnauthorizedRESTAPI(Class classType,  
String url)
```

Returns true if the class has been added to the REST API at the specified URL

Returns:

true if the class has been added to the REST API at the specified URL

addUnauthorizedRESTAPI

```
public boolean addUnauthorizedRESTAPI(Class classType)
```

Returns true if the class has been added to the REST API.

Returns:

true if the class has been added to the REST API

addAuthorizedRESTAPI

```
public boolean addAuthorizedRESTAPI(Class classType,  
String url)
```

Returns true if the class has been added to the REST API at the specified URL

Returns:

true if the class has been added to the REST API at the specified URL

(continued from last page)

getConnectionsMaximum

```
public long getConnectionsMaximum()
```

Returns maximum number of connections allowed to the server (-1 means unlimited)

Returns:

maximum number of connections allowed to the server (-1 means unlimited)

startStats

```
public void startStats()
```

Starts the statistics manager to collect server and application statistics

stopStats

```
public void stopStats()
```

Stops the statistics manager

getDefaultStreamPrefix

```
public String getDefaultStreamPrefix()
```

Get the default stream prefix used if the stream name does not include a prefix (default is mp4)

Returns:

default stream prefix

setDefaultStreamPrefix

```
public void setDefaultStreamPrefix(String defaultStreamPrefix)
```

Set the default stream prefix used if the stream name does not include a prefix (default is mp4)

Parameters:

defaultStreamPrefix - default stream prefix

getRTMPTHeaderServer

```
public String getRTMPTHeaderServer()
```

Get the Server header used for RTMPT responses

Returns:

Server header used for RTMPT responses

setRTMPTHeaderServer

```
public void setRTMPTHeaderServer(String rtmptHeaderServer)
```

Set the Server header used for RTMPT responses

Parameters:

rtmptHeaderServer - Server header used for RTMPT responses

(continued from last page)

getHTTPHeaderServer

```
public String getHTTPHeaderServer()
```

Get the Server header used for HTTP responses

Returns:

the Server header used for HTTP responses

setHTTPHeaderServer

```
public void setHTTPHeaderServer(String httpHeaderServer)
```

Set the Server header used for HTTP responses

Parameters:

httpHeaderServer

isLoggingRemoveStdoutIfRunningAsService

```
public boolean isLoggingRemoveStdoutIfRunningAsService()
```

If true, stdout log4j appender is removed from logging configuration if running as a service.

Returns:

stdout log4j appender is removed from logging configuration if running as a service

setLoggingRemoveStdoutIfRunningAsService

```
public void setLoggingRemoveStdoutIfRunningAsService(boolean loggingRemoveStdoutIfRunningAsService)
```

If true, stdout log4j appender is removed from logging configuration if running as a service.

Parameters:

loggingRemoveStdoutIfRunningAsService - stdout log4j appender is removed from logging configuration if running as a service

getTranscoderUsageTracker

```
public TranscoderUsageTracker getTranscoderUsageTracker()
```

Get the server level live transcoder usage tracker

Returns:

server level live transcoder usage tracker

getTranscoderVODUsageTracker

```
public com.wowza.wms.transcoder.vod.TranscoderVODUsageTracker getTranscoderVODUsageTracker()
```

Get the server level VOD transcoder usage tracker

Returns:

server level VOD transcoder usage tracker

(continued from last page)

getThumbnailerUsageTracker

```
public com.wowza.wms.transcoder.thumbnailer.ThumbnailerUsageTracker  
getThumbnailerUsageTracker()
```

Get the server level thumbnail usage tracker

Returns:

server level thumbnail usage tracker

getRESTUsageTracker

```
public com.wowza.wms.rest.restserver.RESTUsageTracker getRESTUsageTracker()
```

Get the server level REST usage tracker

Returns:

server level REST usage tracker

getTranscoderContextServer

```
public TranscoderContextServer getTranscoderContextServer()
```

Get the server level transcoder context

Returns:

server level transcoder context

getPushPublishUsageTracker

```
public PushPublishUsageTracker getPushPublishUsageTracker()
```

Get the server level push publishing usage tracker

Returns:

server level push publishing usage tracker

com.wowza.wms.server Interface IServerNotify

All Subinterfaces:

[IServerNotify2](#), [IServerNotify3](#)

public interface **IServerNotify**
extends

IServerNotify: listener interface. Configured by adding class entries definitions to Server.xml.Startup order is: [constructor]; onServerConfigLoaded, onServerCreate, onServerInit Shutdown order is: onServerShutdownStart, onServerShutdownComplete, [exit]

Method Summary

void	onServerCreate (IServer server) Triggered when server object is first created.
void	onServerInit (IServer server) Triggered when server initialization is complete and all VHosts have been started
void	onServerShutdownComplete (IServer server) Triggered at the end of server shutdown
void	onServerShutdownStart (IServer server) Triggered at the beginning of server shutdown

Methods

onServerCreate

public void **onServerCreate**([IServer](#) server)

Triggered when server object is first created.

Parameters:

server - server object

onServerInit

public void **onServerInit**([IServer](#) server)

Triggered when server initialization is complete and all VHosts have been started

Parameters:

server - server object

onServerShutdownStart

public void **onServerShutdownStart**([IServer](#) server)

Triggered at the beginning of server shutdown

(continued from last page)

Parameters:

server - server object

onServerShutdownComplete

```
public void onServerShutdownComplete(IServer server)
```

Triggered at the end of server shutdown

Parameters:

server - server object

com.wowza.wms.server Interface IServerNotify2

All Superinterfaces:

[IServerNotify](#)

All Subinterfaces:

[IServerNotify3](#)

All Known Implementing Classes:

[ServerListenerStreamDemoPublisher](#)

```
public interface IServerNotify2
extends IServerNotify
```

IServerNotify2: listener interface. Configured by adding class entries definitions to Server.xml.Startup order is: [constructor]; onServerConfigLoaded, onServerCreate, onServerInit Shutdown order is: onServerShutdownStart, onServerShutdownComplete, [exit]

Method Summary

void	onServerConfigLoaded (IServer server) Triggered when server configuration is loaded
------	---

Methods inherited from interface [com.wowza.wms.server.IServerNotify](#)

[onServerCreate](#), [onServerInit](#), [onServerShutdownComplete](#), [onServerShutdownStart](#)

Methods

onServerConfigLoaded

```
public void onServerConfigLoaded(IServer server)
```

Triggered when server configuration is loaded

Parameters:

server - server object

com.wowza.wms.server Interface IServerNotify3

All Superinterfaces:

[IServerNotify2](#), [IServerNotify](#)

public interface **IServerNotify3**

extends [IServerNotify2](#)

Method Summary

void	onServerAfterVHostStartup (IServer server) Triggered just after virtual hosts are started.
void	onServerBeforeVHostStartup (IServer server) Triggered just before virtual hosts are started.

Methods inherited from interface [com.wowza.wms.server.IServerNotify2](#)

[onServerConfigLoaded](#)

Methods inherited from interface [com.wowza.wms.server.IServerNotify](#)

[onServerCreate](#), [onServerInit](#), [onServerShutdownComplete](#), [onServerShutdownStart](#)

Methods

onServerBeforeVHostStartup

public void **onServerBeforeVHostStartup**([IServer](#) server)

Triggered just before virtual hosts are started.

Parameters:

server - server object

onServerAfterVHostStartup

public void **onServerAfterVHostStartup**([IServer](#) server)

Triggered just after virtual hosts are started.

Parameters:

server - server object

Package

com.wowza.wms.sharedobject

com.wowza.wms.sharedobject Interface ISharedObject

All Known Implementing Classes:

[SharedObject](#)

public interface **ISharedObject**
extends

ISharedObject: public interface to SharedObject class.

Field Summary	
public static final	FILEEXTENSION Value: rso
public static final	SHARED_OBJECT_CMD_CONNECT shared object command: connect Value: 1
public static final	SHARED_OBJECT_CMD_CONNECTSUCCESS shared object command: clear Value: 11
public static final	SHARED_OBJECT_CMD_DELETE shared object command: delete Value: 10
public static final	SHARED_OBJECT_CMD_DISCONNECT shared object command: disconnect Value: 2
public static final	SHARED_OBJECT_CMD_ERROR shared object command: error Value: 7
public static final	SHARED_OBJECT_CMD_SEND shared object command: send Value: 6
public static final	SHARED_OBJECT_CMD_SETVALUE shared object command: setvalue Value: 3
public static final	SHARED_OBJECT_STATUS_CHANGE shared object status: change Value: 4
public static final	SHARED_OBJECT_STATUS_CLEAR shared object status: clear Value: 8

public static final	SHARED_OBJECT_STATUS_DELETE shared object status: delete Value: 9
public static final	SHARED_OBJECT_STATUS_SUCCESS shared object status: success Value: 5

Method Summary

void	acquire() Increment the reference count to this shared object.
void	addClient(IClient client) Add a client to this shared object.
void	addSlotListener(ISharedObjectSlotNotify slotListener) Add a slot listener.
void	clear() Clear all properties from a shared object
void	close() Force close this shared object (not implemented)
boolean	containsProperty(String slotName) Returns true is slot/property name exists
boolean	containsSlot(String slotName) Returns true is slot/property name exists
void	deleteSlot(IClient client, String slotName) Remove a slot (property)
void	deleteSlot(String slotName) Remove slot (property)
void	disconnect(IClient client) Disconnect client from shared object.
void	flush() Flush (write to disk) shared object
java.util.List	getClients() Get a list of client that are connected to this shared object.
String	getName() Get shared object name
ISharedObjects	getParent() Get the shared object container to which this shared object belongs.
AMFData	getProperty(String slotName) Get slot (property) value.
int	getRefCount() Get the current reference (clients) connected to this shared object.

ISharedObjectSlot	getSlot (String name) Get ISharedObjectSlot interface to a slot (property) by name
java.util.List	getSlotNames () Get a list of slot (property) names
java.util.List	getSlots () Get a list of active slots
String	getStorageDir () Get path used to store shared object.
int	getVersion () Get the interval version number.
boolean	isClient (IClient client) Is this client connected to shared object
boolean	isPersistent () Is this shared object being persisted.
void	lock () Lock a shared object for write access
int	purge (int version) Purge all deleted properties older than the version number
void	putSlot (String name, ISharedObjectSlot slot) Add a new slot (property) to a shared object.
void	release () Decrement the reference count to this shared object.
void	removeClient (IClient client) Remove a client from this shared object.
void	removeSlotListener (ISharedObjectSlotNotify slotListener) Remove slot listener
void	send (String handlerName) Call client side handler attached to shared object (no parameters).
void	send (String handlerName, Object[] params) Call client side handler attached to shared object.
void	setName (String name) Set shared object name
void	setPersistent (boolean isPersistent) Set is shared object persisted.
void	setProperty (String slotName, AMFData data) Set slot (property) value as AMFData object.
void	setProperty (String slotName, boolean value) Set slot (property) value as a boolean value (will be wrapped in an AMFDataItem object)
void	setProperty (String slotName, java.util.Date value) Set slot (property) value as a date value (will be wrapped in an AMFDataItem object)

void	setProperty (String slotName, double value) Set slot (property) value as a double value (will be wrapped in an AMFDataItem object)
void	setProperty (String slotName, int value) Set slot (property) value as a int value (will be wrapped in an AMFDataItem object)
void	setProperty (String slotName, long value) Set slot (property) value as a long value (will be wrapped in an AMFDataItem object)
void	setProperty (String slotName, String value) Set slot (property) value as a string value (will be wrapped in an AMFDataItem object)
void	setStorageDir (String storageDir) Set path used to store shared object.
void	setVersion (int version) Set the internal version number.
int	size () Get the number of active slot (properties).
void	unlock () Unlock a shared object for write access
void	writeDeleteError (IClient client, String soName, boolean isPersistent, String slotName, String errorMsg) Write an delete error message back to the client
void	writeSetValueError (IClient client, String soName, boolean isPersistent, String slotName, String errorMsg) Write an set value error message back to the client

Fields

FILEEXTENSION

```
public static final java.lang.String FILEEXTENSION
```

Constant value: **rso**

SHARED_OBJECT_CMD_CONNECT

```
public static final byte SHARED_OBJECT_CMD_CONNECT
```

shared object command: connect

Constant value: **1**

SHARED_OBJECT_CMD_DISCONNECT

```
public static final byte SHARED_OBJECT_CMD_DISCONNECT
```

shared object command: disconnect

Constant value: **2**

(continued from last page)

SHARED_OBJECT_CMD_SETVALUE

```
public static final byte SHARED_OBJECT_CMD_SETVALUE
```

```
    shared object command: setvalue  
    Constant value: 3
```

SHARED_OBJECT_CMD_SEND

```
public static final byte SHARED_OBJECT_CMD_SEND
```

```
    shared object command: send  
    Constant value: 6
```

SHARED_OBJECT_CMD_ERROR

```
public static final byte SHARED_OBJECT_CMD_ERROR
```

```
    shared object command: error  
    Constant value: 7
```

SHARED_OBJECT_CMD_DELETE

```
public static final byte SHARED_OBJECT_CMD_DELETE
```

```
    shared object command: delete  
    Constant value: 10
```

SHARED_OBJECT_CMD_CONNECTSUCCESS

```
public static final byte SHARED_OBJECT_CMD_CONNECTSUCCESS
```

```
    shared object command: clear  
    Constant value: 11
```

SHARED_OBJECT_STATUS_CHANGE

```
public static final byte SHARED_OBJECT_STATUS_CHANGE
```

```
    shared object status: change  
    Constant value: 4
```

SHARED_OBJECT_STATUS_SUCCESS

```
public static final byte SHARED_OBJECT_STATUS_SUCCESS
```

```
    shared object status: success  
    Constant value: 5
```

SHARED_OBJECT_STATUS_CLEAR

```
public static final byte SHARED_OBJECT_STATUS_CLEAR
```

```
    shared object status: clear  
    Constant value: 8
```

SHARED_OBJECT_STATUS_DELETE

```
public static final byte SHARED_OBJECT_STATUS_DELETE
```

(continued from last page)

shared object status: delete
Constant value: **9**

Methods

getSlotNames

```
public java.util.List getSlotNames()
```

Get a list of slot (property) names

Returns:

list of slot (property) names

getSlot

```
public ISharedObjectSlot getSlot(String name)
```

Get ISharedObjectSlot interface to a slot (property) by name

Parameters:

name - slot (property) name

Returns:

ISharedObjectSlot interface

putSlot

```
public void putSlot(String name,  
    ISharedObjectSlot slot)
```

Add a new slot (property) to a shared object.

Parameters:

name - slot (property) name
slot - new slot

getClients

```
public java.util.List getClients()
```

Get a list of client that are connected to this shared object.

Returns:

list of client that are connected to this shared object

isClient

```
public boolean isClient(IClient client)
```

Is this client connected to shared object

Parameters:

client - client

Returns:

true if client is conencted to shared object

addClient

```
public void addClient(IClient client)
```

Add a client to this shared object.

Parameters:

client - client

removeClient

```
public void removeClient(IClient client)
```

Remove a client from this shared object.

Parameters:

client - client

size

```
public int size()
```

Get the number of active slot (properties). Deleted slots are not counted.

Returns:

number of active slot (properties). Deleted slots are not counted

acquire

```
public void acquire()
```

Increment the reference count to this shared object.

release

```
public void release()
```

Decrement the reference count to this shared object.

close

```
public void close()
```

Force close this shared object (not implemented)

getRefCount

```
public int getRefCount()
```

Get the current reference (clients) connected to this shared object. Includes unbalanced count of calls to acquire.

Returns:

the current reference (clients) connected to this shared object

isPersistent

```
public boolean isPersistent()
```

(continued from last page)

Is this shared object being persisted.

Returns:

true if shared object is being persisted

setPersistent

```
public void setPersistent(boolean isPersistent)
```

Set is shared object persisted.

Parameters:

isPersistent - true if shared object is being persisted

getVersion

```
public int getVersion()
```

Get the internal version number.

Returns:

internal version number

setVersion

```
public void setVersion(int version)
```

Set the internal version number.

Parameters:

version - internal version number

flush

```
public void flush()
```

Flush (write to disk) shared object

deleteSlot

```
public void deleteSlot(IClient client,  
String slotName)
```

Remove a slot (property)

Parameters:

client - client removing slot or null if server side code
slotName - slot (property) name

deleteSlot

```
public void deleteSlot(String slotName)
```

Remove slot (property)

Parameters:

slotName - slot (property) name

getProperty

```
public AMFData getProperty(String slotName)
```

Get slot (property) value.

Parameters:

slotName - slot (property) name

Returns:

slot (property) value as AMFData object

setProperty

```
public void setProperty(String slotName,  
                        String value)
```

Set slot (property) value as a string value (will be wrapped in an AMFDataItem object)

Parameters:

slotName - slot (property) name

value - string value

setProperty

```
public void setProperty(String slotName,  
                        double value)
```

Set slot (property) value as a double value (will be wrapped in an AMFDataItem object)

Parameters:

slotName - slot (property) name

value - double value

setProperty

```
public void setProperty(String slotName,  
                        int value)
```

Set slot (property) value as a int value (will be wrapped in an AMFDataItem object)

Parameters:

slotName - slot (property) name

value - int value

setProperty

```
public void setProperty(String slotName,  
                        long value)
```

Set slot (property) value as a long value (will be wrapped in an AMFDataItem object)

Parameters:

slotName - slot (property) name

value - long value

(continued from last page)

setProperty

```
public void setProperty(String slotName,  
    java.util.Date value)
```

Set slot (property) value as a date value (will be wrapped in an AMFDataItem object)

Parameters:

slotName - slot (property) name
value - date value

setProperty

```
public void setProperty(String slotName,  
    boolean value)
```

Set slot (property) value as a boolean value (will be wrapped in an AMFDataItem object)

Parameters:

slotName - slot (property) name
value - boolean value

setProperty

```
public void setProperty(String slotName,  
    AMFData data)
```

Set slot (property) value as AMFData object.

Parameters:

slotName - slot (property) name
data - slot value as AMFData object. Example: new AMFDataItem((double)1.234) or new AMFDataItem()

disconnect

```
public void disconnect(IClient client)
```

Disconnect client from shared object.

Parameters:

client - client to disconnect

getName

```
public String getName()
```

Get shared object name

Returns:

shared object name

setName

```
public void setName(String name)
```

Set shared object name

Parameters:

name - shared object name

send

```
public void send(String handlerName,  
                Object[] params)
```

Call client side handler attached to shared object.

Parameters:

handlerName - handler name
params - variable argument list of parameters

send

```
public void send(String handlerName)
```

Call client side handler attached to shared object (no parameters).

Parameters:

handlerName - handler name

addSlotListener

```
public void addSlotListener(ISharedObjectSlotNotify slotListener)
```

Add a slot listener. Will receive the following events: onSlotSetValue and onSlotDelete

Parameters:

slotListener - slot listener

removeSlotListener

```
public void removeSlotListener(ISharedObjectSlotNotify slotListener)
```

Remove slot listener

Parameters:

slotListener - slot listener

getStorageDir

```
public String getStorageDir()
```

Get path used to store shared object.

Returns:

path used to store shared object

setStorageDir

```
public void setStorageDir(String storageDir)
```

Set path used to store shared object.

Parameters:

storageDir - path used to store shared object

(continued from last page)

writeSetValueError

```
public void writeSetValueError(IClient client,  
    String soName,  
    boolean isPersistent,  
    String slotName,  
    String errorMsg)
```

Write an set value error message back to the client

Parameters:

client - client removing slot or null if server side code
soName - sharedObject name
isPersistent - is persistent
slotName - slot name
errorMsg - error message

writeDeleteError

```
public void writeDeleteError(IClient client,  
    String soName,  
    boolean isPersistent,  
    String slotName,  
    String errorMsg)
```

Write an delete error message back to the client

Parameters:

client - client removing slot or null if server side code
soName - sharedObject name
isPersistent - is persistent
slotName - slot name
errorMsg - error message

clear

```
public void clear()
```

Clear all properties from a shared object

purge

```
public int purge(int version)
```

Purge all deleted properties older than the version number

Returns:

number of slots purged

getSlots

```
public java.util.List getSlots()
```

Get a list of active slots

Returns:

list of active slots

(continued from last page)

containsProperty

```
public boolean containsProperty(String slotName)
```

Returns true is slot/property name exists

Parameters:

slotName - slot/property name

Returns:

true is slot/property name exists

containsSlot

```
public boolean containsSlot(String slotName)
```

Returns true is slot/property name exists

Parameters:

slotName - slot/property name

Returns:

true is slot/property name exists

lock

```
public void lock()
```

Lock a shared object for write access

unlock

```
public void unlock()
```

Unlock a shared object for write access

getParent

```
public ISharedObjects getParent()
```

Get the shared object container to which this shared object belongs.

Returns:

shared object container

com.wowza.wms.sharedobject Interface ISharedObjectNotify

public interface **ISharedObjectNotify**
extends

ISharedObjectNotify: listener interface used by IApplicationInstance addSharedObjectListener

Method Summary

void	onSharedObjectConnect (ISharedObject sharedObject, IClient client) Triggered when client connects to sharedObject
void	onSharedObjectCreate (ISharedObject sharedObject) Triggered when sharedObject created
void	onSharedObjectDestroy (ISharedObject sharedObject) Triggered when sharedObject destroyed
void	onSharedObjectDisconnect (ISharedObject sharedObject, IClient client) Triggered when client disconnects from sharedObject

Methods

onSharedObjectCreate

public void **onSharedObjectCreate**([ISharedObject](#) sharedObject)

Triggered when sharedObject created

Parameters:

sharedObject - sharedObject

onSharedObjectDestroy

public void **onSharedObjectDestroy**([ISharedObject](#) sharedObject)

Triggered when sharedObject destroyed

Parameters:

sharedObject - sharedObject

onSharedObjectConnect

public void **onSharedObjectConnect**([ISharedObject](#) sharedObject,
[IClient](#) client)

Triggered when client connects to sharedObject

Parameters:

sharedObject - sharedObject

client - client

onSharedObjectDisconnect

```
public void onSharedObjectDisconnect(ISharedObject sharedObject,  
    IClient client)
```

Triggered when client disconnects from sharedObject

Parameters:

sharedObject - sharedObject

client - client

com.wowza.wms.sharedobject Interface ISharedObjects

public interface **ISharedObjects**
extends

ISharedObjects: public interface to SharedObjects. Represent the list of shared objects managed by IApplicationInstance.

Method Summary	
void	addSharedObjectListener (ISharedObjectNotify sharedObjectListener) Add a shared object listener.
void	disconnect (IClient client) Disconnect client from all shared objects in list.
boolean	exists (ISharedObject sharedObject) Is sharedObject in this list (by shared object reference).
boolean	exists (String objectName) Is sharedObject in this list (by name).
void	flush () Flush all persistent shared objects to disk.
ISharedObject	get (String name) Get shared object by name.
java.util.List	getObjectNames () Get a list of shared object names.
ISharedObject	getOrCreate (String name) Get shared object by name if it does not exist create a new shared object with the given name.
String	getStorageDir () Get the storage directory for all shared objects in list.
boolean	isPersistent () Are shared objects in list persistent.
void	load () Load persistent shared objects from file system.
void	put (String objectName, ISharedObject sharedObject) Add or replace a shared object.
void	remove (String objectName) Remove a shared object.
void	removeClient (IClient client) Remove a client from any shared object that it is connected to in this list.
void	removeSharedObjectListener (ISharedObjectNotify sharedObjectListener) Remove a shared object listener.

void	setPersistent (boolean isPersistent) Set is shared object in list persistent
void	setStorageDir (String storageDir) Set the storage directory for all shared objects in list.
int	size () Get number of shared objects.

Methods

size

```
public int size()
```

Get number of shared objects.

Returns:

number of shared objects

get

```
public ISharedObject get(String name)
```

Get shared object by name. If the shared object does not exist null will be returned. (see ISharedObjects.getOrCreate)

Parameters:

name - shared object name

Returns:

shared object

getOrCreate

```
public ISharedObject getOrCreate(String name)
```

Get shared object by name if it does not exist create a new shared object with the given name.

Parameters:

name - shared object name

Returns:

shared object

getObjectNames

```
public java.util.List getObjectNames()
```

Get a list of shared object names.

Returns:

list of shared object names

(continued from last page)

put

```
public void put(String objectName,  
               ISharedObject sharedObject)
```

Add or replace a shared object.

Parameters:

objectName - shared object name
sharedObject - shared object

remove

```
public void remove(String objectName)
```

Remove a shared object.

Parameters:

objectName - shared object name

exists

```
public boolean exists(String objectName)
```

Is sharedObject in this list (by name).

Parameters:

objectName - shared object name

Returns:

true if shared object in list

exists

```
public boolean exists(ISharedObject sharedObject)
```

Is sharedObject in this list (by shared object reference).

Parameters:

sharedObject - shared object

Returns:

true if shared object in list

isPersistent

```
public boolean isPersistent()
```

Are shared objects in list persistent.

Returns:

true is shared objects in list are persistent

setPersistent

```
public void setPersistent(boolean isPersistent)
```

Set is shared object in list persistent

(continued from last page)

Parameters:

isPersistent - true is shared objects in list are persistent

removeClient

```
public void removeClient(IClient client)
```

Remove a client from any shared object that it is connected to in this list.

Parameters:

client - client

flush

```
public void flush()
```

Flush all persistent shared objects to disk.

disconnect

```
public void disconnect(IClient client)
```

Disconnect client from all shared objects in list.

Parameters:

client - client

addSharedObjectListener

```
public void addSharedObjectListener(ISharedObjectNotify sharedObjectListener)
```

Add a shared object listener. The listener will receive the following events: onSharedObjectCreate, onSharedObjectDestroy, onSharedObjectConnect, onSharedObjectDisconnect.

Parameters:

sharedObjectListener

removeSharedObjectListener

```
public void removeSharedObjectListener(ISharedObjectNotify sharedObjectListener)
```

Remove a shared object listener.

Parameters:

sharedObjectListener

getStorageDir

```
public String getStorageDir()
```

Get the storage directory for all shared objects in list.

Returns:

storage dir

setStorageDir

```
public void setStorageDir(String storageDir)
```

(continued from last page)

Set the storage directory for all shared objects in list.

Parameters:

storageDir

load

```
public void load()
```

Load persistent shared objects from file system.

com.wowza.wms.sharedobject Interface ISharedObjectSlot

public interface **ISharedObjectSlot**
extends

ISharedObjectSlot: public interface to SharedObjectSlot class.

Method Summary	
AMFData	getData() Get slot data as AMFData object.
int	getLastClientId() Get client id of client that performed last operation on slot.
int	getLastOperation() Get last slot (property) operation.
String	getName() Get slot (property) name.
int	getSlotVersion() Get slot version
int	getSoVersion() Get parent shared object version
void	incSlotVersion() Increment slot version by 1.
void	init(String name, AMFData data, int slotVersion) Initialize shared object slot
void	setData(AMFData data) Set slot data as AMFData object.
void	setData(byte[] data) Set slot data as byte[].
void	setData(byte[] data, AMFDataContextDeserialize context) Set slot data as byte[].
void	setLastClientId(int lastClientId) Set client id of client that performed last operation on slot.
void	setLastOperation(int lastOperation) Set last slot (property) operation.
void	setName(String name) Set slot (property) name
void	setSlotVersion(int slotVersion) Set slot version

void	setSoVersion (int soVersion) Set parent shared object version
------	--

Methods

init

```
public void init(String name,  
                 AMFData data,  
                 int slotVersion)
```

Initialize shared object slot

Parameters:

name - slot (property) name
data - data
slotVersion - version

getData

```
public AMFData getData()
```

Get slot data as AMFData object.

Returns:

slot data as AMFData object

setData

```
public void setData(byte[] data,  
                    AMFDataContextDeserialize context)
```

Set slot data as byte[]. Data will be deserialized as AMFData object.

Parameters:

data - data as byte[]
context - deserialization context

setData

```
public void setData(byte[] data)
```

Set slot data as byte[]. Data will be deserialized as AMFData object.

Parameters:

data - data as byte[]

setData

```
public void setData(AMFData data)
```

Set slot data as AMFData object.

Parameters:

data - data as AMFData object

getName

```
public String getName()
```

Get slot (property) name.

Returns:

slot (property) name

setName

```
public void setName(String name)
```

Set slot (property) name

Parameters:

name - slot (property) name

getSlotVersion

```
public int getSlotVersion()
```

Get slot version

Returns:

slot version

setSlotVersion

```
public void setSlotVersion(int slotVersion)
```

Set slot version

Parameters:

slotVersion - slot version

incSlotVersion

```
public void incSlotVersion()
```

Increment slot version by 1.

getSoVersion

```
public int getSoVersion()
```

Get parent shared object version

Returns:

parent shared object version

setSoVersion

```
public void setSoVersion(int soVersion)
```

Set parent shared object version

(continued from last page)

Parameters:

soVersion - parent shared object version

getLastOperation

```
public int getLastOperation()
```

Get last slot (property) operation. See ISharedObject.SHAREDOBJECT_CMD_*.

Returns:

last slot (property) operation (ISharedObject.SHAREDOBJECT_CMD_*)

setLastOperation

```
public void setLastOperation(int lastOperation)
```

Set last slot (property) operation. See ISharedObject.SHAREDOBJECT_CMD_*.

Parameters:

lastOperation - last slot (property) operation (ISharedObject.SHAREDOBJECT_CMD_*)

getLastClientId

```
public int getLastClientId()
```

Get client id of client that performed last operation on slot.

Returns:

client id of client that performed last operation on slot

setLastClientId

```
public void setLastClientId(int lastClientId)
```

Set client id of client that performed last operation on slot.

Parameters:

lastClientId - client id of client that performed last operation on slot

com.wowza.wms.sharedobject Interface ISharedObjectSlotNotify

public interface **ISharedObjectSlotNotify**
extends

ISharedObjectSlotNotify: listener interface used by ISharedObject addSlotListener

Method Summary

void	onSlotDelete (ISharedObject sharedObject, ISharedObjectSlot slot) Triggered when sharedObject slot value deleted
void	onSlotSetValue (ISharedObject sharedObject, ISharedObjectSlot slot) Triggered when sharedObject slot value set

Methods

onSlotSetValue

public void **onSlotSetValue**([ISharedObject](#) sharedObject,
[ISharedObjectSlot](#) slot)

Triggered when sharedObject slot value set

Parameters:

sharedObject
slot

onSlotDelete

public void **onSlotDelete**([ISharedObject](#) sharedObject,
[ISharedObjectSlot](#) slot)

Triggered when sharedObject slot value deleted

Parameters:

sharedObject
slot

com.wowza.wms.sharedobject Class SharedObject

java.lang.Object

└─com.wowza.wms.sharedobject.SharedObject

All Implemented Interfaces:

[ISharedObject](#)

public class **SharedObject**
extends Object
implements [ISharedObject](#)

Field Summary

public static final	READACCESS Value: 0
public static final	WRITEACCESS Value: 1

Fields inherited from interface [com.wowza.wms.sharedobject.ISharedObject](#)

[FILEEXTENSION](#), [SHARED_OBJECT_CMD_CONNECT](#), [SHARED_OBJECT_CMD_CONNECTSUCCESS](#),
[SHARED_OBJECT_CMD_DELETE](#), [SHARED_OBJECT_CMD_DISCONNECT](#), [SHARED_OBJECT_CMD_ERROR](#),
[SHARED_OBJECT_CMD_SEND](#), [SHARED_OBJECT_CMD_SETVALUE](#), [SHARED_OBJECT_STATUS_CHANGE](#),
[SHARED_OBJECT_STATUS_CLEAR](#), [SHARED_OBJECT_STATUS_DELETE](#), [SHARED_OBJECT_STATUS_SUCCESS](#)

Constructor Summary

public	SharedObject (String name) Create new shared object
public	SharedObject (String name, boolean isPersistent, String storageDir) Create new shared object

Method Summary

void	acquire ()
void	addClient (IClient client)
void	addSlotListener (ISharedObjectSlotNotify slotListener)
void	clear ()
void	close ()

boolean	containsProperty (String slotName)
boolean	containsSlot (String slotName)
void	deleteSlot (IClient client, String slotName)
void	deleteSlot (String slotName)
void	disconnect (IClient client)
void	flush ()
static boolean[]	getAccess (IClient client, String soName)
java.util.List	getClients ()
void	getClientUpdates (IClient client)
String	getName ()
ISharedObjects	getParent ()
AMFData	getProperty (String slotName)
int	getRefCount ()
ISharedObjectSlot	getSlot (String name)
java.util.List	getSlotNames ()
java.util.List	getSlots ()
String	getStorageDir ()
int	getVersion ()
boolean	isClient (IClient client)
boolean	isPersistent ()
void	load ()
void	lock ()
void	notifySlotDelete (ISharedObjectSlot slot)
void	notifySlotSetValue (ISharedObjectSlot slot)

int	purge (int version)
void	putSlot (String name, ISharedObjectSlot slot)
void	release ()
void	removeClient (IClient client)
void	removeSlotListener (ISharedObjectSlotNotify slotListener)
void	send (String handlerName)
void	send (String handlerName, Object[] params)
void	sendInternal (IClient client, String handlerName, byte[] msgBytes)
void	sendInternal (IClient client, String handlerName, byte[] msgBytes, AMFDataContextDeserialize context)
void	sendInternal (String handlerName, AMFData[] params)
void	setName (String name)
void	setParent (ISharedObjects parent)
void	setPersistent (boolean isPersistent)
void	setProperty (String slotName, AMFData data)
void	setProperty (String slotName, boolean value)
void	setProperty (String slotName, java.util.Date value)
void	setProperty (String slotName, double value)
void	setProperty (String slotName, int value)
void	setProperty (String slotName, long value)
void	setProperty (String slotName, String value)
void	setSlotValue (IClient client, String slotName, AMFData amfData)
void	setSlotValue (IClient client, String slotName, byte[] byteData)
void	setSlotValue (IClient client, String slotName, byte[] byteData, AMFData amfData)

void	setSlotValue(IClient client, String slotName, byte[] byteData, AMFData amfData, AMFDataContextDeserialize context)
void	setSlotValue(IClient client, String slotName, byte[] byteData, AMFDataContextDeserialize context)
void	setStorageDir(String storageDir)
void	setVersion(int version)
int	size()
void	unlock()
void	writeDeleteError(IClient client, String soName, boolean isPersistent, String slotName, String errorMsg)
static void	writeError(IClient client, String soName, boolean isPersistent, String errorMsg, boolean isConnect)
void	writeSetValueError(IClient client, String soName, boolean isPersistent, String slotName, String errorMsg)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.sharedobject.ISharedObject](#)

[acquire](#), [addClient](#), [addSlotListener](#), [clear](#), [close](#), [containsProperty](#), [containsSlot](#), [deleteSlot](#), [deleteSlot](#), [disconnect](#), [flush](#), [getClients](#), [getName](#), [getParent](#), [getProperty](#), [getRefCount](#), [getSlot](#), [getSlotNames](#), [getSlots](#), [getStorageDir](#), [getVersion](#), [isClient](#), [isPersistent](#), [lock](#), [purge](#), [putSlot](#), [release](#), [removeClient](#), [removeSlotListener](#), [send](#), [send](#), [setName](#), [setPersistent](#), [setProperty](#), [setProperty](#), [setProperty](#), [setProperty](#), [setProperty](#), [setProperty](#), [setStorageDir](#), [setVersion](#), [size](#), [unlock](#), [writeDeleteError](#), [writeSetValueError](#)

Fields

READACCESS

```
public static final int READACCESS
```

Constant value: **0**

WRITEACCESS

```
public static final int WRITEACCESS
```

Constant value: **1**

(continued from last page)

Constructors

SharedObject

```
public SharedObject(String name)
```

Create new shared object

Parameters:

name - shared object name

SharedObject

```
public SharedObject(String name,  
                    boolean isPersistent,  
                    String storageDir)
```

Create new shared object

Parameters:

name - shared object name

isPersistent - is persistent

storageDir - storage directory for persistent shared object

Methods

size

```
public int size()
```

purge

```
public int purge(int version)
```

clear

```
public void clear()
```

getSlots

```
public java.util.List getSlots()
```

getSlotNames

```
public java.util.List getSlotNames()
```

(continued from last page)

getSlot

```
public ISharedObjectSlot getSlot(String name)
```

putSlot

```
public void putSlot(String name,  
    ISharedObjectSlot slot)
```

getClients

```
public java.util.List getClients()
```

isClient

```
public boolean isClient(IClient client)
```

addClient

```
public void addClient(IClient client)
```

removeClient

```
public void removeClient(IClient client)
```

acquire

```
public void acquire()
```

release

```
public void release()
```

getRefCount

```
public int getRefCount()
```

isPersistent

```
public boolean isPersistent()
```

(continued from last page)

setPersistent

```
public void setPersistent(boolean isPersistent)
```

getVersion

```
public int getVersion()
```

setVersion

```
public void setVersion(int version)
```

deleteSlot

```
public void deleteSlot(String slotName)
```

containsProperty

```
public boolean containsProperty(String slotName)
```

containsSlot

```
public boolean containsSlot(String slotName)
```

deleteSlot

```
public void deleteSlot(IClient client,  
                        String slotName)
```

getProperty

```
public AMFData getProperty(String slotName)
```

setProperty

```
public void setProperty(String slotName,  
                        boolean value)
```

setProperty

```
public void setProperty(String slotName,  
    java.util.Date value)
```

setProperty

```
public void setProperty(String slotName,  
    double value)
```

setProperty

```
public void setProperty(String slotName,  
    long value)
```

setProperty

```
public void setProperty(String slotName,  
    int value)
```

setProperty

```
public void setProperty(String slotName,  
    String value)
```

setProperty

```
public void setProperty(String slotName,  
    AMFData data)
```

setSlotValue

```
public void setSlotValue(IClient client,  
    String slotName,  
    AMFData amfData)
```

setSlotValue

```
public void setSlotValue(IClient client,  
    String slotName,  
    byte[] byteData)
```

(continued from last page)

setSlotValue

```
public void setSlotValue(IClient client,  
    String slotName,  
    byte[] byteData,  
    AMFDataContextDeserialize context)
```

setSlotValue

```
public void setSlotValue(IClient client,  
    String slotName,  
    byte[] byteData,  
    AMFData amfData)
```

setSlotValue

```
public void setSlotValue(IClient client,  
    String slotName,  
    byte[] byteData,  
    AMFData amfData,  
    AMFDataContextDeserialize context)
```

writeError

```
public static void writeError(IClient client,  
    String soName,  
    boolean isPersistent,  
    String errorMsg,  
    boolean isConnect)
```

writeSetValueError

```
public void writeSetValueError(IClient client,  
    String soName,  
    boolean isPersistent,  
    String slotName,  
    String errorMsg)
```

writeDeleteError

```
public void writeDeleteError(IClient client,  
    String soName,  
    boolean isPersistent,  
    String slotName,  
    String errorMsg)
```

getClientUpdates

```
public void getClientUpdates(IClient client)
```

(continued from last page)

disconnect

```
public void disconnect(IClient client)
```

getName

```
public String getName()
```

setName

```
public void setName(String name)
```

send

```
public void send(String handlerName,  
                 Object[] params)
```

send

```
public void send(String handlerName)
```

sendInternal

```
public void sendInternal(String handlerName,  
                         AMFData\[\] params)
```

sendInternal

```
public void sendInternal(IClient client,  
                        String handlerName,  
                        byte[] msgBytes)
```

sendInternal

```
public void sendInternal(IClient client,  
                        String handlerName,  
                        byte[] msgBytes,  
                        AMFDataContextDeserialize context)
```

(continued from last page)

addSlotListener

```
public void addSlotListener(ISharedObjectSlotNotify slotListener)
```

removeSlotListener

```
public void removeSlotListener(ISharedObjectSlotNotify slotListener)
```

notifySlotSetValue

```
public void notifySlotSetValue(ISharedObjectSlot slot)
```

notifySlotDelete

```
public void notifySlotDelete(ISharedObjectSlot slot)
```

getStorageDir

```
public String getStorageDir()
```

setStorageDir

```
public void setStorageDir(String storageDir)
```

flush

```
public void flush()
```

load

```
public void load()
```

close

```
public void close()
```

lock

```
public void lock()
```

(continued from last page)

unlock

```
public void unlock()
```

setParent

```
public void setParent(ISharedObjects parent)
```

getParent

```
public ISharedObjects getParent()
```

getAccess

```
public static boolean[] getAccess(IClient client,  
    String soName)
```

Package

com.wowza.wms.sourcecontrol

com.wowza.wms.sourcecontrol Interface ISourceControl

All Subinterfaces:

[ISourceControlCamera](#)

public interface **ISourceControl**
extends

Public interface to generic source control device.

Method Summary

SourceControlContext	createContext() Create an empty context structure
ISourceControlSession	createSourceControlSession (String streamName, IApplicationInstance appInstance) Create a SourceControlSession for the device and associate it with the provided stream name and application instance
SourceControlContext	getContext() Get the SourceControlContext for the device.
SourceControlInformation	getSourceFeatures() Get the SourceControlFeatures for the device.
SourceControlInformation	getSourceInformation() Get the SourceControlInformation for the device.
void	setContext (SourceControlContext context) Set the SourceControlContext for the device.

Methods

createContext

public SourceControlContext **createContext**()

Create an empty context structure

setContext

public void **setContext**(SourceControlContext context)

Set the SourceControlContext for the device.

Parameters:

context

(continued from last page)

getContext

```
public SourceControlContext getContext()
```

Get the SourceControlContext for the device.

Returns:

SourceControlContext the source control context for this source control device

getSouceInformation

```
public SourceControlInformation getSouceInformation()
```

Get the SourceControlInformation for the device.

Returns:

SourceControlInformation class containing information and features about the source control device

getSouceFeatures

```
public SourceControlInformation getSouceFeatures()
```

Get the SourceControlFeatures for the device.

Returns:

SourceControlFeatures class containing information and features about the source control device

createSourceControlSession

```
public ISourceControlSession createSourceControlSession(String streamName,  
IApplicationInstance appInstance)
```

Create a SourceControlSession for the device and associate it with the provided stream name and application instance

Parameters:

streamName - the stream name to associate the source control session with

appInstance - the application instance to associate the source control session with

com.wowza.wms.sourcecontrol Interface ISourceControlCamera

All Superinterfaces:

[ISourceControl](#)

public interface **ISourceControlCamera**

extends [ISourceControl](#)

Public interface for a Camera Source Control device.

Method Summary

String	captureImage() Command the camera to capture a single frame image and return it in a base64 encoded string
boolean	panTiltStep(String direction) Command the camera to Pan/Tilt one step in the direction indicated.
boolean	zoomStep(String direction) Command the camera to Zoom one step in the direction indicated.

Methods inherited from interface [com.wowza.wms.sourcecontrol.ISourceControl](#)

[createContext](#), [createSourceControlSession](#), [getContext](#), [getSouceFeatures](#),
[getSouceInformation](#), [setContext](#)

Methods

panTiltStep

public boolean **panTiltStep**(String direction)

Command the camera to Pan/Tilt one step in the direction indicated.

Parameters:

direction - to Pan/Tilt the camera (see SourceControlCameraFeature for list of available directions, see SourceControlInformation.features for the list of supported directions)

Returns:

true if the command was successfully performed

zoomStep

public boolean **zoomStep**(String direction)

Command the camera to Zoom one step in the direction indicated.

Parameters:

direction - to zoom the camera (see SourceControlCameraFeature for list of available directions, see SourceControlInformation.features for the list of supported directions)

(continued from last page)

Returns:

true if the command was successfully performed

captureImage

```
public String captureImage()
```

Command the camera to capture a single frame image and return it in a base64 encoded string

Returns:

base64 encoded image or null if the capture failed.

com.wowza.wms.sourcecontrol Interface ISourceControlSession

public interface **ISourceControlSession**
extends

Public interface for a Source Control device session

Method Summary

IApplicationInstance	getApplicationInstance() Get the IApplicationInstance associated with this session
ISourceControl	getSourceControlImpl() Get the underlying ISourceControl implementation
String	getStreamName() Get the stream name associated with this session
void	setApplicationInstance(IApplicationInstance appInstance) Set the IApplicationInstance associated wit this session
void	setSrouceControlImpl(ISourceControl sourceControlImpl) Set the underlying ISourceControl Implementation
void	setStreamName(String streamName) Set the stream name associated with this session

Methods

getSourceControlImpl

public [ISourceControl](#) **getSourceControlImpl()**

Get the underlying ISourceControl implementation

Returns:

ISourceControl implementation

setSrouceControlImpl

public void **setSrouceControlImpl**([ISourceControl](#) sourceControlImpl)

Set the underlying ISourceControl Implementation

Parameters:

sourceControlImpl - implementation

getApplicationInstance

public [IApplicationInstance](#) **getApplicationInstance()**

(continued from last page)

Get the IApplicationInstance associated with this session

Returns:

IApplicationInstance associated with this session

setApplicationInstance

```
public void setApplicationInstance(IApplicationInstance appInstance)
```

Set the IApplicationInstance associated with this session

Parameters:

appInstance - IApplicationInstance to associate with this session

getStreamName

```
public String getStreamName()
```

Get the stream name associated with this session

Returns:

String containing the stream name

setStreamName

```
public void setStreamName(String streamName)
```

Set the stream name associated with this session

Parameters:

streamName - A String containing the stream name to associate with this session

com.wowza.wms.sourcecontrol Interface ISourceControlSessionNotify

public interface **ISourceControlSessionNotify**
extends

Method Summary

void	onSourceControlSessionCreate (String streamName, ISourceControlSession sourceControlSession) Invoked when source control session is created
void	onSourceControlSessionDestroy (String streamName, ISourceControlSession sourceControlSession) Invoked when source control session is destroyed

Methods

onSourceControlSessionCreate

```
public void onSourceControlSessionCreate(String streamName,  
    ISourceControlSession sourceControlSession)
```

Invoked when source control session is created

Parameters:

streamName - stream name
sourceControlSession - source control session

onSourceControlSessionDestroy

```
public void onSourceControlSessionDestroy(String streamName,  
    ISourceControlSession sourceControlSession)
```

Invoked when source control session is destroyed

Parameters:

streamName - stream name
sourceControlSession - source Control session

Package

com.wowza.wms.sourcecontrol.drivers

com.wowza.wms.sourcecontrol.drivers

Class SourceControlDriverItem

java.lang.Object

↳ com.wowza.wms.sourcecontrol.drivers.SourceControlDriverItem

```
public class SourceControlDriverItem
extends Object
```

SourceControlDriverItem: data class that holds the definition of a Source Control Driver.

Constructor Summary

public	SourceControlDriverItem (String name, String baseClass) Create a SourceControlDriverItem with the provided name and baseClass settings.
--------	--

Method Summary

void	clearProperty (String name) Clear a property by name.
String	getBaseClass () Get the baseClass of the driver.
String	getDescription () Get the description.
String	getName () Get the name used to refer to this driver item.
WMSProperties	getProperties () Get the set of properties defined.
String	getProperty (String name) Get a property by name.
void	setBaseClass (String baseClass) Set the baseClass of the driver.
void	setDescription (String description) Set the description.
void	setName (String name) Set the name use to refer to this driver item.
void	setProperty (String name, String value) Set a property to a string value.
String	toString () Returns a string presentation of the driver item.

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Constructors

SourceControlDriverItem

```
public SourceControlDriverItem(String name,  
                               String baseClass)
```

Create a SourceControlDriverItem with the provided name and baseClass settings.

Parameters:

name - The name used when configuring a source control driver that uses the supplied baseClass
baseClass - the baseClass to use for a SourceControlDriver configured with the supplied name

Methods

getBaseClass

```
public String getBaseClass()
```

Get the baseClass of the driver.

Returns:

the string name of the baseClass

setBaseClass

```
public void setBaseClass(String baseClass)
```

Set the baseClass of the driver.

Parameters:

baseClass - the string name of the baseClass

getName

```
public String getName()
```

Get the name used to refer to this driver item.

Returns:

the name used to refer to this driver item

setName

```
public void setName(String name)
```

Set the name use to refer to this driver item.

Parameters:

name - the name to refer to this driver item by

(continued from last page)

setProperty

```
public void setProperty(String name,  
                        String value)
```

Set a property to a string value.

Parameters:

name - property name
value - property value

clearProperty

```
public void clearProperty(String name)
```

Clear a property by name.

Parameters:

name - of the property to clear

getProperty

```
public String getProperty(String name)
```

Get a property by name.

Parameters:

name - of the property to get

Returns:

the value of the property or null if not set

getProperties

```
public WMSProperties getProperties()
```

Get the set of properties defined.

Returns:

WMSProperties containing the set of defined properties

getDescription

```
public String getDescription()
```

Get the description.

Returns:

the description of the SourceControlDriverItem

setDescription

```
public void setDescription(String description)
```

Set the description.

Parameters:

description

toString

```
public String toString()
```

Returns a string presentation of the driver item.

Returns:

string presentation for the driver item

com.wowza.wms.sourcecontrol.drivers Class SourceControlResponse

java.lang.Object

└─com.wowza.wms.sourcecontrol.drivers.SourceControlResponse

```
public class SourceControlResponse
extends Object
```

Container of the response code as well as data for communications with a Source Control Driver.

Field Summary

public	responseCode the response code return from the request to the device
public	responseData Any data that might be returned from a request to a device

Constructor Summary

public	SourceControlResponse()
--------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

responseCode

```
public int responseCode
```

the response code return from the request to the device

responseData

```
public byte responseData
```

Any data that might be returned from a request to a device

Constructors

SourceControlResponse

```
public SourceControlResponse()
```

Package

com.wowza.wms.sourcecontrol.manager

com.wowza.wms.sourcecontrol.manager Class SourceControlManager

java.lang.Object

└-com.wowza.wms.sourcecontrol.SourceControlLogging

└-com.wowza.wms.sourcecontrol.manager.SourceControlManager

```
public class SourceControlManager
extends SourceControlLogging
```

Class for the management and construction of Source Control devices

Method Summary

ISourceControlSession	createSourceControlSession (String streamName, IApplicationInstance appInstance) Creates a SourceControlSession for the indicated stream and application instance.
java.util.List	getDriverList () Get a list of the Source Control Drivers
static SourceControlManager	getInstance () Static method to reference a single instance of the Source Control Manager.
ISourceControl	getSourceControlInstance (SourceControlContext context) Gets the ISourceControl implementation for the provided SourceControlContext
static String	getXMLConfigPath () For testing purposes only
boolean	isDriverListLoaded () Returns true if the list of Source Control Drivers was successfully loaded.
SourceControlContext	loadContext (JSON jsonData) Get a SourceControlContext for the source control device described by the provided JSON data
static void	reset () Static method to clear the Source Control Manager, you will need to get a new reference via the getInstance() method.

Methods inherited from class com.wowza.wms.sourcecontrol.SourceControlLogging

enableDebug, logDebug, logError, logError, logInfo, logWarn

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods

(continued from last page)

getInstance

```
public static SourceControlManager getInstance()
```

Static method to reference a single instance of the Source Control Manager.

Returns:

a reference to the single instance of the source control manager

reset

```
public static void reset()
```

Static method to clear the Source Control Manager, you will need to get a new reference via the getInstance() method.

getXMLConfigPath

```
public static String getXMLConfigPath()
```

For testing purposes only

isDriverListLoaded

```
public boolean isDriverListLoaded()
```

Returns true if the list of Source Control Drivers was successfully loaded.

Returns:

true if the list of Source Control Drivers was successfully loaded

getDriverList

```
public java.util.List getDriverList()
```

Get a list of the Source Control Drivers

Returns:

a list of the Source Control Drivers

loadContext

```
public SourceControlContext loadContext(JSON jsonData)
```

Get a SourceControlContext for the source control device described by the provided JSON data

Parameters:

jsonData - JSON class that contains the key value pairs that describe a source control device

Returns:

SourceControlContext for the device if the JSON data describes one, otherwise returns NULL

getSourceControlInstance

```
public ISourceControl getSourceControlInstance(SourceControlContext context)
```

Gets the ISourceControl implementation for the provided SourceControlContext

Parameters:

(continued from last page)

context - that contains the information to instantiate an ISourceControl device

Returns:

ISourceControl if the context properly describes a source Control Device, otherwise NULL

createSourceControlSession

```
public ISourceControlSession createSourceControlSession(String streamName,  
    IApplicationInstance appInstance)
```

Creates a SourceControlSession for the indicated stream and application instance. This will create the session, underlying ISourceControl instance as well and associate them in the returned ISourceControlSession.

Parameters:

streamName - the stream name to associate it with

appInstance - the application instance to associate it with

Returns:

ISourceControlSession

Package

com.wowza.wms.stats

com.wowza.wms.stats Interface IStatsManager

public interface **IStatsManager**
extends

Field Summary

public static final	DAYS_OF_DAILY_STORAGE Value: 365
public static final	DAYS_OF_HOURLY_STORAGE Value: 30
public static final	DAYS_OF_MINUTES_STORAGE Value: 3
public static final	HOURS_OF_REALTIME_STORAGE Value: 12
public static final	SECONDS_RESOLUTION Value: 5

Method Summary

IStatsDatabaseManager	getStatsDatabaseManager () Gets the currently used IStatsDBManager interface
boolean	isEnabled () Indicates if the Stats Manager is enabled.
void	rollup (IStatsDatabase database) Rollups up the provided database
void	setDebugLogging (boolean enable) enables/disables debug logging in the StatsManager.
void	setStatsDatabaseManager (IStatsDatabaseManager dbManager) Sets the DBManager to be used by the stats manager for open/closing the various databases
void	startManager (IServer server) Starts the stats manager collecting stats data
void	stopManager () Stops the Stats manager collecting stats data

Fields

(continued from last page)

SECONDS_RESOLUTION

```
public static final int SECONDS_RESOLUTION
```

Constant value: **5**

HOURS_OF_REALTIME_STORAGE

```
public static final int HOURS_OF_REALTIME_STORAGE
```

Constant value: **12**

DAYS_OF_MINUTES_STORAGE

```
public static final int DAYS_OF_MINUTES_STORAGE
```

Constant value: **3**

DAYS_OF_HOURLY_STORAGE

```
public static final int DAYS_OF_HOURLY_STORAGE
```

Constant value: **30**

DAYS_OF_DAILY_STORAGE

```
public static final int DAYS_OF_DAILY_STORAGE
```

Constant value: **365**

Methods

startManager

```
public void startManager(IServer server)
```

Starts the stats manager collecting stats data

Parameters:

server - - IServer to collect data from

stopManager

```
public void stopManager()
```

Stops the Stats manager collecting stats data

isEnabled

```
public boolean isEnabled()
```

Indicates if the Stats Manager is enabled.

setStatsDatabaseManager

```
public void setStatsDatabaseManager(IStatsDatabaseManager dbManager)
```

Sets the DBManager to be used by the stats manager for open/closing the various databases

Parameters:

dbManager - - IStatsDBManager database manager

getStatsDatabaseManager

```
public IStatsDatabaseManager getStatsDatabaseManager()
```

Gets the currently used IStatsDBManager interface

Returns:

IStatsDBManager

rollup

```
public void rollup(IStatsDatabase database)
```

Rollups up the provided database

Parameters:

database - server - IServer to collect data from

setDebugLogging

```
public void setDebugLogging(boolean enable)
```

enables/disables debug logging in the StatsManager.

Parameters:

enable

Package

com.wowza.wms.stats.database

com.wowza.wms.stats.database Interface IStatsDatabase

public interface **IStatsDatabase**
extends

Field Summary

public static final	APPLICATION_FIELD_COUNT Value: 10
public static final	FIELD_ALL Value: -1
public static final	FIELD_ALL_CONN Value: 2
public static final	FIELD_BW_IN Value: 0
public static final	FIELD_BW_OUT Value: 1
public static final	FIELD_CPU Value: 0
public static final	FIELD_DASH_CONN Value: 9
public static final	FIELD_DISK Value: 2
public static final	FIELD_HDS_CONN Value: 4
public static final	FIELD_HEAP_MEMORY Value: 3
public static final	FIELD_HLS_CONN Value: 5
public static final	FIELD_INVALID Value: -2
public static final	FIELD_MEM Value: 1

public static final	FIELD_RTMP_CONN Value: 2
public static final	FIELD_RTSP_CONN Value: 3
public static final	FIELD_SMOOTH_CONN Value: 6
public static final	FIELD_WEBM_CONN Value: 8
public static final	FIELD_WEBRTC_CONN Value: 7
public static final	LEVEL_COUNT Value: 4
public static final	LEVEL_DAYS Value: 3
public static final	LEVEL_HOURS Value: 2
public static final	LEVEL_INVALID Value: -1
public static final	LEVEL_MINUTES Value: 1
public static final	LEVEL_SECONDS Value: 0
public static final	MACHINE_FIELD_COUNT Value: 3
public static final	SERVER_FIELD_COUNT Value: 4
public static final	TABLE_AVE Value: 2
public static final	TABLE_COUNT Value: 3
public static final	TABLE_INVALID Value: -1

public static final	TABLE_MAX Value: 1
public static final	TABLE_MIN Value: 0
public static final	TABLE_SECONDS Value: 0
public static final	VHOST_FIELD_COUNT Value: 3

Method Summary

void	close() Closes the database for reading and writing
boolean	create(String filename, int fieldCount) Creates an empty database for use
boolean	delete(int level, org.joda.time.DateTime datetime) Deletes all entries in the level from the date time provided (inclusive) to the end of the table
void	dumpDebug() dumps debug data for the database.
String	getFilename() Gets the filename of the file on disk to be used
int	getRefCount() Debug only.
boolean	open() Opens the database for reading/writing
java.util.List	read(int level, int table, org.joda.time.DateTime start, org.joda.time.DateTime end) Reads the Stats Entries from the database
void	setDebugLogging(boolean enable) Enables/disables debug logging on within the database methods
void	setFilename(String filename) Sets the filename of the file on disk to be used
boolean	write(int level, StatsEntry[] data) Writes the provided stats entries to the database.

Fields

LEVEL_INVALID

```
public static final int LEVEL_INVALID
```

(continued from last page)

Constant value: **-1**

LEVEL_SECONDSpublic static final int **LEVEL_SECONDS**Constant value: **0**

LEVEL_MINUTESpublic static final int **LEVEL_MINUTES**Constant value: **1**

LEVEL_HOURSpublic static final int **LEVEL_HOURS**Constant value: **2**

LEVEL_DAYSpublic static final int **LEVEL_DAYS**Constant value: **3**

LEVEL_COUNTpublic static final int **LEVEL_COUNT**Constant value: **4**

TABLE_INVALIDpublic static final int **TABLE_INVALID**Constant value: **-1**

TABLE_SECONDSpublic static final int **TABLE_SECONDS**Constant value: **0**

TABLE_MINpublic static final int **TABLE_MIN**Constant value: **0**

(continued from last page)

TABLE_MAX

```
public static final int TABLE_MAX
```

Constant value: **1**

TABLE_AVE

```
public static final int TABLE_AVE
```

Constant value: **2**

TABLE_COUNT

```
public static final int TABLE_COUNT
```

Constant value: **3**

FIELD_BW_IN

```
public static final int FIELD_BW_IN
```

Constant value: **0**

FIELD_BW_OUT

```
public static final int FIELD_BW_OUT
```

Constant value: **1**

FIELD_RTMP_CONN

```
public static final int FIELD_RTMP_CONN
```

Constant value: **2**

FIELD_RTSP_CONN

```
public static final int FIELD_RTSP_CONN
```

Constant value: **3**

FIELD_HDS_CONN

```
public static final int FIELD_HDS_CONN
```

Constant value: **4**

FIELD_HLS_CONN

```
public static final int FIELD_HLS_CONN
```

(continued from last page)

Constant value: 5

FIELD_SMOOTH_CONNpublic static final int **FIELD_SMOOTH_CONN**

Constant value: 6

FIELD_WEBRTC_CONNpublic static final int **FIELD_WEBRTC_CONN**

Constant value: 7

FIELD_WEBM_CONNpublic static final int **FIELD_WEBM_CONN**

Constant value: 8

FIELD_DASH_CONNpublic static final int **FIELD_DASH_CONN**

Constant value: 9

APPLICATION_FIELD_COUNTpublic static final int **APPLICATION_FIELD_COUNT**

Constant value: 10

FIELD_CPUpublic static final int **FIELD_CPU**

Constant value: 0

FIELD_MEMpublic static final int **FIELD_MEM**

Constant value: 1

FIELD_DISKpublic static final int **FIELD_DISK**

Constant value: 2

MACHINE_FIELD_COUNT

```
public static final int MACHINE_FIELD_COUNT
```

Constant value: **3**

FIELD_ALL_CONN

```
public static final int FIELD_ALL_CONN
```

Constant value: **2**

FIELD_HEAP_MEMORY

```
public static final int FIELD_HEAP_MEMORY
```

Constant value: **3**

SERVER_FIELD_COUNT

```
public static final int SERVER_FIELD_COUNT
```

Constant value: **4**

VHOST_FIELD_COUNT

```
public static final int VHOST_FIELD_COUNT
```

Constant value: **3**

FIELD_ALL

```
public static final int FIELD_ALL
```

Constant value: **-1**

FIELD_INVALID

```
public static final int FIELD_INVALID
```

Constant value: **-2**

Methods

setFilename

```
public void setFilename(String filename)
```

Sets the filename of the file on disk to be used

Parameters:

(continued from last page)

filename

getFilename

```
public String getFilename()
```

Gets the filename of the file on disk to be used

Returns:

returns null if setFilename has not been called

create

```
public boolean create(String filename,  
    int fieldCount)
```

Creates an empty database for use

Parameters:

filename - to be used.

fieldCount - number of fields being stored

Returns:

returns false if unable to create the DB otherwise true

open

```
public boolean open()
```

Opens the database for reading/writing

Returns:

returns false if unable to open the database otherwise true

read

```
public java.util.List read(int level,  
    int table,  
    org.joda.time.DateTime start,  
    org.joda.time.DateTime end)
```

Reads the Stats Entries from the database

Parameters:

level - to read from

table - to read from

start - start date and time (inclusive) to start reading from

end - end date and time (inclusive) to stop reading from. Okay if null, reads to end of table then.

Returns:

returns a List of the stats entries (appropriate class) from the database

write

```
public boolean write(int level,  
    StatsEntry[] data)
```

Writes the provided stats entries to the database. The first entry is written to the first table of the level, the second to the second table of the level etc. Must provide an entry for all tables in the level.

(continued from last page)

Parameters:

level
data

Returns:

returns false if unable to write or incorrect number of entries for the level

delete

```
public boolean delete(int level,  
                      org.joda.time.DateTime datetime)
```

Deletes all entries in the level from the date time provided (inclusive) to the end of the table

Parameters:

level - to delete from
datetime

Returns:

returns false if unable to delete the requested entries, true otherwise. Doesn't not return false if there are no entries that meet the criteria

close

```
public void close()
```

Closes the database for reading and writing

getRefCount

```
public int getRefCount()
```

Debug only. Gets the current refcount for the database

Returns:

ref count for the database

setDebugLogging

```
public void setDebugLogging(boolean enable)
```

Enables/disables debug logging on within the database methods

Parameters:

enable

dumpDebug

```
public void dumpDebug()
```

dumps debug data for the database.

com.wowza.wms.stats.database Interface IStatsDatabaseManager

public interface **IStatsDatabaseManager**
extends

Method Summary

void	<u>applicationDeleteDatabase</u> (String vhost, String appName) Deletes the stats database used to store the specified application stats data
<u>IStatsDatabase</u>	<u>applicationGetDatabase</u> (String vhost, String appName) Gets the IStatsDB database reference for use in reading and writing to the specified application stats data
void	<u>checkStorage</u> () Checks the permissions on the storage root provided.
boolean	<u>isStorageAvailable</u> () Indicates if the DB manager can read/write to the supplied storage root.
void	<u>machineDeleteDatabase</u> () Deletes the stats database used to store the machine stats data
<u>IStatsDatabase</u>	<u>machineGetDatabase</u> () Gets the IStatsDB database reference for use in reading and writing to the machine stats data
void	<u>serverDeleteDatabase</u> () Deletes the stats database used to store the server stats data
<u>IStatsDatabase</u>	<u>serverGetDatabase</u> () Gets the IStatsDB database reference for use in reading and writing to the server stats data
void	<u>setDebugLogging</u> (boolean enable) sets debug logging within the DB manager as well as any Stats Databases opened/created
void	<u>setStorageRoot</u> (String storageRoot) Sets the storage root for the stats database files
void	<u>vhostDeleteDatabase</u> (String vhost) Deletes the stats database used to store the specified vhost stats data
<u>IStatsDatabase</u>	<u>vhostGetDatabase</u> (String vhost) Gets the IStatsDB database reference for use in reading and writing to the specified vhost stats data

Methods

setStorageRoot

public void **setStorageRoot**(String storageRoot)

Sets the storage root for the stats database files

(continued from last page)

Parameters:

storageRoot - absolute or relative paths accepted

checkStorage

```
public void checkStorage()
```

Checks the permissions on the storage root provided. Call only if you suspect permissions has changed.

isStorageAvailable

```
public boolean isStorageAvailable()
```

Indicates if the DB manager can read/write to the supplied storage root.

Returns:

returns false if unable to access/create the provided storage root otherwise true.

serverGetDatabase

```
public IStatsDatabase serverGetDatabase()
```

Gets the IStatsDB database reference for use in reading and writing to the server stats data

Returns:

returns null if unable to find/create the server stats database

machineGetDatabase

```
public IStatsDatabase machineGetDatabase()
```

Gets the IStatsDB database reference for use in reading and writing to the machine stats data

Returns:

returns null if unable to find/create the machine stats database

vhostGetDatabase

```
public IStatsDatabase vhostGetDatabase(String vhost)
```

Gets the IStatsDB database reference for use in reading and writing to the specified vhost stats data

Returns:

returns null if unable to find/create the specified vhost stats database

applicationGetDatabase

```
public IStatsDatabase applicationGetDatabase(String vhost,  
String appName)
```

Gets the IStatsDB database reference for use in reading and writing to the specified application stats data

Returns:

returns null if unable to find/create the specified application stats database

(continued from last page)

serverDeleteDatabase

```
public void serverDeleteDatabase()
```

Deletes the stats database used to store the server stats data

machineDeleteDatabase

```
public void machineDeleteDatabase()
```

Deletes the stats database used to store the machine stats data

vhostDeleteDatabase

```
public void vhostDeleteDatabase(String vhost)
```

Deletes the stats database used to store the specified vhost stats data

applicationDeleteDatabase

```
public void applicationDeleteDatabase(String vhost,  
String appName)
```

Deletes the stats database used to store the specified application stats data

setDebugLogging

```
public void setDebugLogging(boolean enable)
```

sets debug logging within the DB manager as well as any Stats Databases opened/created

Parameters:

enable

Package

com.wowza.wms.stats.database.file

com.wowza.wms.stats.database.file Interface IStatsFileDatabase

public interface **IStatsFileDatabase**
extends

Field Summary	
public static final	ATOMID_HEADER Value: head
public static final	ATOMID_LEVEL Value: levl
public static final	ATOMID_LEVEL_DATATABLE Value: ldat
public static final	ATOMID_LEVEL_HEADER Value: lhdr
public static final	ATOMID_LEVEL_TIME Value: ltme
public static final	ATOMID_LEVEL_TIMEINDEX Value: ltmi
public static final	ATOMSIZE Value: 8
public static final	BYTESPERTIMECODE Value: 4
public static final	DEFAULT_BYTESPERFIELD Value: 3
public static final	DEFAULT_FIELDSPERROW Value: 12
public static final	DEFAULT_TABLECOUNT Value: 1
public static final	DEFAULT_TIMEINDEX_FACTOR Value: 10
public static final	EPOCH_SECS Value: 1341360000

public static final	FILE_SIGNATURE Value: WSDB
public static final	FILE_VERSION Value: 0

Method Summary

void	close() Close open database (will leak descriptors if not closed)
long	getEpoch() Get the defined time epoch
int	getFlags() Get the flags
IStatsFileDatabaseLevel	getLevel(int levelIndex) Get level
StatsFileDatabaseStorageContext	getStorageContext() Get the storage context for open database.
int	getVersion() Get version
boolean	isValidSecondsTime(long timecode) Returns true if valid timecode value (in seconds).
void	putLevel(int levelIndex, StatsFileDatabaseLevel level) Put level
boolean	writeEmptyDatabase(String path) Write empty database

Fields

ATOMSIZE

```
public static final int ATOMSIZE
```

Constant value: **8**

FILE_SIGNATURE

```
public static final java.lang.String FILE_SIGNATURE
```

Constant value: **WSDB**

FILE_VERSION

```
public static final int FILE_VERSION
```

(continued from last page)

Constant value: **0**

ATOMID_HEADER

```
public static final java.lang.String ATOMID_HEADER
```

Constant value: **head**

ATOMID_LEVEL

```
public static final java.lang.String ATOMID_LEVEL
```

Constant value: **levl**

ATOMID_LEVEL_HEADER

```
public static final java.lang.String ATOMID_LEVEL_HEADER
```

Constant value: **lhdr**

ATOMID_LEVEL_TIME

```
public static final java.lang.String ATOMID_LEVEL_TIME
```

Constant value: **ltme**

ATOMID_LEVEL_TIMEINDEX

```
public static final java.lang.String ATOMID_LEVEL_TIMEINDEX
```

Constant value: **ltmi**

ATOMID_LEVEL_DATATABLE

```
public static final java.lang.String ATOMID_LEVEL_DATATABLE
```

Constant value: **ldat**

EPOCH_SECS

```
public static final long EPOCH_SECS
```

Constant value: **1341360000**

BYTESPERTIMECODE

```
public static final int BYTESPERTIMECODE
```

Constant value: **4**

(continued from last page)

DEFAULT_TIMEINDEX_FACTOR

```
public static final int DEFAULT_TIMEINDEX_FACTOR
```

Constant value: **10**

DEFAULT_BYTESPERFIELD

```
public static final int DEFAULT_BYTESPERFIELD
```

Constant value: **3**

DEFAULT_FIELDSPERROW

```
public static final int DEFAULT_FIELDSPERROW
```

Constant value: **12**

DEFAULT_TABLECOUNT

```
public static final int DEFAULT_TABLECOUNT
```

Constant value: **1**

Methods

writeEmptyDatabase

```
public boolean writeEmptyDatabase(String path)
```

Write empty database

Parameters:

path

Returns:

true if successful

getLevel

```
public IStatsFileDatabaseLevel getLevel(int levelIndex)
```

Get level

Parameters:

levelIndex

Returns:

level index

putLevel

```
public void putLevel(int levelIndex,  
    StatsFileDatabaseLevel level)
```

(continued from last page)

Put level

Parameters:levelIndex
level

isValidSecondsTimepublic boolean **isValidSecondsTime**(long timecode)

Returns true if valid timecode value (in seconds). Must be greater than define epoch and less than epoch+Inter.MAX_VALUE

Parameters:

timecode

Returns:

true if valid timecode

getStorageContextpublic StatsFileDatabaseStorageContext **getStorageContext**()

Get the storage context for open database. You can get read/write stats

Returns:

storage context for open database

getEpochpublic long **getEpoch**()

Get the defined time epoch

Returns:

epoch time

getVersionpublic int **getVersion**()

Get version

Returns:

version

getFlagspublic int **getFlags**()

Get the flags

Returns:

flags

closepublic void **close**()

Close open database (will leak descriptors if not closed)

com.wowza.wms.stats.database.file Interface IStatsFileDatabaseLevel

public interface **IStatsFileDatabaseLevel**
extends

Method Summary

boolean	deleteRows (int row) Deletes all rows equal to and greater than supplied row.
boolean	deleteRowsAll () Deletes all data in level.
void	dropIndexData () As time and records are read/written some storage is used to speed operation.
boolean	findTime (long time, StatsFileDatabaseTime timeResult) Find the closest row with a given time.
int	getBytesPerField () Get the number of bytes per-field
int	getFieldCount () Get the number of fields per-row.
boolean	getFirstTime (StatsFileDatabaseTime timeResult) Get the time of row 0
int	getFlags () Get flags
boolean	getLastTime (StatsFileDatabaseTime timeResult) Get the time of last row
long	getLastWriteTime () Get the time of the last row written.
int	getLevelIndex () Get level index
int	getRowCountCurrent () Get the current number of rows in the level
int	getRowCountMax () Get the maximum number of rows for this level
int	getRowStorageSize () Get the storage size in bytes for a single row of data.
int	getTableCount () Get the number of tables
boolean	getTime (int row, StatsFileDatabaseTime timeResult) Get time associated with a given row.

int	getTimeIncrement() Get the time increment for this level (only informational)
int	getTimeIndexFactor() Not really used - may use in the future
int	getTimes(int row, int count, long[] time) Get time for a range or rows.
int	getVersion() Get version
boolean	readRows(int table, int row, int count, byte[] rowBytes, int offset) Read the data for a range of rows.
void	setBytesPerField(int bytesPerField) Set the number of bytes per-field (only when creating empty database)
void	setFieldCount(int fieldCount) Set the number of fields per-row (only when creating empty database)
void	setRowCountMax(int rowCountMax) Get the max number of rows (only when creating empty database)
void	setTableCount(int tableCount) Set number of tables (only when creating empty database)
void	setTimeIncrement(int timeIncrement) Set the time increment for this level v
void	setTimeIndexFactor(int timeIndexFactor) Not really used - may use in the future
boolean	writeRow(long timecode, int[] fields) Write a row to the level.
boolean	writeRow(long timecode, int[][] fieldsArr) Write a row to the level.

Methods

getLevelIndex

```
public int getLevelIndex()
```

Get level index

Returns:

level index

dropIndexData

```
public void dropIndexData()
```

As time and records are read/written some storage is used to speed operation. This will dump the storage. It will be re-created if needed by underlying APIs.

findTime

```
public boolean findTime(long time,  
    StatsFileDatabaseTime timeResult)
```

Find the closest row with a given time. If the time is greater then the last row false will be returned. If the level is empty false will be returned. It will find closets time not greater then the requested time.

Parameters:

time
timeResult

Returns:

returns false if time is greater than last row in level or level is empty

getFirstTime

```
public boolean getFirstTime(StatsFileDatabaseTime timeResult)
```

Get the time of row 0

Parameters:

timeResult

Returns:

returns false if level is empty

getLastTime

```
public boolean getLastTime(StatsFileDatabaseTime timeResult)
```

Get the time of last row

Parameters:

timeResult

Returns:

returns false if level is empty

getTime

```
public boolean getTime(int row,  
    StatsFileDatabaseTime timeResult)
```

Get time associated with a given row.

Parameters:

row
timeResult

Returns:

returns false if row is greater then total row count or level is empty

getTimes

```
public int getTimes(int row,  
    int count,  
    long[] time)
```

(continued from last page)

Get time for a range or rows. If count = -1 it will get times for all rows to end of table.

Parameters:

row
count
time

Returns:

returns false if row+count is greater then total row count or level is empty

getLastWriteTime

```
public long getLastWriteTime()
```

Get the time of the last row written. writeRow will fail if try to write row using timecode less than this value. If returns -1 means level is empty.

Returns:

time of the last row written (milliseconds)

deleteRowsAll

```
public boolean deleteRowsAll()
```

Deletes all data in level.

Returns:

true, if rows deleted

deleteRows

```
public boolean deleteRows(int row)
```

Deletes all rows equal to and greater than supplied row.

Parameters:

row

Returns:

true, if rows deleted

getRowStorageSize

```
public int getRowStorageSize()
```

Get the storage size in bytes for a single row of data.

Returns:

storage size in bytes

readRows

```
public boolean readRows(int table,  
    int row,  
    int count,  
    byte[] rowBytes,  
    int offset)
```

Read the data for a range of rows. If count = -1 will read from row to the end of the level.

(continued from last page)

Parameters:

table
row
count
rowBytes
offset

Returns:

true if successful

writeRow

```
public boolean writeRow(long timecode,  
    int[] fields)
```

Write a row to the level. This is for writing the level with only a single table's worth of data.

Parameters:

timecode
fields

Returns:

true if successful

writeRow

```
public boolean writeRow(long timecode,  
    int[][] fieldsArr)
```

Write a row to the level. This is for writing to a level with more than one table (avg, min, max)

Parameters:

timecode
fieldsArr

Returns:

true if successful

getRowCountMax

```
public int getRowCountMax()
```

Get the maximum number of rows for this level

Returns:

maximum number of rows for this level

setRowCountMax

```
public void setRowCountMax(int rowCountMax)
```

Get the max number of rows (only when creating empty database)

Parameters:

rowCountMax

(continued from last page)

getRowCountCurrent

```
public int getRowCountCurrent()
```

Get the current number of rows in the level

Returns:

current number of rows in the level

getFieldCount

```
public int getFieldCount()
```

Get the number of fields per-row.

Returns:

number of fields per-row

setFieldCount

```
public void setFieldCount(int fieldCount)
```

Set the number of fields per-row (only when creating empty database)

Parameters:

fieldCount

getTableCount

```
public int getTableCount()
```

Get the number of tables

Returns:

number of tables

setTableCount

```
public void setTableCount(int tableCount)
```

Set number of tables (only when creating empty database)

Parameters:

tableCount

getBytesPerField

```
public int getBytesPerField()
```

Get the number of bytes per-field

Returns:

number of bytes per-field

setBytesPerField

```
public void setBytesPerField(int bytesPerField)
```

(continued from last page)

Set the number of bytes per-field (only when creating empty database)

Parameters:

bytesPerField

getTimeIncrement

```
public int getTimeIncrement()
```

Get the time increment for this level (only informational)

Returns:

time increment for this level

setTimeIncrement

```
public void setTimeIncrement(int timeIncrement)
```

Set the time increment for this level v

Parameters:

timeIncrement

getTimeIndexFactor

```
public int getTimeIndexFactor()
```

Not really used - may use in the future

Returns:

not used

setTimeIndexFactor

```
public void setTimeIndexFactor(int timeIndexFactor)
```

Not really used - may use in the future

Parameters:

timeIndexFactor

getVersion

```
public int getVersion()
```

Get version

Returns:

version

getFlags

```
public int getFlags()
```

Get flags

Returns:

flags

Package

com.wowza.wms.stream

com.wowza.wms.stream Interface IMediaIndexItem

public interface **IMediaIndexItem**
extends

IMediaIndexItem: generic interface to mediaIndex

Field Summary

public static final	MISSING media file is missing Value: **missing**
---------------------	---

Method Summary

IMediaIndexItem	clone() Make a clone copy of media index
String	getChecksum() Get checksum for media index
int	getExtent() Get the duration (milliseconds) of media index
long	getLastAccessed() Get last time media index was accessed (milliseconds)
boolean	isHitEnd() Is media index complete
void	setChecksum(IRandomAccessReader file) Set media index checksum.
void	setChecksum(String checksum) Set media index checksum
void	setLastAccessed(long time) Set last time media index accessed (milliseconds)
void	touch() Set last time accessed to current time

Fields

MISSING

public static final java.lang.String **MISSING**

media file is missing
Constant value: ****missing****

(continued from last page)

Methods

getExtent

```
public int getExtent()
```

Get the duration (milliseconds) of media index

Returns:

duration (milliseconds)

getChecksum

```
public String getChecksum()
```

Get checksum for media index

Returns:

checksum

setChecksum

```
public void setChecksum(String checksum)
```

Set media index checksum

Parameters:

checksum

setChecksum

```
public void setChecksum(IRandomAccessReader file)
```

Set media index checksum. Extract data from File spec

Parameters:

file

clone

```
public IMediaIndexItem clone()
```

Make a clone copy of media index

Returns:

shallow copy of media index

getLastAccessed

```
public long getLastAccessed()
```

Get last time media index was accessed (milliseconds)

Returns:

time media index was accessed (milliseconds)

(continued from last page)

setLastAccessed

```
public void setLastAccessed(long time)
```

Set last time media index accessed (milliseconds)

Parameters:

time - media index was accessed (milliseconds)

isHitEnd

```
public boolean isHitEnd()
```

Is media index complete

Returns:

true if media index is complete

touch

```
public void touch()
```

Set last time accessed to current time

com.wowza.wms.stream Interface IMediaListProvider

public interface **IMediaListProvider**
extends

Method Summary

MediaList	<code>resolveMediaList(IMediaListReader mediaListReader, IMediaStream stream, String streamName)</code> Called to resolve a amlst:streamname to a media list
---------------------------	---

Methods

resolveMediaList

```
public MediaList resolveMediaList(IMediaListReader mediaListReader,  
    IMediaStream stream,  
    String streamName)
```

Called to resolve a amlst:streamname to a media list

Parameters:

mediaListReader - mediaListReader
stream - media stream
streamName - stream name

Returns:

media list

com.wowza.wms.stream Interface IMediaListReader

public interface **IMediaListReader**
extends

Method Summary

void	close() close file
IHTTPStreamerSession	getHTTPStreamerSession() Get the HTTPStreamerSession associated with this media list reader
String	getMediaExtension() Get media extension
MediaList	getMediaList() Get the MediaList object
String	getPath() Get abstract path to the media item
void	init(IApplicationInstance appInstance, IMediaStream stream, String mediaReadType, String basePath, String mediaName, IHTTPStreamerSession httpStreamerSession) Initialize mediaReader
boolean	isOpen() is file open
void	open(String basePath, String name) Open the file for reading
void	setHTTPStreamerSession(IHTTPStreamerSession httpStreamerSession) Set the HTTPStreamerSession associated with this media list reader
void	setMediaReaderItem(MediaReaderItem mediaReaderItem) Set the mediaReader item definition
void	setProperties(WMSProperties properties) Set the properties for this media reader

Methods

init

```
public void init(IApplicationInstance appInstance,
IMediaStream stream,
String mediaReadType,
String basePath,
String mediaName,
IHTTPStreamerSession httpStreamerSession)
```

(continued from last page)

Initialize mediaReader

Parameters:

stream - parent stream
mediaReadType - media reader type id. Example: flv
basePath - Base path for application instance
mediaName - name of the media item

setMediaReaderItem

```
public void setMediaReaderItem(MediaReaderItem mediaReaderItem)
```

Set the mediaReader item definition

Parameters:

mediaReaderItem

open

```
public void open(String basePath,  
String name)
```

Open the file for reading

Parameters:

basePath - base path to file
name - file name without extension

close

```
public void close()
```

close file

isOpen

```
public boolean isOpen()
```

is file open

Returns:

is file open

setProperty

```
public void setProperty(WMSProperties properties)
```

Set the properties for this media reader

Parameters:

properties - properties

getPath

```
public String getPath()
```

Get abstract path to the media item

Returns:

(continued from last page)

abstract path to the media item

getMediaExtension

```
public String getMediaExtension()
```

Get media extension

Returns:

media extension

getMediaList

```
public MediaList getMediaList()
```

Get the MediaList object

Returns:

MediaList object

getHTTPStreamerSession

```
public IHTTPStreamerSession getHTTPStreamerSession()
```

Get the HTTPStreamerSession associated with this media list reader

Returns:

HTTPStreamerSession

setHTTPStreamerSession

```
public void setHTTPStreamerSession(IHTTPStreamerSession httpStreamerSession)
```

Set the HTTPStreamerSession associated with this media list reader

Parameters:

httpStreamerSession - HTTPStreamerSession

com.wowza.wms.stream Interface IMediaReader

All Subinterfaces:

[IMediaReaderSmoothStreamer](#), [IMediaReaderSanJose](#), [IMediaReaderMPEGDash](#), [IMediaReaderCupertino](#)

public interface **IMediaReader**
extends

IMediaReader: generic media reader interface. All media types implement this interface to interact with PlaylistPlayer.

Field Summary	
public static final	CONTENTTYPE_MEDIA Value: 1
public static final	CONTENTTYPE_MEDIALIST Value: 2
public static final	DEFAULT_RANDOMACCESSREADER Value: com.wowza.io.DirectRandomAccessReader
public static final	DEFAULT_RANDOMACCESSREADEROPTIMIZER Value: com.wowza.io.RandomAccessReadOptimizer
public static final	PLAYEVENT_AFTERBUFFERFILL Value: 5
public static final	PLAYEVENT_AFTERMETADATA Value: 3
public static final	PLAYEVENT_BEFOREBUFFERFILL Value: 4
public static final	PLAYEVENT_BEFOREMETADATA Value: 2
public static final	PLAYEVENT_STARTPLAYBACK Value: 1
public static final	SEEK_EXACT Seek direction: closest frame (audio, video) (key, no-key) Value: 4
public static final	SEEK_KEYCLOSE Seek direction: closest key frame Value: 3

public static final	SEEK_KEYDOWN Seek direction: down to closets key frame Value: 2
public static final	SEEK_KEYUP Seek direction: up to closets key frame Value: 1
public static final	SEEKTARGET_AUDIO Value: 3
public static final	SEEKTARGET_ENHANCED Value: 4
public static final	SEEKTARGET_VIDEOKEYFRAME Value: 1

Method Summary

void	close() close file
long	getDuration() Get duration or time (milliseconds) of the media file
long	getLength() Get the stream length in bytes
String	getMediaExtension() Get media extension
java.util.List	getMetadata() Get a collection of metadata packets in ByteBuffers for this file.
String	getPath() Get abstract path to the media item
IMediaReaderStreamPosition	getStreamPosition() Get a reference to the current stream position
void	init(IApplicationInstance appInstance, IMediaStream stream, String mediaReadType, String basePath, String mediaName) Initialize mediaReader
boolean	isOpen() is file open
void	open(String basePath, String name) Open the file for reading
void	rewind() rewind file to start
PlaylistSeekResult	seek(long timecode, int seektype) seek to timecode in file

int	sendZeroLengthPacket (int type, int timecode, boolean isAbsolute, IMediaStream stream, java.io.OutputStream out, AMFObj wmsObj, PlaylistCursor flvCursor, PlaylistWriteControl control, PlaylistReaderWriteResults results, long[] sizes, boolean isForceTCZero)
void	setMediaReaderItem (MediaReaderItem mediaReaderItem) Set the mediaReader item definition
void	setProperties (WMSProperties properties) Set the properties for this media reader
void	setStreamPosition (IMediaReaderStreamPosition pos) Set the file position within the media file
void	startPlayback () Called each time the player being playback (before the buffer it filled)
int	writeGeneratedKeyFrame (IMediaStream stream, java.io.OutputStream out, AMFObj wmsObjAudio, AMFObj wmsObjVideo, AMFObj wmsObjData, PlaylistCursor flvCursor, PlaylistWriteControl control, PlaylistReaderWriteResults results, long[] sizes, FastPlaySettings fastPlaySettings, boolean isForceTCZero) From current location in file generate a key frame (enhanced seek) and write it to out
int	writePackets (IMediaStream stream, java.io.OutputStream out, AMFObj wmsObjAudio, AMFObj wmsObjVideo, AMFObj wmsObjData, PlaylistCursor flvCursor, PlaylistWriteControl control, PlaylistReaderWriteResults results, long[] sizes, FastPlaySettings fastPlaySettings, boolean isForceTCZero) From current location in file write packets to output
int	writePackets (java.util.List packetList, PlaylistCursor flvCursor, PlaylistWriteControl control, PlaylistReaderWriteResults results, long[] sizes, FastPlaySettings fastPlaySettings) Write packets to the packetList as AMFPackets

Fields

CONTENTTYPE_MEDIA

```
public static final int CONTENTTYPE_MEDIA
```

Constant value: **1**

CONTENTTYPE_MEDIALIST

```
public static final int CONTENTTYPE_MEDIALIST
```

Constant value: **2**

DEFAULT_RANDOMACCESSREADER

```
public static final java.lang.String DEFAULT_RANDOMACCESSREADER
```

Constant value: **com.wowza.io.DirectRandomAccessReader**

DEFAULT_RANDOMACCESSREADEROPTIMIZER

```
public static final java.lang.String DEFAULT_RANDOMACCESSREADEROPTIMIZER
```

Constant value: **com.wowza.io.RandomAccessReadOptimizer**

SEEKTARGET_VIDEOKEYFRAME

```
public static final int SEEKTARGET_VIDEOKEYFRAME
```

Constant value: **1**

SEEKTARGET_AUDIO

```
public static final int SEEKTARGET_AUDIO
```

Constant value: **3**

SEEKTARGET_ENHANCED

```
public static final int SEEKTARGET_ENHANCED
```

Constant value: **4**

PLAYEVENT_STARTPLAYBACK

```
public static final int PLAYEVENT_STARTPLAYBACK
```

Constant value: **1**

PLAYEVENT_BEFOREMETADATA

```
public static final int PLAYEVENT_BEFOREMETADATA
```

Constant value: **2**

PLAYEVENT_AFTERMETADATA

```
public static final int PLAYEVENT_AFTERMETADATA
```

Constant value: **3**

PLAYEVENT_BEFOREBUFFERFILL

```
public static final int PLAYEVENT_BEFOREBUFFERFILL
```

Constant value: **4**

(continued from last page)

PLAYEVENT_AFTERBUFFERFILL

```
public static final int PLAYEVENT_AFTERBUFFERFILL
```

Constant value: **5**

SEEK_KEYUP

```
public static final int SEEK_KEYUP
```

Seek direction: up to closets key frame
Constant value: **1**

SEEK_KEYDOWN

```
public static final int SEEK_KEYDOWN
```

Seek direction: down to closets key frame
Constant value: **2**

SEEK_KEYCLOSE

```
public static final int SEEK_KEYCLOSE
```

Seek direction: closest key frame
Constant value: **3**

SEEK_EXACT

```
public static final int SEEK_EXACT
```

Seek direction: closest frame (audio, video) (key, no-key)
Constant value: **4**

Methods

init

```
public void init(IApplicationInstance appInstance,  
                IMediaStream stream,  
                String mediaReadType,  
                String basePath,  
                String mediaName)
```

Initialize mediaReader

Parameters:

stream - parent stream
mediaReadType - media reader type id. Example: flv
basePath - Base path for application instance
mediaName - name of the media item

setMediaReaderItem

```
public void setMediaReaderItem(MediaReaderItem mediaReaderItem)
```

Set the mediaReader item definition

Parameters:

(continued from last page)

mediaReaderItem

open

```
public void open(String basePath,  
                String name)
```

Open the file for reading

Parameters:

basePath - base path to file
name - file name without extension

getMetadata

```
public java.util.List getMetadata()
```

Get a collection of metadata packets in ByteBuffers for this file. You can use 'new AMFDataList(data)' to convert to AMF objects.

Returns:

collection of metadata packets in ByteBuffers

rewind

```
public void rewind()
```

rewind file to start

close

```
public void close()
```

close file

isOpen

```
public boolean isOpen()
```

is file open

Returns:

is file open

seek

```
public PlaylistSeekResult seek(long timecode,  
                                int seektype)
```

seek to timecode in file

Parameters:

timecode - timecode (milliseconds) to seek to
seektype - seek type IMediaReader.SEEK_*

Returns:

detailed results object of seek or null if failure

(continued from last page)

writePackets

```
public int writePackets(IMediaStream stream,
    java.io.OutputStream out,
    AMFObj wmsObjAudio,
    AMFObj wmsObjVideo,
    AMFObj wmsObjData,
    PlaylistCursor flvCursor,
    PlaylistWriteControl control,
    PlaylistReaderWriteResults results,
    long[] sizes,
    FastPlaySettings fastPlaySettings,
    boolean isForceTCZero)
```

From current location in file write packets to output

Parameters:

stream - parent mediaStream
out - output stream
wmsObjAudio - audio channel amfObj
wmsObjVideo - video channel amfObj
wmsObjData - data channel amfObj
flvCursor - current cursor that keeps track of timecodes and flags indicating position in media file
control - write control flags. Mainly used to control when it should stop writing
results - write results returned from this routine
sizes - array of values that keep track of number of bytes written and number of packets for each data type (audio, video, data). See IMediaStreamPlay.PLAYSIZES_*
fastPlaySettings - current fastPlay settings for the stream
isForceTCZero - are we forcing all timecodes to zero

Returns:

number of bytes written

writePackets

```
public int writePackets(java.util.List packetList,
    PlaylistCursor flvCursor,
    PlaylistWriteControl control,
    PlaylistReaderWriteResults results,
    long[] sizes,
    FastPlaySettings fastPlaySettings)
```

Write packets to the packetList as AMFPackets

Parameters:

packetList - list to which to write packets
flvCursor - current cursor that keeps track of timecodes and flags indicating position in media file
control - write control flags. Mainly used to control when it should stop writing
results - write results returned from this routine
sizes - array of values that keep track of number of bytes written and number of packets for each data type (audio, video, data). See IMediaStreamPlay.PLAYSIZES_*
fastPlaySettings - current fastPlay settings for the stream

Returns:

number of bytes written

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writeGeneratedKeyFrame

```
public int writeGeneratedKeyFrame(IMediaStream stream,
    java.io.OutputStream out,
    AMFObj wmsObjAudio,
    AMFObj wmsObjVideo,
    AMFObj wmsObjData,
    PlaylistCursor flvCursor,
    PlaylistWriteControl control,
    PlaylistReaderWriteResults results,
    long[] sizes,
    FastPlaySettings fastPlaySettings,
    boolean isForceTCZero)
```

From current location in file generate a key frame (enhanced seek) and write it to out

Parameters:

stream - parent mediaStream
out - output stream
wmsObjAudio - audio channel amfObj
wmsObjVideo - video channel amfObj
wmsObjData - data channel amfObj
flvCursor - current cursor that keeps track of timecodes and flags indicating position in media file
control - write control flags. Mainly used to control when it should stop writing
results - write results returned from this routine
sizes - array of values that keep track of number of bytes written and number of packets for each data type (audio, video, data). See IMediaStreamPlay.PLAYSIZES_*
fastPlaySettings - current fastPlay settings for the stream
isForceTCZero - are we forcing all timecodes to zero

Returns:

number of bytes written

sendZeroLengthPacket

```
public int sendZeroLengthPacket(int type,
    int timecode,
    boolean isAbsolute,
    IMediaStream stream,
    java.io.OutputStream out,
    AMFObj wmsObj,
    PlaylistCursor flvCursor,
    PlaylistWriteControl control,
    PlaylistReaderWriteResults results,
    long[] sizes,
    boolean isForceTCZero)
```

startPlayback

```
public void startPlayback()
```

Called each time the player being playback (before the buffer it filled)

getDuration

```
public long getDuration()
```

Get duration or time (milliseconds) of the media file

Returns:

(continued from last page)

duration or time (milliseconds) of the media file

getLength

```
public long getLength()
```

Get the stream length in bytes

Returns:

stream length in bytes

getPath

```
public String getPath()
```

Get abstract path to the media item

Returns:

abstract path to the media item

getMediaExtension

```
public String getMediaExtension()
```

Get media extension

Returns:

media extension

getStreamPosition

```
public IMediaReaderStreamPosition getStreamPosition()
```

Get a reference to the current stream position

Returns:

stream position

setStreamPosition

```
public void setStreamPosition(IMediaReaderStreamPosition pos)
```

Set the file position within the media file

Parameters:

pos - stream position

setProperty

```
public void setProperty(WMSProperties properties)
```

Set the properties for this media reader

Parameters:

properties - properties

com.wowza.wms.stream Interface IMediaReaderActionNotify

All Known Implementing Classes:
[MediaReaderActionNotifyBase](#)

public interface **IMediaReaderActionNotify**
extends

IMediaReaderActionNotify: listener interface for IMediaReader actions: See
IApplicationInstance.addMediaReaderListener(IMediaReaderActionNotify mediaReaderListener)

Method Summary

void	onMediaReaderClose (IMediaReader mediaReader, IMediaStream stream) Called when media reader is closed
void	onMediaReaderCreate (IMediaReader mediaReader) Called when media reader is created
void	onMediaReaderExtractMetaData (IMediaReader mediaReader, IMediaStream stream) Called after media reader metadata is extracted from the file
void	onMediaReaderInit (IMediaReader mediaReader, IMediaStream stream) Called after media reader is initialized
void	onMediaReaderOpen (IMediaReader mediaReader, IMediaStream stream) Called after media reader is opened

Methods

onMediaReaderCreate

public void **onMediaReaderCreate**([IMediaReader](#) mediaReader)

Called when media reader is created

Parameters:

mediaReader - media reader

onMediaReaderInit

public void **onMediaReaderInit**([IMediaReader](#) mediaReader, [IMediaStream](#) stream)

Called after media reader is initialized

Parameters:

mediaReader - media reader

stream - stream

onMediaReaderOpen

```
public void onMediaReaderOpen(IMediaReader mediaReader,  
    IMediaStream stream)
```

Called after media reader is opened

Parameters:

mediaReader - media reader
stream - stream

onMediaReaderExtractMetaData

```
public void onMediaReaderExtractMetaData(IMediaReader mediaReader,  
    IMediaStream stream)
```

Called after media reader metadata is extracted from the file

Parameters:

mediaReader - media reader
stream - stream

onMediaReaderClose

```
public void onMediaReaderClose(IMediaReader mediaReader,  
    IMediaStream stream)
```

Called when media reader is closed

Parameters:

mediaReader - media reader
stream - stream

com.wowza.wms.stream
Interface IMediaReaderEncInfo

public interface **IMediaReaderEncInfo**
extends

Method Summary

MediaReaderEncInfo	getEncInfo()
------------------------------------	------------------------------

Methods

getEncInfo

public [MediaReaderEncInfo](#) **getEncInfo()**

com.wowza.wms.stream
Interface IMediaReaderStreamPosition

public interface **IMediaReaderStreamPosition**
extends

IMediaReaderStreamPosition: Internal use

Method Summary

boolean	isValid()
---------	---------------------------

Methods

isValid

public boolean **isValid()**

com.wowza.wms.stream Interface IMediaStream

public interface **IMediaStream**
extends

IMediaStream: public, generic interface to mediaStream object. Upon creation of a new mediaStream, the client connection's default streamType value will be used to dynamically create a mediaStream object based on the definitions available in the vHosts.mediaStreamMap. All mediaStream implementations implement this interface.

Field Summary

public static final	AUDIOSAMPLEACCESS Value: 2
public static final	PACKET_COUNTS_AUDIO Value: 0
public static final	PACKET_COUNTS_DATA Value: 3
public static final	PACKET_COUNTS_SIZE Value: 4
public static final	PACKET_COUNTS_VIDEO Value: 1
public static final	PACKET_COUNTS_VIDEOKEY Value: 2
public static final	PUBLISH_BITRATE_SOURCE_MEASURE Value: 1
public static final	PUBLISH_BITRATE_SOURCE_METADATA Value: 2
public static final	PUBLISH_FRAMERATE_SOURCE_MEASURE Value: 1
public static final	PUBLISH_FRAMERATE_SOURCE_METADATA Value: 2
public static final	READACCESS Value: 0
public static final	VIDEOSAMPLEACCESS Value: 3

public static final	WRITEACCESS Value: 1
---------------------	--

Method Summary

void	addAudioCodecConfigPacket (long timecode, AMFPacket packet) Set audio codec configuration packet (needed for H.264/AAC playback)
void	addAudioData (byte[] data, int offset, int size) Add data to current audio packet
void	addAudioExtraData (java.util.Map extraData) Add extra data to the current audio packet
void	addCallbackListener (IMediaStreamCallback callbackListener) Add a callback listener to listen for all stream metadata
void	addClientListener (IMediaStreamActionNotify actionListener) Add client listener.
void	addClientListener (IMediaStreamActionNotify2 actionListener) Add client listener.
void	addClientListener (IMediaStreamActionNotify3 actionListener) Add client listener.
void	addDataData (byte[] data, int offset, int size) Add data to current data packet
void	addDataExtraData (java.util.Map extraData) Add extra data to the current data packet
void	addLivePacketListener (IMediaStreamLivePacketNotify listener) Add a listener to receiver notification of new live AMF packets
void	addVideoCodecConfigPacket (long timecode, AMFPacket packet) Set video codec configuration packet (needed for H.264/AAC playback)
void	addVideoData (byte[] data, int offset, int size) Add data to current video packet
void	addVideoExtraData (java.util.Map extraData) Add extra data to the current video packet
void	addVideoH264SEIListener (IMediaStreamH264SEINotify h264SEIListener) Add an H.264 SEI listener.
void	clear () Delete media file pointed to by this mediaStream (be careful)
void	clearFastPlaySettings () Clear fastPlay settings
void	clearLoggingValues ()
void	close () Close mediaStream

void	flush() Force publishing packets to be flushed from the input buffers to the output buffers
boolean[]	getAccess(IClient client, String name) Get the read/write access to this stream for this client
AMFPacket	getAudioCodecConfigPacket(long timecode) Get audio codec configuration packet (needed for H.264/AAC playback)
int	getAudioMissing() Get number of audio bytes missing from current audio packet
int	getAudioSize() Get the size of the current audio packet that is being streamed from the client to the server
long	getAudioTC() Get last absolute audio timecode (milliseconds) sent to mediaStream
int	getBufferTime() Get buffer time for mediaStream (milliseconds)
byte[]	getBurstStartStop(boolean isStart) Get the dynamic streaming burst start/stop AMF packet
String	getCacheName() not used
IClient	getClient() Get parent client connection
int	getClientId() Get parent client connection (id)
String	getContextStr() Returns the stream context string in the form [application]/[appInstance]/[streamName].
int	getDataMissing() Get number of data bytes missing from current data packet
int	getDataSize() Get the size of the current data packet that is being streamed from the client to the server
long	getDataTC() Get last absolute data timecode (milliseconds) sent to mediaStream
int	getDataType() Get the data packet type: (IVHost.CONTENTTYPE_DATA0 or IVHost.CONTENTTYPE_DATA3)
String	getDvrRecorder() Get the DVR Recorder for this stream
ILiveStreamDvrRecorder	getDvrRecorder(String name) Get the DVR Recorder interface to a stream by name
String	getDvrRecorderList() Get the comma separated list of DVR Recorder names being used by this stream (see conf/Dvr.xml)

String	getDvrRepeater() Get the DVR repeater name for this stream
ElapsedTimer	getElapsedTime() Get the interface to the elapse timer
String	getExt() Get media file extension
FastPlaySettings	getFastPlaySettings() Get current fastPlay settings
int	getHeaderSize() Get the last packet header size (debugging)
IHTTPStreamerSession	getHTTPStreamerSession() Get the HTTPStreamer session associated with this stream
AMFPacket	getLastKeyFrame() Get most recent video key frame
AMFPacket	getLastPacket() Get most recent live packet
String	getLiveStreamPacketizer() Get the live stream packetizer that this stream is using
ILiveStreamPacketizer	getLiveStreamPacketizer(String name) Get the LiveStreamPacketizer interface to a stream by name
String	getLiveStreamPacketizerList() Get the comma separated list of LiveStreamPacketizers names being used by this stream (see conf/LiveStreamPacketizers.xml)
String	getLiveStreamRepeater() Get the live stream repeater name for the stream
ILiveStreamTranscoder	getLiveStreamTranscoder(String name) Get a live stream transcoder for this stream by name
String	getLiveStreamTranscoderList() Get the comma separated list of LiveStreamTranscoders names being used by this stream (see conf/LiveStreamTranscoders.xml)
java.util.Map	getLiveStreamTranscoders() Get the list of transcoders for this stream.
long	getMaxTimecode() Get the timecode of the latest received packet
IOPerformanceCounter	getMediaIOPerformance() Get IO performance counter
IMediaStreamMetaDataProvider	getMetaDataProvider() Get the metaData provider
String	getName() Get stream name

INetConnection	getNetConnection() Get parent netConnection (future server to server communication)
IMediaStreamPlay	getPlayer() Get underlying player (IMediaStreamPlay) object
java.util.List	getPlayPackets() Get all available live packets
WMSProperties	getProperties() Get mediaStream properties
int	getPublishAudioCodecId() Get the codec id of the most recently published audio packet
int	getPublishBitrateAudio() Get the audio bitrate of an incoming live published stream (bits per second).
int	getPublishBitrateAudio(int source) Get the audio bitrate of an incoming live published stream (bits per second).
int	getPublishBitrateVideo() Get the video bitrate of an incoming live published stream (bits per second).
int	getPublishBitrateVideo(int source) Get the video bitrate of an incoming live published stream (bits per second).
long	getPublishFrameCountAudio() Get the total number of audio frames received for an incoming live stream.
long	getPublishFrameCountData() Get the total number of data frames received for an incoming live stream.
long	getPublishFrameCounts(long[] counts) Get the total number of frames received for an incoming live stream.
long	getPublishFrameCountVideo() Get the total number of video frames received for an incoming live stream.
long	getPublishFrameCountVideoKey() Get the total number of video key frames received for an incoming live stream.
double	getPublishFramerateVideo() Get the video framerate of an incoming live published stream (frames per second).
double	getPublishFramerateVideo(int source) Get the video bitrate of an incoming live published stream (bits per second).
int[]	getPublishKeyFrameIntervalsVideo() Get the last n key frame intervals for an incoming publish stream (frames per GOP), Most recent GOPs are first in the list.
int	getPublishVideoCodecId() Get the codec id of the most recently published video packet
String	getQueryStr() Get play/publish name query string.
int	getReceiveVideoFPS() Set frame per seconds for video (not currently implemented)

AMFObj	getRespAMFAudioObj() Get audio response channel object
AMFObj	getRespAMFDataObj() Get data response channel object
AMFObj	getRespAMFVideoObj() Get video response channel object
RTPStream	getRTPStream() Get the RTP based stream this stream is associated with
int	getSrc() Get the stream id
java.io.File	getStreamFileForRead() Get the File object to read from a stream (get stream name, ext and query from stream object)
java.io.File	getStreamFileForRead(String name, String ext, String query) Get the File object to read from a stream (specify name, ext and query)
java.io.File	getStreamFileForWrite() Get the File object to write to a stream (get stream name, ext and query from stream object)
java.io.File	getStreamFileForWrite(String name, String ext, String query) Get the File object to write to a stream (specify name, ext and query)
MediaStreamMap	getStreams() Get parent mediaStreamMap (owned by applicationInstance)
String	getStreamType() Get mediaStream streamType
String	getUniqueStreamIdStr() Get a string that uniquely identifies this stream
AMFPacket	getVideoCodecConfigPacket(long timecode) Get video codec configuration packet (needed for H.264/AAC playback)
int	getVideoMissing() Get number of video bytes missing from current video packet
int	getVideoSize() Get the size of the current video packet that is being streamed from the client to the server
long	getVideoTC() Get last absolute video timecode (milliseconds) sent to mediaStream
void	handleCallback(com.wowza.wms.request.RequestFunction function) Routes request function to callback handler onStatus, onPlayStatus or [method/handler]
boolean	idle() Allow the mediaStream to perform idle work (not currently in use)
long	incrementMediaInBytes(long increment) Increment the number of mediaStream bytes received
long	incrementMediaLossBytes(long bytes, long count) Increment the number of mediaStream loss bytes sent and number of packets sent

long	incrementMediaOutBytes (long bytes, long count) Increment the number of mediaStream bytes sent and number of packets sent
void	init (MediaStreamMap parent, int src, WMSProperties properties) Initialize the mediaStream object after creation.
void	initLiveStreamRepeating (String liveStreamPacketizer, String liveStreamRepeater) Initialize this stream for live stream repeating
boolean	isAppend () Is append to media file (only valid if isRecord)
boolean	isClustered () not used
boolean	isMediaCasterPlay () Is MediaCaster play enabled (if true, will trigger MediaCaster startup)
boolean	isMergeOnMetadata () If true, merge incoming onMetadata events with the current onMetadata event data.
boolean	isOpen () Is mediaStream open
boolean	isPlay () Is the stream a play stream (vs a publish stream)
boolean	isPlaying () Is mediaStream playing (or paused - false)
boolean	isPublisherStream () Returns true if stream was created by stream publisher API.
boolean	isPublishStreamReady (boolean checkAudio, boolean checkVideo) Returns true if the publishing stream contains enough video/audio data to start playback
boolean	isReceiveAudio () Is client currently receiving audio.
boolean	isReceiveVideo () Is client currently receiving video.
boolean	isRecord () Is set to true if second parameter of NetStream.publish is "record"
boolean	isSendPlayStopLogEvent () Get need to send a log event for stop
boolean	isSendPublishStopLogEvent () Get need to send a log event for publishing
boolean	isSendRecordStopLogEvent () Get need to send a log event for recording
boolean	isTranscodeResult () Is this stream the result of a transcode operation.
boolean	isVideoH264SEIListenerEmpty () Is H.264 SEI listener list empty.

double	length() Get length/duration (seconds) of media file pointed to by mediaStream
void	notifyActionOnCodecInfoAudio (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio) Notify client listeners of audio codec information change
void	notifyActionOnCodecInfoVideo (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo) Notify client listeners of video codec information change
void	notifyActionOnMetaData (AMFPacket metaDataPacket) Notify client listeners of onMetaData change
void	notifyActionPause (boolean isPause, long location) Notify client listeners of pause action
void	notifyActionPauseRaw (boolean isPause, long location) Notify client listeners of pauseRaw action
void	notifyActionPlay (String streamName, double playStart, double playLen, int playReset) Notify client listeners of play action
void	notifyActionPublish (String streamName, boolean isRecord, boolean isAppend) Notify client listeners of publish action
void	notifyActionSeek (double location) Notify client listeners of seek action
void	notifyActionStop () Notify client listeners of stop action
void	notifyActionUnPublish (String streamName, boolean isRecord, boolean isAppend) Notify client listeners of unpublish action
void	notifyLivePacket (AMFPacket packet) Notify new live AMF packet
void	notifyVideoH264Packet (AMFPacket packet, com.wowza.wms.media.h264.H264SEIMessages seiMessages) Notify H.264 SEI listener.
void	packetComplete () Invoked by requestAdapter when at the end of a set of packets
void	publish () Publish mediaStream
void	putDvrRecorder (String name, ILiveStreamDvrRecorder dvr) Add a live stream dvr to this stream
void	putLiveStreamTranscoder (String name, ILiveStreamTranscoder liveStreamTranscoder) Add a live stream transcoder to this stream
void	registerCallback (String handlerName, IMediaStreamCallback callback) Register a callback handler

void	registerOnPlayStatus (IMediaStreamCallback callback) Register onPlayStatus handler
void	registerOnStatus (IMediaStreamCallback callback) Register onStatus handler
void	removeCallbackListener (IMediaStreamCallback callbackListener) Remove a callback listener to listen for all stream metadata
void	removeClientListener (IMediaStreamActionNotify actionListener) Remove client listener.
void	removeClientListener (IMediaStreamActionNotify2 actionListener) Remove client listener.
void	removeClientListener (IMediaStreamActionNotify3 actionListener) Remove client listener.
ILiveStreamDvrRecorder	removeDvrRecorder (String name) Remove a live stream dvr by name
void	removeLivePacketListener (IMediaStreamLivePacketNotify listener) Remove a listener to receiver notification of new live AMF packets
ILiveStreamTranscoder	removeLiveStreamTranscoder (String name) Remove a live stream transcoder by name
void	removeVideoH264SEIListener (IMediaStreamH264SEINotify h264SEIListener) Remove an H.264 SEI listener.
void	send (String handlerName) Call client side NetStream method/handler with no parameters
void	send (String handlerName, Object[] params) Call client side NetStream method/handler
void	sendAMF3 (String handlerName) Call client side NetStream method/handler with no parameters.
void	sendAMF3 (String handlerName, Object[] params) Call client side NetStream method/handler.
int	sendControlBytes (int controlType, java.io.OutputStream out) Send playback control bytes.
void	sendDirect (String handlerName) Call client side NetStream method/handler and send event to underlying stream (will record event)
void	sendDirect (String handlerName, Object[] params) Call client side NetStream method/handler and send event to underlying stream (will record event)
void	sendDirectAMF3 (String handlerName) Call client side NetStream method/handler and send event to underlying stream (will record event).
void	sendDirectAMF3 (String handlerName, Object[] params) Call client side NetStream method/handler and send event to underlying stream (will record event).

int	sendLivePlaySeek (java.io.OutputStream out, String name, long timecode) Send onStatus(NetStream.Seek.Notify) event
int	sendLivePlayStart (java.io.OutputStream out, String name, long timecode, long timecodeOffset) Send onStatus(NetStream.Play.Start) event
int	sendLivePlaySwitch (java.io.OutputStream out, String name, long timecode) Send onStatus(NetStream.Play.Transition) event
int	sendPauseNotify (long timecode, String name) Send onStatus(NetStream.Pause.Notify) event
int	sendPauseNotify (java.io.OutputStream out, long timecode, String name) Send onStatus(NetStream.Pause.Notify) event.
int	sendPlayReset (java.io.OutputStream out, String name) Send onStatus(NetStream.Play.Reset) event.
int	sendPlayReset (String name) Send onStatus(NetStream.Play.Reset) event
int	sendPlaySeek (long location, long seekLocation, String name) Send onStatus(NetStream.Seek.Notify) event.
int	sendPlaySeek (java.io.OutputStream out, long location, long seekLocation, String name) Send onStatus(NetStream.Seek.Notify) event.
int	sendPlaySeek (java.io.OutputStream out, long location, long seekLocation, String name, java.util.List seekTypes) Send onStatus(NetStream.Seek.Notify) event.
int	sendPlayStart (java.io.OutputStream out, String name, boolean isSwitch, boolean isLive, long timecode, java.util.List seekTypes) Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch).
int	sendPlayStart (java.io.OutputStream out, String name, boolean isSwitch, long timecode) Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch).
int	sendPlayStart (java.io.OutputStream out, String name, boolean isSwitch, long timecode, java.util.List seekTypes) Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch).
int	sendPlayStart (String name, long timecode) Send onStatus(NetStream.Play.Start) event
int	sendPlayStatus (long timecode, int statusType, double duration, double bytesSent) Send onPlayStatus(NetStream.Play.Switch, NetStream.Play.Complete, NetStream.Play.Stop) event
int	sendPlayStatus (java.io.OutputStream out, long timecode, int statusType, double duration, double bytesSent) Send onPlayStatus(NetStream.Play.Switch, NetStream.Play.Complete, NetStream.Play.Stop) event.

int	sendPlayStop (long location, String name) Send onStatus(NetStream.Play.Stop) event
int	sendPlayStop (java.io.OutputStream out, long location, String name) Send onStatus(NetStream.Play.Stop) event.
int	sendPlaySwitch (java.io.OutputStream out, String name, boolean isSwitch, long timecode) Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch).
int	sendPlaySwitch (String name, long timecode) Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch).
int	sendStreamNotFound (java.io.OutputStream out, String name) Send onStatus(NetStream.Play.StreamNotFound) event.
int	sendStreamNotFound (String name) Send onStatus(NetStream.Play.StreamNotFound) event
int	sendUnpauseNotify (long location, String name) Send onStatus(NetStream.Unpause.Notify) event
int	sendUnpauseNotify (java.io.OutputStream out, long location, String name) Send onStatus(NetStream.Unpause.Notify) event.
int	sendUnpauseNotify (java.io.OutputStream out, long location, String name, java.util.List seekTypes) Send onStatus(NetStream.Unpause.Notify) event
int	sendVODPlaySwitch (java.io.OutputStream out, String name, long timecode) Send onStatus(NetStream.Play.Transition) event
void	setAppend (boolean isAppend) Set is append to media file (only valid if isRecord)
void	setAudioSize (int audioSize) Set the size of the current audio packet that is being streamed from the client to the server
void	setAudioTC (long audioTC) Set last absolute audio timecode (milliseconds) sent to mediaStream
void	setAudioTC (long audioTC, boolean isAbsolute) Set last absolute audio timecode (milliseconds) sent to mediaStream
void	setBufferTime (int bufferTime) Set buffer time for mediaStream (milliseconds)
void	setClient (IClient client) Set parent client connection
void	setClustered (boolean isClustered) not used
void	setDataSize (int dataSize) Set the size of the current data packet that is being streamed from the client to the server
void	setDataTC (long dataTC) Set last absolute data timecode (milliseconds) sent to mediaStream

void	setDataTC (long dataTC, boolean isAbsolute) Set last absolute data timecode (milliseconds) sent to mediaStream
void	setDataType (int dataType) Set the data packet type: (IVHost.CONTENTTYPE_DATA0 or IVHost.CONTENTTYPE_DATA3)
void	setDvrRecorder (String recorderName) Set the DVR Recorder that this stream is using
void	setDvrRecorderList (String recorderList) Set the comma separated list of DVR Recorder names being used by this stream (see conf/Dvr.xml)
void	setExt (String ext) Set media file extension
void	setFastPlaySettings (FastPlaySettings fastPlaySettings) Set fastPlay settings
void	setHeaderSize (int headerSize) Set the last packet header size (debugging)
void	setHTTPStreamerSession (IHTTPStreamerSession httpStreamerSession) Set the HTTPStreamer session associated with this stream
void	setIsPlaying (boolean isPlaying) Set is mediaStream playing
void	setLiveStreamPacketizer (String liveStreamPacketizer) Set the live stream packetizer that this stream is using
void	setLiveStreamPacketizerList (String liveStreamPacketizerList) Set the comma separated list of LiveStreamPacketizers names being used by this stream (see conf/LiveStreamPacketizers.xml)
void	setLiveStreamRepeater (String liveStreamRepeater) Set the live stream repeater name for the stream
void	setLiveStreamTranscoderList (String liveStreamTranscoderList) Set the comma separated list of LiveStreamTranscoders names being used by this stream (see conf/LiveStreamTranscoders.xml)
void	setMediaCasterPlay (boolean isMediaCasterPlay) Is MediaCaster play enabled (if true, will trigger MediaCaster startup)
void	setMergeOnMetadata (boolean mergeOnMetadata) If true, merge incoming onMetadata events with the current onMetadata event data.
void	setMetaDataProvider (IMediaStreamMetaDataProvider metaDataProvider) Set the metaData provider
void	setName (String name) Set stream name
void	setName (String name, String ext) Set stream name and extension.

void	<u>setName</u> (String name, String oldName, String ext, String queryStr, double playStart, double playLen, int playTransition) Set stream name, extension, query string, play start, play len and play reset from play command.
void	<u>setNetConnection</u> (<u>INetConnection</u> netConnection) Set parent netConnection (future server to server communication)
void	<u>setOpen</u> (boolean isOpen) Set mediaStream open
void	<u>setPlay</u> (boolean isPlay) Set is the stream a play stream (vs a publish stream)
void	<u>setPlayer</u> (<u>IMediaStreamPlay</u> player) Set underlying player (IMediaStreamPlay) object
void	<u>setPublishAudioCodecId</u> (int publishAudioCodecId) Set the codec id of the most recently published audio packet
void	<u>setPublisherStream</u> (boolean isPublisherStream) Set stream was created by stream publisher.
void	<u>setPublishVideoCodecId</u> (int publishVideoCodecId) Set the codec id of the most recently published video packet
void	<u>setQueryStr</u> (String queryStr) Set play/publish name query string.
void	<u>setReceiveAudio</u> (boolean receiveAudio) Set receive audio
void	<u>setReceiveVideo</u> (boolean receiveVideo) Set receive video
void	<u>setReceiveVideoFPS</u> (int receiveVideoFPS) Set frame per second for video (not currently implemented)
void	<u>setRecord</u> (boolean isRecord) Set to true if second parameter of NetStream.publish is "record"
void	<u>setRTPStream</u> (<u>RTPStream</u> rtpStream) Set the RTP based stream this stream is associated with
void	<u>setSendPlayStopLogEvent</u> (boolean sendPlayStopLogEvent) Set need to send a log event for stop
void	<u>setSendPublishStopLogEvent</u> (boolean sendPlayStopLogEvent) Set need to send a log event for publishing
void	<u>setSendRecordStopLogEvent</u> (boolean sendPlayStopLogEvent) Set need to send a log event for recording
void	<u>setSrc</u> (int src) Set stream id
void	<u>setStreamType</u> (String streamType) Set mediaStream streamType.
void	<u>setTranscodeResult</u> (boolean isTranscodeResult) Is this stream the result of a transcode operation.

void	setVideoSize (int videoSize) Set the size of the current video packet that is being streamed from the client to the server
void	setVideoTC (long videoTC) Set last absolute video timecode (milliseconds) sent to mediaStream
void	setVideoTC (long videoTC, boolean isAbsolute) Set last absolute video timecode (milliseconds) sent to mediaStream
void	shutdown () shutdown or close this mediaStream
long	size () Get size (bytes) of media file pointed to by mediaStream
void	startAudioPacket () Called when an audio packet is first being populated with data
void	startDataPacket () Called when a data packet is first being populated with data
void	startPublishing () Start publishing live stream
void	startVideoPacket () Called when a video packet is first being populated with data
void	stopName (String name, String oldName, String ext, String queryStr, double playStart, double playLen, int playTransition) Stop stream name
void	stopPublishing () Stop publishing live stream
void	switchName (String name, String oldName, String ext, String queryStr, double playStart, double playLen, int playTransition) Switch to stream name
void	trim () Trim mediaStream.
void	unregisterCallback (String handlerName) Unregister a callback handler
void	unregisterOnPlayStatus (IMediaStreamCallback callback) Unregister onPlayStatus handler
void	unregisterOnStatus (IMediaStreamCallback callback) Unregister onStatus handler
void	updateLoggingDuration () Update logging.MDC with mediaStream logging information
void	updateLoggingValues () Update logging.MDC with mediaStream logging information

Fields

(continued from last page)

READACCESS

```
public static final int READACCESS
```

Constant value: 0

WRITEACCESS

```
public static final int WRITEACCESS
```

Constant value: 1

AUDIOSAMPLEACCESS

```
public static final int AUDIOSAMPLEACCESS
```

Constant value: 2

VIDEOSAMPLEACCESS

```
public static final int VIDEOSAMPLEACCESS
```

Constant value: 3

PUBLISH_BITRATE_SOURCE_MEASURE

```
public static final int PUBLISH_BITRATE_SOURCE_MEASURE
```

Constant value: 1

PUBLISH_BITRATE_SOURCE_METADATA

```
public static final int PUBLISH_BITRATE_SOURCE_METADATA
```

Constant value: 2

PUBLISH_FRAMERATE_SOURCE_MEASURE

```
public static final int PUBLISH_FRAMERATE_SOURCE_MEASURE
```

Constant value: 1

PUBLISH_FRAMERATE_SOURCE_METADATA

```
public static final int PUBLISH_FRAMERATE_SOURCE_METADATA
```

Constant value: 2

(continued from last page)

PACKET_COUNTS_AUDIO

```
public static final int PACKET_COUNTS_AUDIO
```

Constant value: **0**

PACKET_COUNTS_VIDEO

```
public static final int PACKET_COUNTS_VIDEO
```

Constant value: **1**

PACKET_COUNTS_VIDEOKEY

```
public static final int PACKET_COUNTS_VIDEOKEY
```

Constant value: **2**

PACKET_COUNTS_DATA

```
public static final int PACKET_COUNTS_DATA
```

Constant value: **3**

PACKET_COUNTS_SIZE

```
public static final int PACKET_COUNTS_SIZE
```

Constant value: **4**

Methods

init

```
public void init(MediaStreamMap parent,  
                int src,  
                WMSProperties properties)
```

Initialize the mediaStream object after creation. Creation and initialization are separated due to the order of the creation events.

Parameters:

parent - parent mediaStreamMap of the parent applicationInstance
src - stream id for this stream
properties - initial properties as defined in Streams.xml

getBufferTime

```
public int getBufferTime()
```

Get buffer time for mediaStream (milliseconds)

Returns:

buffer time (milliseconds)

setBufferTime

```
public void setBufferTime(int bufferTime)
```

Set buffer time for mediaStream (milliseconds)

Parameters:

bufferTime - buffer time (milliseconds)

isPlaying

```
public boolean isPlaying()
```

Is mediaStream playing (or paused - false)

Returns:

is playing

setIsPlaying

```
public void setIsPlaying(boolean isPlaying)
```

Set is mediaStream playing

Parameters:

isPlaying

getAudioSize

```
public int getAudioSize()
```

Get the size of the current audio packet that is being streamed from the client to the server

Returns:

size

getVideoSize

```
public int getVideoSize()
```

Get the size of the current video packet that is being streamed from the client to the server

Returns:

size

getDataSize

```
public int getDataSize()
```

Get the size of the current data packet that is being streamed from the client to the server

Returns:

size

setAudioSize

```
public void setAudioSize(int audioSize)
```

(continued from last page)

Set the size of the current audio packet that is being streamed from the client to the server

Parameters:

audioSize

setVideoSize

```
public void setVideoSize(int videoSize)
```

Set the size of the current video packet that is being streamed from the client to the server

Parameters:

videoSize

setDataSize

```
public void setDataSize(int dataSize)
```

Set the size of the current data packet that is being streamed from the client to the server

Parameters:

dataSize

addAudioExtraData

```
public void addAudioExtraData(java.util.Map extraData)
```

Add extra data to the current audio packet

Parameters:

extraData - extra data

addVideoExtraData

```
public void addVideoExtraData(java.util.Map extraData)
```

Add extra data to the current video packet

Parameters:

extraData - extra data

addDataExtraData

```
public void addDataExtraData(java.util.Map extraData)
```

Add extra data to the current data packet

Parameters:

extraData - extra data

getSrc

```
public int getSrc()
```

Get the stream id

Returns:

stream id

setSrc

```
public void setSrc(int src)
```

Set stream id

Parameters:

src - stream id

getName

```
public String getName()
```

Get stream name

Returns:

stream name

setName

```
public void setName(String name)
```

Set stream name

Parameters:

name - stream name

setName

```
public void setName(String name,  
String ext)
```

Set stream name and extension. Example: if play command sent flv:test name=test, ext=flv.

Parameters:

name - stream name

ext - stream extension

setName

```
public void setName(String name,  
String oldName,  
String ext,  
String queryStr,  
double playStart,  
double playLen,  
int playTransition)
```

Set stream name, extension, query string, play start, play len and play reset from play command.

Parameters:

name - stream name

oldName - old stream name

ext - stream extension

queryStr - query string

playStart - play start

playLen - play len

playTransition - play transition (see MediaBase.PLAYTRANSITION_*)

switchName

```
public void switchName(String name,  
    String oldName,  
    String ext,  
    String queryStr,  
    double playStart,  
    double playLen,  
    int playTransition)
```

Switch to stream name

Parameters:

name - stream name
oldName - old stream name
ext - stream extension
queryStr - query string
playStart - play start
playLen - play len
playTransition - play transition (see MediaBase.PLAYTRANSITION_*)

stopName

```
public void stopName(String name,  
    String oldName,  
    String ext,  
    String queryStr,  
    double playStart,  
    double playLen,  
    int playTransition)
```

Stop stream name

Parameters:

name - stream name
oldName - old stream name
ext - stream extension
queryStr - query string
playStart - play start
playLen - play len
playTransition - play transition (see MediaBase.PLAYTRANSITION_*)

shutdown

```
public void shutdown()
```

shutdown or close this mediaStream

getAudioTC

```
public long getAudioTC()
```

Get last absolute audio timecode (milliseconds) sent to mediaStream

Returns:

last absolute audio timecode (milliseconds)

(continued from last page)

setAudioTC

```
public void setAudioTC(long audioTC,  
    boolean isAbsolute)
```

Set last absolute audio timecode (milliseconds) sent to mediaStream

Parameters:

audioTC - timecode (milliseconds)

isAbsolute - is the timecode value relative to last timecode or absolute

setAudioTC

```
public void setAudioTC(long audioTC)
```

Set last absolute audio timecode (milliseconds) sent to mediaStream

Parameters:

audioTC - timecode (milliseconds)

getVideoTC

```
public long getVideoTC()
```

Get last absolute video timecode (milliseconds) sent to mediaStream

Returns:

last absolute video timecode (milliseconds)

setVideoTC

```
public void setVideoTC(long videoTC,  
    boolean isAbsolute)
```

Set last absolute video timecode (milliseconds) sent to mediaStream

Parameters:

videoTC - timecode (milliseconds)

isAbsolute - is the timecode value relative to last timecode or absolute

setVideoTC

```
public void setVideoTC(long videoTC)
```

Set last absolute video timecode (milliseconds) sent to mediaStream

Parameters:

videoTC - timecode (milliseconds)

getDataTC

```
public long getDataTC()
```

Get last absolute data timecode (milliseconds) sent to mediaStream

Returns:

last absolute data timecode (milliseconds)

(continued from last page)

setDataTC

```
public void setDataTC(long dataTC,  
    boolean isAbsolute)
```

Set last absolute data timecode (milliseconds) sent to mediaStream

Parameters:

dataTC - timecode (milliseconds)

isAbsolute - is the timecode value relative to last timecode or absolute

getDataType

```
public int getDataType()
```

Get the data packet type: (IVHost.CONTENTTYPE_DATA0 or IVHost.CONTENTTYPE_DATA3)

Returns:

data packet type

setDataType

```
public void setDataType(int dataType)
```

Set the data packet type: (IVHost.CONTENTTYPE_DATA0 or IVHost.CONTENTTYPE_DATA3)

Parameters:

dataType - data packet type

setDataTC

```
public void setDataTC(long dataTC)
```

Set last absolute data timecode (milliseconds) sent to mediaStream

Parameters:

dataTC - timecode (milliseconds)

isRecord

```
public boolean isRecord()
```

Is set to true if second parameter of NetStream.publish is "record"

Returns:

is true if second parameter of NetStream.publish is "record"

setRecord

```
public void setRecord(boolean isRecord)
```

Set to true if second parameter of NetStream.publish is "record"

Parameters:

isRecord - true if second parameter of NetStream.publish is "record"

(continued from last page)

isPlay

```
public boolean isPlay()
```

Is the stream a play stream (vs a publish stream)

Returns:

is play stream (has nothing to do with if its playing just that its play vs publish)

setPlay

```
public void setPlay(boolean isPlay)
```

Set is the stream a play stream (vs a publish stream)

Parameters:

isPlay - is play stream (has nothing to do with if its playing just that its play vs publish)

idle

```
public boolean idle()
```

Allow the mediaStream to perform idle work (not currently in use)

Returns:

true if it did some work

getClientId

```
public int getClientId()
```

Get parent client connection (id)

Returns:

parent client connection (id)

getClient

```
public IClient getClient()
```

Get parent client connection

Returns:

parent client connection

getNetConnection

```
public INetConnection getNetConnection()
```

Get parent netConnection (future server to server communication)

Returns:

parent netConnection connection

setNetConnection

```
public void setNetConnection(INetConnection netConnection)
```

(continued from last page)

Set parent netConnection (future server to server communication)

Parameters:

netConnection - netConnection connection

setClient

```
public void setClient(IClient client)
```

Set parent client connection

Parameters:

client - parent client connection

getStreams

```
public MediaStreamMap getStreams()
```

Get parent mediaStreamMap (owned by applicationInstance)

Returns:

parent mediaStreamMap

packetComplete

```
public void packetComplete()
```

Invoked by requestAdapter when at the end of a set of packets

sendStreamNotFound

```
public int sendStreamNotFound(String name)
```

Send onStatus(NetStream.Play.StreamNotFound) event

Parameters:

name - stream name

Returns:

bytes sent to client

sendStreamNotFound

```
public int sendStreamNotFound(java.io.OutputStream out,  
String name)
```

Send onStatus(NetStream.Play.StreamNotFound) event. Send directly to OutputStream.

Parameters:

out - OutputStream

name - stream name

Returns:

bytes sent to client

(continued from last page)

sendLivePlayStart

```
public int sendLivePlayStart(java.io.OutputStream out,  
    String name,  
    long timecode,  
    long timecodeOffset)
```

Send onStatus(NetStream.Play.Start) event

Parameters:

out - OutputStream
name - stream name
timecode - timecode
timecodeOffset - timecode offset

Returns:

bytes sent to client

sendVODPlaySwitch

```
public int sendVODPlaySwitch(java.io.OutputStream out,  
    String name,  
    long timecode)
```

Send onStatus(NetStream.Play.Transition) event

Parameters:

out - OutputStream
name - stream name
timecode - timecode

Returns:

bytes sent to client

sendLivePlaySwitch

```
public int sendLivePlaySwitch(java.io.OutputStream out,  
    String name,  
    long timecode)
```

Send onStatus(NetStream.Play.Transition) event

Parameters:

out - OutputStream
name - stream name
timecode - timecode

Returns:

bytes sent to client

sendLivePlaySeek

```
public int sendLivePlaySeek(java.io.OutputStream out,  
    String name,  
    long timecode)
```

Send onStatus(NetStream.Seek.Notify) event

Parameters:

out - OutputStream

(continued from last page)

name - stream name
timecode - timecode

Returns:

bytes sent to client

sendPlayReset

```
public int sendPlayReset(String name)
```

Send onStatus(NetStream.Play.Reset) event

Parameters:

name - stream name

Returns:

bytes sent to client

sendPlayReset

```
public int sendPlayReset(java.io.OutputStream out,  
String name)
```

Send onStatus(NetStream.Play.Reset) event. Send directly to OutputStream.

Parameters:

out - OutputStream
name - stream name

Returns:

bytes sent to client

sendPlayStop

```
public int sendPlayStop(long location,  
String name)
```

Send onStatus(NetStream.Play.Stop) event

Parameters:

location - timecode where play stopped
name - stream name

Returns:

bytes sent to client

sendPlayStop

```
public int sendPlayStop(java.io.OutputStream out,  
long location,  
String name)
```

Send onStatus(NetStream.Play.Stop) event. Send directly to OutputStream

Parameters:

out - OutputStream
location - timecode where play stopped
name - stream name

(continued from last page)

Returns:

bytes sent to client

sendPlaySeek

```
public int sendPlaySeek(java.io.OutputStream out,  
    long location,  
    long seekLocation,  
    String name,  
    java.util.List seekTypes)
```

Send onStatus(NetStream.Seek.Notify) event.

Parameters:

out - OutputStream
location - request location of seek
seekLocation - result location of seek
name - stream name
seekTypes - list of commands to respond to (seek, unpause, play)

Returns:

bytes sent to client

sendPlaySeek

```
public int sendPlaySeek(long location,  
    long seekLocation,  
    String name)
```

Send onStatus(NetStream.Seek.Notify) event.

Parameters:

location - request location of seek
seekLocation - result location of seek
name - stream name

Returns:

bytes sent to client

sendPlaySeek

```
public int sendPlaySeek(java.io.OutputStream out,  
    long location,  
    long seekLocation,  
    String name)
```

Send onStatus(NetStream.Seek.Notify) event. Send directly to OutputStream

Parameters:

out - OutputStream
location - request location of seek
seekLocation - result location of seek
name - stream name

Returns:

bytes sent to client

(continued from last page)

sendPlayStart

```
public int sendPlayStart(String name,  
    long timecode)
```

Send onStatus(NetStream.Play.Start) event

Parameters:

name - stream name

Returns:

bytes sent to client

sendPlaySwitch

```
public int sendPlaySwitch(String name,  
    long timecode)
```

Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch).

Parameters:

name - stream name

timecode - timecode of event

Returns:

bytes sent to client

sendPlaySwitch

```
public int sendPlaySwitch(java.io.OutputStream out,  
    String name,  
    boolean isSwitch,  
    long timecode)
```

Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch). Send directly to OutputStream

Parameters:

out - OutputStream

name - stream name

isSwitch - is this a switch or a start

timecode - timecode of event

Returns:

bytes sent to client

sendPlayStart

```
public int sendPlayStart(java.io.OutputStream out,  
    String name,  
    boolean isSwitch,  
    boolean isLive,  
    long timecode,  
    java.util.List seekTypes)
```

Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch). Send directly to OutputStream

Parameters:

out - OutputStream

(continued from last page)

name - stream name
isSwitch - is this a switch or a start
isLive - is the stream live
timecode - timecode of event
seekTypes - commands to respond to (seek, unpause, play)

sendPlayStart

```
public int sendPlayStart(java.io.OutputStream out,  
    String name,  
    boolean isSwitch,  
    long timecode,  
    java.util.List seekTypes)
```

Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch). Send directly to OutputStream

Parameters:

out - OutputStream
name - stream name
isSwitch - is this a switch or a start
timecode - timecode of event
seekTypes - commands to respond to (seek, unpause, play)

Returns:

bytes sent to client

sendPlayStart

```
public int sendPlayStart(java.io.OutputStream out,  
    String name,  
    boolean isSwitch,  
    long timecode)
```

Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch). Send directly to OutputStream

Parameters:

out - OutputStream
name - stream name
isSwitch - is this a switch or a start
timecode - timecode of event

Returns:

bytes sent to client

sendPlayStatus

```
public int sendPlayStatus(long timecode,  
    int statusType,  
    double duration,  
    double bytesSent)
```

Send onPlayStatus(NetStream.Play.Switch, NetStream.Play.Complete, NetStream.Play.Stop) event

Parameters:

timecode - timecode of event
statusType - status type IMediaStreamPlay.PLAYSTATUSTYPE_*
duration - (not used)
bytesSent - (not used)

(continued from last page)

Returns:

bytes sent to client

sendPlayStatus

```
public int sendPlayStatus(java.io.OutputStream out,  
    long timecode,  
    int statusType,  
    double duration,  
    double bytesSent)
```

Send onPlayStatus(NetStream.Play.Switch, NetStream.Play.Complete, NetStream.Play.Stop) event. Send directly to OutputStream.

Parameters:

out - OutputStream
timecode - timecode of event
statusType - status type IMediaStreamPlay.PLAYSTATUSTYPE_*
duration - (not used)
bytesSent - (not used)

Returns:

bytes sent to client

sendPauseNotify

```
public int sendPauseNotify(long timecode,  
    String name)
```

Send onStatus(NetStream.Pause.Notify) event

Parameters:

timecode - timecode of event
name - stream name

Returns:

bytes sent to client

sendPauseNotify

```
public int sendPauseNotify(java.io.OutputStream out,  
    long timecode,  
    String name)
```

Send onStatus(NetStream.Pause.Notify) event. Send directly to OutputStream.

Parameters:

out - OutputStream
timecode - timecode of event
name - stream name

Returns:

bytes sent to client

sendUnpauseNotify

```
public int sendUnpauseNotify(java.io.OutputStream out,  
    long location,  
    String name,  
    java.util.List seekTypes)
```

(continued from last page)

Send onStatus(NetStream.Unpause.Notify) event

Parameters:

out - OutputStream
location - timecode of event
name - stream name
seekTypes - list of operations to respond to (seek, play, unpause)

Returns:

bytes sent to client

sendUnpauseNotify

```
public int sendUnpauseNotify(long location,  
    String name)
```

Send onStatus(NetStream.Unpause.Notify) event

Parameters:

location - timecode of event
name - stream name

Returns:

bytes sent to client

sendUnpauseNotify

```
public int sendUnpauseNotify(java.io.OutputStream out,  
    long location,  
    String name)
```

Send onStatus(NetStream.Unpause.Notify) event. Send directly to OutputStream.

Parameters:

out - OutputStream
location - timecode of event
name - stream name

Returns:

bytes sent to client

isAppend

```
public boolean isAppend()
```

Is append to media file (only valid if isRecord)

Returns:

is appending or rewriting media file

setAppend

```
public void setAppend(boolean isAppend)
```

Set is append to media file (only valid if isRecord)

Parameters:

isAppend - is appending or rewriting media file

setPlayer

```
public void setPlayer(IMediaStreamPlay player)
```

Set underlying player (IMediaStreamPlay) object

Parameters:

player - underlying player (IMediaStreamPlay) object

getPlayer

```
public IMediaStreamPlay getPlayer()
```

Get underlying player (IMediaStreamPlay) object

Returns:

underlying player (IMediaStreamPlay) object

getAudioMissing

```
public int getAudioMissing()
```

Get number of audio bytes missing from current audio packet

Returns:

number of bytes missing

getVideoMissing

```
public int getVideoMissing()
```

Get number of video bytes missing from current video packet

Returns:

number of bytes missing

getDataMissing

```
public int getDataMissing()
```

Get number of data bytes missing from current data packet

Returns:

number of bytes missing

addVideoData

```
public void addVideoData(byte[] data,  
    int offset,  
    int size)
```

Add data to current video packet

Parameters:

data - byte array

offset - offset in byte array

size - size of data to add

addAudioData

```
public void addAudioData(byte[] data,  
    int offset,  
    int size)
```

Add data to current audio packet

Parameters:

data - byte array
offset - offset in byte array
size - size of data to add

addDataData

```
public void addDataData(byte[] data,  
    int offset,  
    int size)
```

Add data to current data packet

Parameters:

data - byte array
offset - offset in byte array
size - size of data to add

getProperties

```
public WMSProperties getProperties()
```

Get mediaStream properties

Returns:

properties

getPlayPackets

```
public java.util.List getPlayPackets()
```

Get all available live packets

Returns:

play packets

getMaxTimecode

```
public long getMaxTimecode()
```

Get the timecode of the latest received packet

Returns:

timecode of the latest received packet

getLastKeyFrame

```
public AMFPacket getLastKeyFrame()
```

Get most recent video key frame

(continued from last page)

Returns:
play packets

getLastPacket

```
public AMFPacket getLastPacket()
```

Get most recent live packet

Returns:
most recent live packet or null or no live packets

getStreamType

```
public String getStreamType()
```

Get mediaStream streamType

Returns:
streamType

setStreamType

```
public void setStreamType(String streamType)
```

Set mediaStream streamType. This method will not change the type of the current stream.

Parameters:
streamType

sendDirectAMF3

```
public void sendDirectAMF3(String handlerName,  
    Object[] params)
```

Call client side NetStream method/handler and send event to underlying stream (will record event). Force AMF3 encoding.

Parameters:
handlerName - handler name
params - variable list of parameters. All parameters will be wrapped in AMFDataObj.

sendDirect

```
public void sendDirect(String handlerName,  
    Object[] params)
```

Call client side NetStream method/handler and send event to underlying stream (will record event)

Parameters:
handlerName - handler name
params - variable list of parameters. All parameters will be wrapped in AMFDataObj.

sendDirectAMF3

```
public void sendDirectAMF3(String handlerName)
```

Call client side NetStream method/handler and send event to underlying stream (will record event). Force AMF3 encoding.

(continued from last page)

Parameters:

handlerName - handler name

sendDirect

```
public void sendDirect(String handlerName)
```

Call client side NetStream method/handler and send event to underlying stream (will record event)

Parameters:

handlerName - handler name

sendAMF3

```
public void sendAMF3(String handlerName,  
    Object[] params)
```

Call client side NetStream method/handler. Force AMF3 encoding.

Parameters:

handlerName - handler name

params - variable list of parameters. All parameters will be wrapped in AMFDataObj.

send

```
public void send(String handlerName,  
    Object[] params)
```

Call client side NetStream method/handler

Parameters:

handlerName - handler name

params - variable list of parameters. All parameters will be wrapped in AMFDataObj.

sendAMF3

```
public void sendAMF3(String handlerName)
```

Call client side NetStream method/handler with no parameters. Force AMF3 encoding.

Parameters:

handlerName - handler name

send

```
public void send(String handlerName)
```

Call client side NetStream method/handler with no parameters

Parameters:

handlerName - handler name

close

```
public void close()
```

Close mediaStream

(continued from last page)

isOpen

```
public boolean isOpen()
```

Is mediaStream open

Returns:

is mediaStream open

setOpen

```
public void setOpen(boolean isOpen)
```

Set mediaStream open

Parameters:

isOpen - mediaStream open

getFastPlaySettings

```
public FastPlaySettings getFastPlaySettings()
```

Get current fastPlay settings

Returns:

fastPlay settings

setFastPlaySettings

```
public void setFastPlaySettings(FastPlaySettings fastPlaySettings)
```

Set fastPlay settings

Parameters:

fastPlaySettings - fastPlay settings

clearFastPlaySettings

```
public void clearFastPlaySettings()
```

Clear fastPlay settings

isReceiveAudio

```
public boolean isReceiveAudio()
```

Is client currently receiving audio. Controlled by client side call receiveAudio.

Returns:

receive audio

setReceiveAudio

```
public void setReceiveAudio(boolean receiveAudio)
```

Set receive audio

Parameters:

(continued from last page)

receiveAudio - receive audio

isReceiveVideo

```
public boolean isReceiveVideo()
```

Is client currently receiving video. Controlled by client side call receiveVideo

Returns:

receive video

setReceiveVideo

```
public void setReceiveVideo(boolean receiveVideo)
```

Set receive video

Parameters:

receiveVideo - receive video

getReceiveVideoFPS

```
public int getReceiveVideoFPS()
```

Set frame per seconds for video (not currently implemented)

Returns:

video frames per second

setReceiveVideoFPS

```
public void setReceiveVideoFPS(int receiveVideoFPS)
```

Set frame per second for video (not currently implemented)

Parameters:

receiveVideoFPS - video frames per second

getMediaIOPerformance

```
public IOPerformanceCounter getMediaIOPerformance()
```

Get IO performance counter

Returns:

IO performance counter

incrementMediaOutBytes

```
public long incrementMediaOutBytes(long bytes,  
    long count)
```

Increment the number of mediaStream bytes sent and number of packets sent

Parameters:

bytes - number of bytes sent
count - number of packets sent

Returns:

(continued from last page)

total number of bytes sent (after increment)

incrementMediaLossBytes

```
public long incrementMediaLossBytes(long bytes,  
                                     long count)
```

Increment the number of mediaStream loss bytes sent and number of packets sent

Parameters:

bytes - number of bytes sent
count - number of packets sent

Returns:

total number of bytes sent (after increment)

incrementMediaInBytes

```
public long incrementMediaInBytes(long increment)
```

Increment the number of mediaStream bytes received

Parameters:

increment - number of byte received

Returns:

total number of bytes received (after increment)

publish

```
public void publish()
```

Publish mediaStream

trim

```
public void trim()
```

Trim mediaStream. This method will remove live packets that are older than the live buffer size.

handleCallback

```
public void handleCallback(com.wowza.wms.request.RequestFunction function)
```

Routes request function to callback handler onStatus, onPlayStatus or [method/handler]

Parameters:

function - request function

unregisterCallback

```
public void unregisterCallback(String handlerName)
```

Unregister a callback handler

Parameters:

handlerName - handler name

registerCallback

```
public void registerCallback(String handlerName,  
    IMediaStreamCallback callback)
```

Register a callback handler

Parameters:

handlerName - handler name
callback - callback object

unregisterOnStatus

```
public void unregisterOnStatus(IMediaStreamCallback callback)
```

Unregister onStatus handler

Parameters:

callback

registerOnStatus

```
public void registerOnStatus(IMediaStreamCallback callback)
```

Register onStatus handler

Parameters:

callback - callback object

unregisterOnPlayStatus

```
public void unregisterOnPlayStatus(IMediaStreamCallback callback)
```

Unregister onPlayStatus handler

Parameters:

callback - callback object

registerOnPlayStatus

```
public void registerOnPlayStatus(IMediaStreamCallback callback)
```

Register onPlayStatus handler

Parameters:

callback - callback object

addClientListener

```
public void addClientListener(IMediaStreamActionNotify actionListener)
```

Add client listener. Listens for (onPlay, onPublish, onPause, onSeek, onStop)

Parameters:

actionListener - listener

(continued from last page)

addClientListener

```
public void addClientListener(IMediaStreamActionNotify2 actionListener)
```

Add client listener. Listens for (onPlay, onPublish, onPause, onSeek, onStop)

Parameters:

actionListener - listener

addClientListener

```
public void addClientListener(IMediaStreamActionNotify3 actionListener)
```

Add client listener. Listens for (onPlay, onPublish, onPause, onSeek, onStop)

Parameters:

actionListener - listener

removeClientListener

```
public void removeClientListener(IMediaStreamActionNotify actionListener)
```

Remove client listener. Listens for (onPlay, onPublish, onPause, onSeek, onStop)

Parameters:

actionListener - listener

removeClientListener

```
public void removeClientListener(IMediaStreamActionNotify2 actionListener)
```

Remove client listener. Listens for (onPlay, onPublish, onPause, onSeek, onStop)

Parameters:

actionListener - listener

removeClientListener

```
public void removeClientListener(IMediaStreamActionNotify3 actionListener)
```

Remove client listener. Listens for (onPlay, onPublish, onPause, onSeek, onStop)

Parameters:

actionListener - listener

notifyActionPlay

```
public void notifyActionPlay(String streamName,  
    double playStart,  
    double playLen,  
    int playReset)
```

Notify client listeners of play action

Parameters:

streamName - stream name

playStart - play start

playLen - play length

playReset - play reset

notifyActionPauseRaw

```
public void notifyActionPauseRaw(boolean isPause,  
    long location)
```

Notify client listeners of pauseRaw action

Parameters:

isPause - is pause or unpause
location - timecode (milliseconds) of action

notifyActionPause

```
public void notifyActionPause(boolean isPause,  
    long location)
```

Notify client listeners of pause action

Parameters:

isPause - is pause or unpause
location - timecode (milliseconds) of action

notifyActionSeek

```
public void notifyActionSeek(double location)
```

Notify client listeners of seek action

Parameters:

location - timecode (milliseconds) of seek request

notifyActionPublish

```
public void notifyActionPublish(String streamName,  
    boolean isRecord,  
    boolean isAppend)
```

Notify client listeners of publish action

Parameters:

streamName - stream name
isRecord - is record or live
isAppend - is append if isRecord is true

notifyActionUnPublish

```
public void notifyActionUnPublish(String streamName,  
    boolean isRecord,  
    boolean isAppend)
```

Notify client listeners of unpublish action

Parameters:

streamName - stream name
isRecord - is record or live
isAppend - is append if isRecord is true

(continued from last page)

notifyActionOnMetaData

```
public void notifyActionOnMetaData(AMFPacket metaDataPacket)
```

Notify client listeners of onMetaData change

Parameters:

metaDataPacket - metaDataPacket

notifyActionOnCodecInfoVideo

```
public void notifyActionOnCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo)
```

Notify client listeners of video codec information change

Parameters:

codecInfoVideo - video codec information

notifyActionOnCodecInfoAudio

```
public void notifyActionOnCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
codecInfoAudio)
```

Notify client listeners of audio codec information change

Parameters:

codecInfoAudio - audio codec information

notifyActionStop

```
public void notifyActionStop()
```

Notify client listeners of stop action

isClustered

```
public boolean isClustered()
```

not used

Returns:

isClustered

setClustered

```
public void setClustered(boolean isClustered)
```

not used

Parameters:

isClustered

getCacheName

```
public String getCacheName()
```

not used

(continued from last page)

Returns:
cache name

startPublishing

```
public void startPublishing()
```

Start publishing live stream

stopPublishing

```
public void stopPublishing()
```

Stop publishing live stream

getStreamFileForWrite

```
public java.io.File getStreamFileForWrite()
```

Get the File object to write to a stream (get stream name, ext and query from stream object)

Returns:
resultant File object

getStreamFileForWrite

```
public java.io.File getStreamFileForWrite(String name,  
String ext,  
String query)
```

Get the File object to write to a stream (specify name, ext and query)

Parameters:
name - stream name
ext - stream prefix (Ex. mp4:)
query - query part of stream name (Ex. mystream?param1=value1)

Returns:
resultant File object

getStreamFileForRead

```
public java.io.File getStreamFileForRead()
```

Get the File object to read from a stream (get stream name, ext and query from stream object)

Returns:
resultant File object

getStreamFileForRead

```
public java.io.File getStreamFileForRead(String name,  
String ext,  
String query)
```

Get the File object to read from a stream (specify name, ext and query)

Parameters:
name - stream name

(continued from last page)

ext - stream prefix (Ex. mp4:)

query - query part of stream name (Ex. mystream?param1=value1)

Returns:

resultant File object

sendControlBytes

```
public int sendControlBytes(int controlType,  
    java.io.OutputStream out)
```

Send playback control bytes. Valid values are (0, 1, 4)

Parameters:

controlType - control types (0, 1, 4)

out - OutputStream

Returns:

bytes sent to client

getBurstStartStop

```
public byte[] getBurstStartStop(boolean isStart)
```

Get the dynamic streaming burst start/stop AMF packet

Parameters:

isStart - is start

Returns:

byte array with AMF packet

getRespAMFAudioObj

```
public AMFObj getRespAMFAudioObj()
```

Get audio response channel object

Returns:

audio response channel object

getRespAMFVideoObj

```
public AMFObj getRespAMFVideoObj()
```

Get video response channel object

Returns:

video response channel object

getRespAMFDataObj

```
public AMFObj getRespAMFDataObj()
```

Get data response channel object

Returns:

data response channel object

getQueryStr

```
public String getQueryStr()
```

Get play/publish name query string. Example: if play name is flv:test?param1=data1¶m2=data2, query string is "param1=data1¶m2=data2".

Returns:

query string

setQueryStr

```
public void setQueryStr(String queryStr)
```

Set play/publish name query string. Example: if play name is flv:test?param1=data1¶m2=data2, query string is "param1=data1¶m2=data2".

Parameters:

queryStr

updateLoggingDuration

```
public void updateLoggingDuration()
```

Update logging.MDC with mediaStream logging information

updateLoggingValues

```
public void updateLoggingValues()
```

Update logging.MDC with mediaStream logging information

clearLoggingValues

```
public void clearLoggingValues()
```

length

```
public double length()
```

Get length/duration (seconds) of media file pointed to by mediaStream

Returns:

length (seconds)

size

```
public long size()
```

Get size (bytes) of media file pointed to by mediaStream

Returns:

size (bytes)

(continued from last page)

getExt

```
public String getExt()
```

Get media file extension

Returns:

media file extension

setExt

```
public void setExt(String ext)
```

Set media file extension

Parameters:

ext

clear

```
public void clear()
```

Delete media file pointed to by this mediaStream (be careful)

isSendPlayStopLogEvent

```
public boolean isSendPlayStopLogEvent()
```

Get need to send a log event for stop

Returns:

need to send a log event for stop

setSendPlayStopLogEvent

```
public void setSendPlayStopLogEvent(boolean sendPlayStopLogEvent)
```

Set need to send a log event for stop

Parameters:

sendPlayStopLogEvent - need to send a log event for stop

isSendRecordStopLogEvent

```
public boolean isSendRecordStopLogEvent()
```

Get need to send a log event for recording

Returns:

need to send a log event for stop

setSendRecordStopLogEvent

```
public void setSendRecordStopLogEvent(boolean sendPlayStopLogEvent)
```

Set need to send a log event for recording

Parameters:

(continued from last page)

sendPlayStopLogEvent - need to send a log event for stop

isSendPublishStopLogEvent

```
public boolean isSendPublishStopLogEvent()
```

Get need to send a log event for publishing

Returns:

need to send a log event for stop

setSendPublishStopLogEvent

```
public void setSendPublishStopLogEvent(boolean sendPlayStopLogEvent)
```

Set need to send a log event for publishing

Parameters:

sendPlayStopLogEvent - need to send a log event for stop

getAccess

```
public boolean[] getAccess(IClient client,  
String name)
```

Get the read/write access to this stream for this client

Parameters:

client - client
name - stream name

Returns:

array of booleans read[0], write[1]

getMetaDataProvider

```
public IMediaStreamMetaDataProvider getMetaDataProvider()
```

Get the metaData provider

Returns:

metaData provider

setMetaDataProvider

```
public void setMetaDataProvider(IMediaStreamMetaDataProvider metaDataProvider)
```

Set the metaData provider

Parameters:

metaDataProvider - metaData provider

getHeaderSize

```
public int getHeaderSize()
```

Get the last packet header size (debugging)

Returns:

(continued from last page)

last packet header size

setHeaderSize

```
public void setHeaderSize(int headerSize)
```

Set the last packet header size (debugging)

Parameters:

headerSize - last packet header size

getAudioCodecConfigPacket

```
public AMFPacket getAudioCodecConfigPacket(long timecode)
```

Get audio codec configuration packet (needed for H.264/AAC playback)

Parameters:

timecode - timecode of the packet to which you want to get the codec config information

Returns:

audio codec configuration packet (needed for H.264/AAC playback)

addAudioCodecConfigPacket

```
public void addAudioCodecConfigPacket(long timecode,  
AMFPacket packet)
```

Set audio codec configuration packet (needed for H.264/AAC playback)

Parameters:

timecode - timecode in milliseconds of first packet that uses this timecode
packet - audio codec configuration packet (needed for H.264/AAC playback)

getVideoCodecConfigPacket

```
public AMFPacket getVideoCodecConfigPacket(long timecode)
```

Get video codec configuration packet (needed for H.264/AAC playback)

Parameters:

timecode - timecode of the packet to which you want to get the codec config information

Returns:

video codec configuration packet (needed for H.264/AAC playback)

addVideoCodecConfigPacket

```
public void addVideoCodecConfigPacket(long timecode,  
AMFPacket packet)
```

Set video codec configuration packet (needed for H.264/AAC playback)

Parameters:

timecode - timecode in milliseconds of first packet that uses this timecode
packet - video codec configuration packet (needed for H.264/AAC playback)

(continued from last page)

getRTPStream

```
public RTPStream getRTPStream( )
```

Get the RTP based stream this stream is associated with

Returns:

RTP based stream this stream is associated with

setRTPStream

```
public void setRTPStream(RTPStream rtpStream)
```

Set the RTP based stream this stream is associated with

Parameters:

rtpStream - RTP based stream this stream is associated with

flush

```
public void flush( )
```

Force publishing packets to be flushed from the input buffers to the output buffers

startAudioPacket

```
public void startAudioPacket( )
```

Called when an audio packet is first being populated with data

startVideoPacket

```
public void startVideoPacket( )
```

Called when a video packet is first being populated with data

startDataPacket

```
public void startDataPacket( )
```

Called when a data packet is first being populated with data

getLiveStreamPacketizerList

```
public String getLiveStreamPacketizerList( )
```

Get the comma separated list of LiveStreamPacketizers names being used by this stream (see conf/LiveStreamPacketizers.xml)

Returns:

comma separated list of LiveStreamPacketizers names

setLiveStreamPacketizerList

```
public void setLiveStreamPacketizerList(String liveStreamPacketizerList)
```

Set the comma separated list of LiveStreamPacketizers names being used by this stream (see conf/LiveStreamPacketizers.xml)

Parameters:

(continued from last page)

liveStreamPacketizerList - comma separated list of LiveStreamPacketizers names

getLiveStreamTranscoderList

```
public String getLiveStreamTranscoderList()
```

Get the comma separated list of LiveStreamTranscoders names being used by this stream (see conf/LiveStreamTranscoders.xml)

Returns:

comma separated list of LiveStreamTranscoders names

setLiveStreamTranscoderList

```
public void setLiveStreamTranscoderList(String liveStreamTranscoderList)
```

Set the comma separated list of LiveStreamTranscoders names being used by this stream (see conf/LiveStreamTranscoders.xml)

Parameters:

liveStreamTranscoderList - comma separated list of LiveStreamTranscoders names

getLiveStreamPacketizer

```
public ILiveStreamPacketizer getLiveStreamPacketizer(String name)
```

Get the LiveStreamPacketizer interface to a stream by name

Parameters:

name - LiveStreamPacketizer name

Returns:

LiveStreamPacketizer interface

getDvrRecorderList

```
public String getDvrRecorderList()
```

Get the comma separated list of DVR Recorder names being used by this stream (see conf/Dvr.xml)

Returns:

comma separated list of DVR Recorder names

setDvrRecorderList

```
public void setDvrRecorderList(String recorderList)
```

Set the comma separated list of DVR Recorder names being used by this stream (see conf/Dvr.xml)

Parameters:

recorderList - comma separated list of DVR Recorder names

getDvrRecorder

```
public ILiveStreamDvrRecorder getDvrRecorder(String name)
```

Get the DVR Recorder interface to a stream by name

Parameters:

(continued from last page)

name - DVR Recorder name

Returns:

DVR Recorder interface

getUniqueStreamIdStr

```
public String getUniqueStreamIdStr()
```

Get a string that uniquely identifies this stream

Returns:

unique stream identifier

getHTTPStreamerSession

```
public IHTTPStreamerSession getHTTPStreamerSession()
```

Get the HTTPStreamer session associated with this stream

Returns:

HTTPStreamer session associated with this stream

setHTTPStreamerSession

```
public void setHTTPStreamerSession(IHTTPStreamerSession httpStreamerSession)
```

Set the HTTPStreamer session associated with this stream

Parameters:

httpStreamerSession - HTTPStreamer session associated with this stream

getElapsedTime

```
public ElapsedTimer getElapsedTime()
```

Get the interface to the elapse timer

Returns:

interface to the elapse timer

getLiveStreamPacketizer

```
public String getLiveStreamPacketizer()
```

Get the live stream packetizer that this stream is using

Returns:

live stream packetizer

setLiveStreamPacketizer

```
public void setLiveStreamPacketizer(String liveStreamPacketizer)
```

Set the live stream packetizer that this stream is using

Parameters:

liveStreamPacketizer - live stream packetizer

getLiveStreamRepeater

```
public String getLiveStreamRepeater()
```

Get the live stream repeater name for the stream

Returns:

live stream repeater name

setLiveStreamRepeater

```
public void setLiveStreamRepeater(String liveStreamRepeater)
```

Set the live stream repeater name for the stream

Parameters:

liveStreamRepeater - live stream repeater name

initLiveStreamRepeating

```
public void initLiveStreamRepeating(String liveStreamPacketizer,  
String liveStreamRepeater)
```

Initialize this stream for live stream repeating

Parameters:

liveStreamPacketizer - live stream packetizer

liveStreamRepeater - live stream repeater name

getPublishVideoCodecId

```
public int getPublishVideoCodecId()
```

Get the codec id of the most recently published video packet

Returns:

codec id of the most recently published video packet

setPublishVideoCodecId

```
public void setPublishVideoCodecId(int publishVideoCodecId)
```

Set the codec id of the most recently published video packet

Parameters:

publishVideoCodecId - codec id of the most recently published video packet

getPublishAudioCodecId

```
public int getPublishAudioCodecId()
```

Get the codec id of the most recently published audio packet

Returns:

codec id of the most recently published audio packet

(continued from last page)

setPublishAudioCodecId

```
public void setPublishAudioCodecId(int publishAudioCodecId)
```

Set the codec id of the most recently published audio packet

Parameters:

publishAudioCodecId - codec id of the most recently published audio packet

isPublishStreamReady

```
public boolean isPublishStreamReady(boolean checkAudio,  
    boolean checkVideo)
```

Returns true if the publishing stream contains enough video/audio data to start playback

Parameters:

checkAudio - check audio stream

checkVideo - check video stream

Returns:

true if the publishing stream contains enough video/audio data to start playback

getContextStr

```
public String getContextStr()
```

Returns the stream context string in the form [application]/[appInstance]/[streamName].

Returns:

stream context string

isMediaCasterPlay

```
public boolean isMediaCasterPlay()
```

Is MediaCaster play enabled (if true, will trigger MediaCaster startup)

Returns:

true if MediaCaster play enabled

setMediaCasterPlay

```
public void setMediaCasterPlay(boolean isMediaCasterPlay)
```

Is MediaCaster play enabled (if true, will trigger MediaCaster startup)

Parameters:

isMediaCasterPlay - true if MediaCaster play enabled

isMergeOnMetadata

```
public boolean isMergeOnMetadata()
```

If true, merge incoming onMetadata events with the current onMetadata event data. If false, replace.

Returns:

true, merge incoming onMetadata events with the current onMetadata event data. If false, replace.

setMergeOnMetadata

```
public void setMergeOnMetadata(boolean mergeOnMetadata)
```

If true, merge incoming onMetadata events with the current onMetadata event data. If false, replace.

Parameters:

mergeOnMetadata - true, merge incoming onMetadata events with the current onMetadata event data. If false, replace.

getDvrRecorder

```
public String getDvrRecorder()
```

Get the DVR Recorder for this stream

Returns:

DVR Recorder

getDvrRepeater

```
public String getDvrRepeater()
```

Get the DVR repeater name for this stream

Returns:

repeater name

setDvrRecorder

```
public void setDvrRecorder(String recorderName)
```

Set the DVR Recorder that this stream is using

Parameters:

recorderName - DVR Recorder

removeDvrRecorder

```
public ILiveStreamDvrRecorder removeDvrRecorder(String name)
```

Remove a live stream dvr by name

Parameters:

name - dvr name

Returns:

live stream dvr

putDvrRecorder

```
public void putDvrRecorder(String name,  
    ILiveStreamDvrRecorder dvr)
```

Add a live stream dvr to this stream

Parameters:

name - dvr name
dvr - live stream dvr

getLiveStreamTranscoders

```
public java.util.Map getLiveStreamTranscoders()
```

Get the list of transcoders for this stream.

Returns:

list of transcoders for this stream

getLiveStreamTranscoder

```
public ILiveStreamTranscoder getLiveStreamTranscoder(String name)
```

Get a live stream transcoder for this stream by name

Parameters:

name - transcoder name

Returns:

live stream transcoder

removeLiveStreamTranscoder

```
public ILiveStreamTranscoder removeLiveStreamTranscoder(String name)
```

Remove a live stream transcoder by name

Parameters:

name - transcoder name

Returns:

live stream transcoder

putLiveStreamTranscoder

```
public void putLiveStreamTranscoder(String name,  
    ILiveStreamTranscoder liveStreamTranscoder)
```

Add a live stream transcoder to this stream

Parameters:

name - transcoder name

liveStreamTranscoder - live stream transcoder

isTranscodeResult

```
public boolean isTranscodeResult()
```

Is this stream the result of a transcode operation.

Returns:

true if stream the result of a transcode operation

setTranscodeResult

```
public void setTranscodeResult(boolean isTranscodeResult)
```

Is this stream the result of a transcode operation.

(continued from last page)

Parameters:

isTranscodeResult - true if stream the result of a transcode operation

addVideoH264SEIListener

```
public void addVideoH264SEIListener(IMediaStreamH264SEINotify h264SEIListener)
```

Add an H.264 SEI listener. This listener will be notified of all incoming H.264 video packets and has the ability to read and/or modify SEI section of the video frame.

Parameters:

h264SEIListener - H.264 SEI listener

removeVideoH264SEIListener

```
public void removeVideoH264SEIListener(IMediaStreamH264SEINotify h264SEIListener)
```

Remove an H.264 SEI listener. This listener will be notified of all incoming H.264 video packets and has the ability to read and/or modify SEI section of the video frame.

Parameters:

h264SEIListener - H.264 SEI listener

isVideoH264SEIListenerEmpty

```
public boolean isVideoH264SEIListenerEmpty()
```

Is H.264 SEI listener list empty. This listener will be notified of all incoming H.264 video packets and has the ability to read and/or modify SEI section of the video frame.

Returns:

true if H.264 SEI listener list empty

notifyVideoH264Packet

```
public void notifyVideoH264Packet(AMFPacket packet,  
com.wowza.wms.media.h264.H264SEIMessages seiMessages)
```

Notify H.264 SEI listener.

Parameters:

packet - AMF Packet
seiMessages - seiMessages

addCallbackListener

```
public void addCallbackListener(IMediaStreamCallback callbackListener)
```

Add a callback listener to listen for all stream metadata

Parameters:

callbackListener

removeCallbackListener

```
public void removeCallbackListener(IMediaStreamCallback callbackListener)
```

Remove a callback listener to listen for all stream metadata

(continued from last page)

Parameters:

callbackListener

addLivePacketListener

```
public void addLivePacketListener(IMediaStreamLivePacketNotify listener)
```

Add a listener to receiver notification of new live AMF packets

Parameters:

listener - listener

removeLivePacketListener

```
public void removeLivePacketListener(IMediaStreamLivePacketNotify listener)
```

Remove a listener to receiver notification of new live AMF packets

Parameters:

listener - listener

notifyLivePacket

```
public void notifyLivePacket(AMFPacket packet)
```

Notify new live AMF packet

Parameters:

packet - new live AMF packet

isPublisherStream

```
public boolean isPublisherStream()
```

Returns true if stream was created by stream publisher API.

Returns:

true if stream was created by stream publisher API

setPublisherStream

```
public void setPublisherStream(boolean isPublisherStream)
```

Set stream was created by stream publisher.

Parameters:

isPublisherStream - true if stream was created by stream publisher API

getPublishFrameCounts

```
public long getPublishFrameCounts(long[] counts)
```

Get the total number of frames received for an incoming live stream. See `PACKET_COUNTS_*` for the index into the array. The array passed in should be `PACKET_COUNTS_SIZE`.

Returns:

total total number of frames received (audio + video + data)

getPublishFrameCountVideoKey

```
public long getPublishFrameCountVideoKey()
```

Get the total number of video key frames received for an incoming live stream.

Returns:

total number of video key frames received

getPublishFrameCountVideo

```
public long getPublishFrameCountVideo()
```

Get the total number of video frames received for an incoming live stream.

Returns:

total number of video frames received

getPublishFrameCountAudio

```
public long getPublishFrameCountAudio()
```

Get the total number of audio frames received for an incoming live stream.

Returns:

total number of audio frames received

getPublishFrameCountData

```
public long getPublishFrameCountData()
```

Get the total number of data frames received for an incoming live stream.

Returns:

total number of data frames received

getPublishBitrateVideo

```
public int getPublishBitrateVideo()
```

Get the video bitrate of an incoming live published stream (bits per second). Value of -1 indicates still measuring bandwidth. Value of 0 indicates the stream does not contain video.

Returns:

video bitrate of an incoming live published stream (bits per second)

getPublishFramerateVideo

```
public double getPublishFramerateVideo()
```

Get the video framerate of an incoming live published stream (frames per second). Value of -1 indicates still measuring bandwidth. Value of 0 indicates the stream does not contain video.

Returns:

video framerate

(continued from last page)

getPublishKeyFrameIntervalsVideo

```
public int[] getPublishKeyFrameIntervalsVideo()
```

Get the last n key frame intervals for an incoming publish stream (frames per GOP), Most recent GOPs are first in the list. -1 indicates the end of the list.

Returns:

last n key frame intervals for an incoming publish stream (frames per GOP)

getPublishBitrateAudio

```
public int getPublishBitrateAudio()
```

Get the audio bitrate of an incoming live published stream (bits per second). Value of -1 indicates still measuring bandwidth. Value of 0 indicates the stream does not contain audio.

Returns:

audio bitrate of an incoming live published stream (bits per second)

getPublishBitrateVideo

```
public int getPublishBitrateVideo(int source)
```

Get the video bitrate of an incoming live published stream (bits per second). Value of -1 indicates still measuring bandwidth. Value of 0 indicates the stream does not contain video.

Parameters:

source - source of bitrate (see IMediaStream.PUBLISH_BITRATE_SOURCE_*)

Returns:

video bitrate of an incoming live published stream (bits per second)

getPublishFramerateVideo

```
public double getPublishFramerateVideo(int source)
```

Get the video bitrate of an incoming live published stream (bits per second). Value of -1 indicates still measuring bandwidth. Value of 0 indicates the stream does not contain video.

Parameters:

source - source source of framerate (see IMediaStream.PUBLISH_FRAMERATE_SOURCE_*)

Returns:

video frame rate

getPublishBitrateAudio

```
public int getPublishBitrateAudio(int source)
```

Get the audio bitrate of an incoming live published stream (bits per second). Value of -1 indicates still measuring bandwidth. Value of 0 indicates the stream does not contain audio.

Parameters:

source - source of bitrate (see IMediaStream.PUBLISH_BITRATE_SOURCE_*)

Returns:

audio bitrate of an incoming live published stream (bits per second)

com.wowza.wms.stream Interface IMediaStreamActionNotify

All Subinterfaces:

[IMediaStreamActionNotify2](#), [IMediaStreamActionNotify3](#)

All Known Implementing Classes:

[MediaStreamActionNotifyBase](#)

public interface **IMediaStreamActionNotify**
extends

IMediaStreamActionNotify: listener interface used by IMediaStream addClientListener

Method Summary

void	onPause (IMediaStream stream, boolean isPause, double location) Triggered on mediaStream pause
void	onPlay (IMediaStream stream, String streamName, double playStart, double playLen, int playReset) Triggered on mediaStream play
void	onPublish (IMediaStream stream, String streamName, boolean isRecord, boolean isAppend) Triggered on mediaStream publish
void	onSeek (IMediaStream stream, double location) Triggered on mediaStream seek
void	onStop (IMediaStream stream) Triggered on mediaStream stop
void	onUnPublish (IMediaStream stream, String streamName, boolean isRecord, boolean isAppend) Triggered on mediaStream unpublish

Methods

onPlay

```
public void onPlay(IMediaStream stream,
    String streamName,
    double playStart,
    double playLen,
    int playReset)
```

Triggered on mediaStream play

Parameters:

stream - mediaStream
streamName - streamName
playStart - playStart offset
playLen - playLen

(continued from last page)

playReset - reset playlist

onPublish

```
public void onPublish(IMediaStream stream,
    String streamName,
    boolean isRecord,
    boolean isAppend)
```

Triggered on mediaStream publish

Parameters:

stream - mediaStream
streamName - streamName
isRecord - recording stream
isAppend - appending to file

onUnPublish

```
public void onUnPublish(IMediaStream stream,
    String streamName,
    boolean isRecord,
    boolean isAppend)
```

Triggered on mediaStream unpublish

Parameters:

stream - mediaStream
streamName - streamName
isRecord - recording stream
isAppend - appending to file

onPause

```
public void onPause(IMediaStream stream,
    boolean isPause,
    double location)
```

Triggered on mediaStream pause

Parameters:

stream - mediaStream
isPause - pause or unpause
location - location (milliseconds)

onSeek

```
public void onSeek(IMediaStream stream,
    double location)
```

Triggered on mediaStream seek

Parameters:

stream - mediaStream
location - location (milliseconds)

onStop

```
public void onStop(IMediaStream stream)
```

(continued from last page)

Triggered on mediaStream stop

Parameters:

stream - mediaStream

com.wowza.wms.stream Interface IMediaStreamActionNotify2

All Superinterfaces:

[IMediaStreamActionNotify](#)

All Subinterfaces:

[IMediaStreamActionNotify3](#)

All Known Implementing Classes:

[MediaStreamActionNotifyBase](#)

public interface **IMediaStreamActionNotify2**
extends [IMediaStreamActionNotify](#)

Method Summary

void	onMetaData (IMediaStream stream, AMFPacket metaDataPacket) Triggered when a published streams metadata is set or changes
void	onPauseRaw (IMediaStream stream, boolean isPause, double location) Triggered on mediaStream pauseRaw.

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify](#)

[onPause](#), [onPlay](#), [onPublish](#), [onSeek](#), [onStop](#), [onUnPublish](#)

Methods

onMetaData

```
public void onMetaData(IMediaStream stream,
    AMFPacket metaDataPacket)
```

Triggered when a published streams metadata is set or changes

onPauseRaw

```
public void onPauseRaw(IMediaStream stream,
    boolean isPause,
    double location)
```

Triggered on mediaStream pauseRaw. The pauseRaw method is called when a pause occurs in the player.

Parameters:

stream - mediaStream
isPause - pause or unpause
location - location (milliseconds)

com.wowza.wms.stream Interface IMediaStreamActionNotify3

All Superinterfaces:

[IMediaStreamActionNotify2](#), [IMediaStreamActionNotify](#)

All Known Implementing Classes:

[MediaStreamActionNotifyBase](#), [MediaStreamActionNotify3Base](#)

public interface **IMediaStreamActionNotify3**
extends [IMediaStreamActionNotify2](#)

Method Summary

void	onCodecInfoAudio (IMediaStream stream, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio) Triggered when publishing stream receives codec information.
void	onCodecInfoVideo (IMediaStream stream, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo) Triggered when publishing stream receives codec information.

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify2](#)

[onMetaData](#), [onPauseRaw](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify](#)

[onPause](#), [onPlay](#), [onPublish](#), [onSeek](#), [onStop](#), [onUnPublish](#)

Methods

onCodecInfoVideo

```
public void onCodecInfoVideo(IMediaStream stream,  
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
```

Triggered when publishing stream receives codec information.

Parameters:

stream - mediaStream
codecInfoVideo - video codec information

onCodecInfoAudio

```
public void onCodecInfoAudio(IMediaStream stream,  
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
```

Triggered when publishing stream receives codec information.

Parameters:

stream - mediaStream

(continued from last page)

codecInfoAudio - video codec information

com.wowza.wms.stream Interface IMediaStreamCallback

public interface **IMediaStreamCallback**
extends

IMediaStreamCallback: callback interface used by IMediaStream registerCallback, registerOnStatus, registerOnPlayStatus

Method Summary

void	<code>onCallback(IMediaStream stream, com.wowza.wms.request.RequestFunction function, AMFDataList params)</code> Triggered on callback event
------	---

Methods

onCallback

```
public void onCallback(IMediaStream stream,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Triggered on callback event

Parameters:

stream - mediaStream
function - function that triggered callback
params - function parameters

com.wowza.wms.stream Interface IMediaStreamFileMapper

public interface **IMediaStreamFileMapper**
extends

Interface for mapping a IMediaStream to the underlying file system. Implement this interface and set your class using `IApplicationInstance.setStreamFileMapper(IMediaStreamFileMapper streamFileMapper)`. Your class will then be called each time a stream needs to be mapped to the underlying file system.

Method Summary

java.io.File	streamToFileForRead(IMediaStream stream) Get the File object to read from a stream (get stream name, ext and query from stream object)
java.io.File	streamToFileForRead(IMediaStream stream, String name, String ext, String query) Get the File object to read from a stream (specify name, ext and query)
java.io.File	streamToFileForWrite(IMediaStream stream) Get the File object to write to a stream (get stream name, ext and query from stream object)
java.io.File	streamToFileForWrite(IMediaStream stream, String name, String ext, String query) Get the File object to write to a stream (specify name, ext and query)

Methods

streamToFileForRead

```
public java.io.File streamToFileForRead(IMediaStream stream,
    String name,
    String ext,
    String query)
```

Get the File object to read from a stream (specify name, ext and query)

Parameters:

stream - stream
name - stream name
ext - stream prefix (Ex. mp4:)
query - query part of stream name (Ex. mystream?param1=value1)

Returns:

resultant File object

streamToFileForRead

```
public java.io.File streamToFileForRead(IMediaStream stream)
```

Get the File object to read from a stream (get stream name, ext and query from stream object)

Parameters:

(continued from last page)

stream - stream

Returns:

resultant File object

streamToFileForWrite

```
public java.io.File streamToFileForWrite(IMediaStream stream,  
    String name,  
    String ext,  
    String query)
```

Get the File object to write to a stream (specify name, ext and query)

Parameters:

stream - stream

name - stream name

ext - stream prefix (Ex. mp4:)

query - query part of stream name (Ex. mystream?param1=value1)

Returns:

resultant File object

streamToFileForWrite

```
public java.io.File streamToFileForWrite(IMediaStream stream)
```

Get the File object to write to a stream (get stream name, ext and query from stream object)

Parameters:

stream - stream

Returns:

resultant File object

com.wowza.wms.stream
Interface IMediaStreamH264SEINotify

public interface **IMediaStreamH264SEINotify**
extends

Method Summary

void	onVideoH264Packet (IMediaStream stream, AMFPacket packet, com.wowza.wms.media.h264.H264SEIMessages seiMessages)
------	--

Methods**onVideoH264Packet**

public void **onVideoH264Packet**([IMediaStream](#) stream,
[AMFPacket](#) packet,
[com.wowza.wms.media.h264.H264SEIMessages](#) seiMessages)

com.wowza.wms.stream Interface IMediaStreamLivePacketNotify

All Known Implementing Classes:

[MediaStreamLivePacketNotifyBase](#)

public interface **IMediaStreamLivePacketNotify**
extends

Method Summary

void	onLivePacket (IMediaStream stream, AMFPacket packet)
------	---

Methods

onLivePacket

public void **onLivePacket**([IMediaStream](#) stream,
[AMFPacket](#) packet)

com.wowza.wms.stream
Interface IMediaStreamMediaCaster

public interface **IMediaStreamMediaCaster**
extends

IMediaStreamMediaCaster: Internal use

Method Summary

IMediaCaster	getMediaCaster()
void	setMediaCasterItem(MediaCasterItem mediaCasterItem)

Methods

setMediaCasterItem

public void **setMediaCasterItem**([MediaCasterItem](#) mediaCasterItem)

getMediaCaster

public [IMediaCaster](#) **getMediaCaster**()

com.wowza.wms.stream Interface IMediaStreamMetaDataProvider

public interface **IMediaStreamMetaDataProvider**
extends

IMediaStreamMetaDataProvider: Live streaming metadata provider.

Method Summary

void	onStreamStart (java.util.List metaDataList, long timecode) Called to get the onMetadata data at a particular point in time in the stream
------	---

Methods

onStreamStart

```
public void onStreamStart(java.util.List metaDataList,  
                           long timecode)
```

Called to get the onMetadata data at a particular point in time in the stream

Parameters:

metaDataList - list of onMetadata data (should always be one item in list)
timecode - timecode in milliseconds

com.wowza.wms.stream Interface IMediaStreamNameAliasProvider

All Subinterfaces:

[IMediaStreamNameAliasProvider2](#)

All Known Implementing Classes:

[MediaStreamNameAliasProviderBase](#)

public interface **IMediaStreamNameAliasProvider**
extends

IMediaStreamNameAliasProvider: alias provider interface. See [IApplication.setStreamNameAliasProvider\(IMediaStreamNameAliasProvider streamNameAliasProvider\)](#). See updated interface [IMediaStreamNameAliasProvider2](#) which provides more complete context information.

Method Summary

String	resolvePlayAlias (IApplicationInstance appInstance, String name) Called to resolve a play alias
String	resolveStreamAlias (IApplicationInstance appInstance, String name) Called to resolve a stream alias

Methods

resolvePlayAlias

public String **resolvePlayAlias**([IApplicationInstance](#) appInstance, String name)

Called to resolve a play alias

Parameters:

appInstance - applicationInstance
name - stream name

Returns:

resultant name, null if want to block playback

resolveStreamAlias

public String **resolveStreamAlias**([IApplicationInstance](#) appInstance, String name)

Called to resolve a stream alias

Parameters:

appInstance - applicationInstance
name - stream name

Returns:

(continued from last page)

resultant name, null if want to block playback

com.wowza.wms.stream Interface IMediaStreamNameAliasProvider2

All Superinterfaces:

[IMediaStreamNameAliasProvider](#)

All Known Implementing Classes:

[MediaStreamNameAliasProviderBase](#)

public interface **IMediaStreamNameAliasProvider2**
extends [IMediaStreamNameAliasProvider](#)

IMediaStreamNameAliasProvider: alias provider interface. See
IApplication.setStreamNameAliasProvider(IMediaStreamNameAliasProvider streamNameAliasProvider).

Method Summary

String	resolvePlayAlias (IApplicationInstance appInstance, String name, IClient client) Resolve play alias for RTMP streaming
String	resolvePlayAlias (IApplicationInstance appInstance, String name, IHTTPStreamerSession httpSession) Resolve play alias for HTTP streaming.
String	resolvePlayAlias (IApplicationInstance appInstance, String name, ILiveStreamPacketizer liveStreamPacketizer) Resolve play alias for live stream packetizer
String	resolvePlayAlias (IApplicationInstance appInstance, String name, RTPSession rtpSession) Resolve play alias for RTSP/RTP streaming
String	resolveStreamAlias (IApplicationInstance appInstance, String name, IMediaCaster mediaCaster) Resolve stream alias for MediaCaster

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamNameAliasProvider](#)

[resolvePlayAlias](#), [resolveStreamAlias](#)

Methods

resolvePlayAlias

```
public String resolvePlayAlias(IApplicationInstance appInstance,
    String name,
    IClient client)
```

Resolve play alias for RTMP streaming

Parameters:

appInstance - application instance
name - stream name

(continued from last page)

client - client interface

Returns:

resultant name, null if want to block playback

resolvePlayAlias

```
public String resolvePlayAlias(IApplicationInstance appInstance,  
    String name,  
    IHTTPStreamerSession httpSession)
```

Resolve play alias for HTTP streaming. This callback may be called when there is not a valid HTTP session. In this case a phantom HTTP session will be created and will be populated with information from the underlying HTTP request (such as IP address and query string) but the session Id will be null.

Parameters:

appInstance - application instance
name - name
httpSession - HTTP session

Returns:

resultant name, null if want to block playback

resolvePlayAlias

```
public String resolvePlayAlias(IApplicationInstance appInstance,  
    String name,  
    RTPSession rtpSession)
```

Resolve play alias for RTSP/RTP streaming

Parameters:

appInstance - application instance
name - name
rtpSession - RTP session

Returns:

resultant name, null if want to block playback

resolvePlayAlias

```
public String resolvePlayAlias(IApplicationInstance appInstance,  
    String name,  
    ILiveStreamPacketizer liveStreamPacketizer)
```

Resolve play alias for live stream packetizer

Parameters:

appInstance - application instance
name - name
liveStreamPacketizer - live stream packetizer

Returns:

resultant name, null if want to block playback

resolveStreamAlias

```
public String resolveStreamAlias(IApplicationInstance appInstance,  
    String name,  
    IMediaCaster mediaCaster)
```

(continued from last page)

Resolve stream alias for MediaCaster

Parameters:

appInstance - application instance
name - name
mediaCaster - media caster

Returns:

resultant name, null if want to block playback

com.wowza.wms.stream Interface IMediaStreamNotify

public interface **IMediaStreamNotify**
extends

IMediaStreamNotify: listener interface used by IApplicationInstance addMediaStreamListener

Method Summary

void	onMediaStreamCreate (IMediaStream stream) Triggered when mediaStream created
void	onMediaStreamDestroy (IMediaStream stream) Triggered when mediaStream destroyed

Methods

onMediaStreamCreate

public void **onMediaStreamCreate**([IMediaStream](#) stream)

Triggered when mediaStream created

Parameters:

stream - mediaStream

onMediaStreamDestroy

public void **onMediaStreamDestroy**([IMediaStream](#) stream)

Triggered when mediaStream destroyed

Parameters:

stream - mediaStream

com.wowza.wms.stream Interface IMediaStreamPlay

public interface **IMediaStreamPlay**
extends

IMediaStreamPlay: public interface of mediaStreamPlayer object.

Field Summary	
public static final	PAUSE_PAUSE Pause type: pause Value: 1
public static final	PAUSE_PLAY Pause type: play Value: 0
public static final	PAUSE_TOGGLE Pause type: toggle Value: -1
public static final	PLAYSIZES_AUDIO_BYTES IMediaReader sizes array: audio byte count Value: 0
public static final	PLAYSIZES_AUDIO_COUNT IMediaReader sizes array: audio packet count Value: 1
public static final	PLAYSIZES_DATA_BYTES IMediaReader sizes array: data byte count Value: 4
public static final	PLAYSIZES_DATA_COUNT IMediaReader sizes array: data packet count Value: 5
public static final	PLAYSIZES_LOSS_BYTES IMediaReader sizes array: data byte count Value: 6
public static final	PLAYSIZES_LOSS_COUNT IMediaReader sizes array: data packet count Value: 7
public static final	PLAYSIZES_SIZE IMediaReader sizes array: size of sizes array long[PLAYSIZES_SIZE] Value: 8
public static final	PLAYSIZES_VIDEO_BYTES IMediaReader sizes array: video byte count Value: 2

public static final	PLAYSIZES_VIDEO_COUNT IMediaReader sizes array: video packet count Value: 3
public static final	PLAYSTATUSTYPE_COMPLETE onPlayStatus type: complete Value: 2
public static final	PLAYSTATUSTYPE_STOP onPlayStatus type: stop Value: 3
public static final	PLAYSTATUSTYPE_SWITCH onPlayStatus type: switch Value: 1

Method Summary

void	close() Close mediaStreamPlay
IMediaStream	getParent() Get the parent media stream object
void	init(IMediaStream parent, MediaStreamMap streams) Initialize mediaStreamPlayer
void	initLiveStreamRepeating(String liveStreamPacketizer, String liveStreamRepeater) Initialize this stream for live stream repeating
void	interruptPlay() Interrupt play to perform operation.
double	length() Get stream length/seconds (seconds)
void	pause(int pauseType, long timecode) pause mediaPlayStream
void	pauseRaw(int pauseType, long timecode) pauseRaw mediaPlayStream
boolean	play() Return true if there are packets to play
int	play(java.io.OutputStream out, AMFObj wmsObjAudio, AMFObj wmsObjVideo, AMFObj wmsObjData, long[] sizes) Write new packets or play packets
void	reset(boolean isReset) Reset mediaStreamPlayer
void	resetNoLookup() Reset but do not lookup current position in live stream
void	seek(int location) seek mediaPlayStream

void	<u>setBufferTime</u> (int bufferTime) Set buffer time
void	<u>setName</u> (String name, String oldName, String ext, String queryStr, double playStart, double playLen, int playTransition) Set mediaPlayStream name, extension, query string, play start, play len, play reset
void	<u>shutdown</u> () Shutdown mediaStreamPlayer
long	<u>size</u> () Get stream media file size
void	<u>startPlay</u> () Start playing stream
void	<u>stopName</u> (String name, String oldName, String ext, String queryStr, double playStart, double playLen, int playTransition) Stop stream name
void	<u>switchName</u> (String name, String oldName, String ext, String queryStr, double playStart, double playLen, int playTransition) Switch to stream name
void	<u>switchPlay</u> ()
void	<u>updateLoggingValues</u> () Update internal logging values

Fields

PAUSE_PAUSE

```
public static final int PAUSE_PAUSE
```

Pause type: pause
Constant value: **1**

PAUSE_TOGGLE

```
public static final int PAUSE_TOGGLE
```

Pause type: toggle
Constant value: **-1**

PAUSE_PLAY

```
public static final int PAUSE_PLAY
```

Pause type: play
Constant value: **0**

PLAYSTATUSTYPE_SWITCH

```
public static final int PLAYSTATUSTYPE_SWITCH
```

onPlayStatus type: switch

(continued from last page)

Constant value: **1**

PLAYSTATUSTYPE_COMPLETEpublic static final int **PLAYSTATUSTYPE_COMPLETE**onPlayStatus type: complete
Constant value: **2**

PLAYSTATUSTYPE_STOPpublic static final int **PLAYSTATUSTYPE_STOP**onPlayStatus type: stop
Constant value: **3**

PLAYSIZES_AUDIO_BYTESpublic static final int **PLAYSIZES_AUDIO_BYTES**IMediaReader sizes array: audio byte count
Constant value: **0**

PLAYSIZES_AUDIO_COUNTpublic static final int **PLAYSIZES_AUDIO_COUNT**IMediaReader sizes array: audio packet count
Constant value: **1**

PLAYSIZES_VIDEO_BYTESpublic static final int **PLAYSIZES_VIDEO_BYTES**IMediaReader sizes array: video byte count
Constant value: **2**

PLAYSIZES_VIDEO_COUNTpublic static final int **PLAYSIZES_VIDEO_COUNT**IMediaReader sizes array: video packet count
Constant value: **3**

PLAYSIZES_DATA_BYTESpublic static final int **PLAYSIZES_DATA_BYTES**IMediaReader sizes array: data byte count
Constant value: **4**

PLAYSIZES_DATA_COUNTpublic static final int **PLAYSIZES_DATA_COUNT**IMediaReader sizes array: data packet count
Constant value: **5**

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PLAYSIZES_LOSS_BYTES

```
public static final int PLAYSIZES_LOSS_BYTES
```

IMediaReader sizes array: data byte count
Constant value: **6**

PLAYSIZES_LOSS_COUNT

```
public static final int PLAYSIZES_LOSS_COUNT
```

IMediaReader sizes array: data packet count
Constant value: **7**

PLAYSIZES_SIZE

```
public static final int PLAYSIZES_SIZE
```

IMediaReader sizes array: size of sizes array long[PLAYSIZES_SIZE]
Constant value: **8**

Methods

init

```
public void init(IMediaStream parent,  
                MediaStreamMap streams)
```

Initialize mediaStreamPlayer

Parameters:

parent - parent mediaStream object
streams - parent mediaStreamMap

shutdown

```
public void shutdown()
```

Shutdown mediaStreamPlayer

reset

```
public void reset(boolean isReset)
```

Reset mediaStreamPlayer

Parameters:

isReset - is this a playlist reset or addition, true if reset

resetNoLookup

```
public void resetNoLookup()
```

Reset but do not lookup current position in live stream

(continued from last page)

play

```
public int play(java.io.OutputStream out,  
    AMFObj wmsObjAudio,  
    AMFObj wmsObjVideo,  
    AMFObj wmsObjData,  
    long[] sizes)
```

Write new packets or play packets

Parameters:

out - OutputStream
wmsObjAudio - audio response channel
wmsObjVideo - video response channel
wmsObjData - data response channel
sizes - sizes array. See IMediaStreamPlay.PLAYSIZES_*

Returns:

total byte output

play

```
public boolean play()
```

Return true if there are packets to play

Returns:

true if packets to play

seek

```
public void seek(int location)
```

seek mediaPlayStream

Parameters:

location - timecode (milliseconds)

pause

```
public void pause(int pauseType,  
    long timecode)
```

pause mediaPlayStream

Parameters:

pauseType - pause type. See IMediaStreamPlay.PAUSE_*
timecode - timecode (milliseconds)

pauseRaw

```
public void pauseRaw(int pauseType,  
    long timecode)
```

pauseRaw mediaPlayStream

Parameters:

pauseType - pause type. See IMediaStreamPlay.PAUSE_*
timecode - timecode (milliseconds)

setBufferTime

```
public void setBufferTime(int bufferTime)
```

Set buffer time

Parameters:

bufferTime

setName

```
public void setName(String name,  
    String oldName,  
    String ext,  
    String queryStr,  
    double playStart,  
    double playLen,  
    int playTransition)
```

Set mediaPlayStream name, extension, query string, play start, play len, play reset

Parameters:

name - stream name

oldName - old stream name

ext - extension

queryStr - query string

playStart - play start

playLen - play len

playTransition - play reset

switchName

```
public void switchName(String name,  
    String oldName,  
    String ext,  
    String queryStr,  
    double playStart,  
    double playLen,  
    int playTransition)
```

Switch to stream name

Parameters:

name - stream name

oldName - old stream name

ext - stream extension

queryStr - query string

playStart - play start

playLen - play len

playTransition - play transition (see MediaBase.PLAYTRANSITION_*)

stopName

```
public void stopName(String name,  
    String oldName,  
    String ext,  
    String queryStr,  
    double playStart,  
    double playLen,  
    int playTransition)
```

(continued from last page)

Stop stream name

Parameters:

name - stream name
oldName - old stream name
ext - stream extension
queryStr - query string
playStart - play start
playLen - play len
playTransition - play transition (see MediaBase.PLAYTRANSITION_*)

close

```
public void close()
```

Close mediaStreamPlay

interruptPlay

```
public void interruptPlay()
```

Interrupt play to perform operation. Usually for seek or pause.

startPlay

```
public void startPlay()
```

Start playing stream

switchPlay

```
public void switchPlay()
```

updateLoggingValues

```
public void updateLoggingValues()
```

Update internal logging values

length

```
public double length()
```

Get stream length/seconds (seconds)

Returns:

length/duration (seconds)

size

```
public long size()
```

Get stream media file size

Returns:

media file size

getParent

```
public IMediaStream getParent()
```

Get the parent media stream object

Returns:

parent media stream object

initLiveStreamRepeating

```
public void initLiveStreamRepeating(String liveStreamPacketizer,  
    String liveStreamRepeater)
```

Initialize this stream for live stream repeating

Parameters:

liveStreamPacketizer - live stream packetizer

liveStreamRepeater - live stream repeater name

com.wowza.wms.stream
Interface IMediaStreamTimecodeControl

public interface **IMediaStreamTimecodeControl**
extends

IMediaStreamTimecodeControl: Internal use.

Method Summary

void	resetTimecodes()
------	----------------------------------

Methods

resetTimecodes

public void **resetTimecodes**()

com.wowza.wms.stream Interface IMediaWriter

public interface **IMediaWriter**
extends

IMediaWriter: generic media writer interface. The flv recording system using this interface to persist .flv data captured from the Flash client. These classes are referenced in [\[install-dir\]/conf/MediaWriters.xml](#).

Example IMediaWriter implementation: MediaWriterFLVBasic

This is a basic IMediaWriter implementation that can handle record and append.

```
import java.io.*;
import java.nio.ByteBuffer;
import java.util.*;

import com.wowza.util.*;
import com.wowza.wms.stream.*;
import com.wowza.wms.amf.AMFData;
import com.wowza.wms.logging.*;

public class MediaWriterFLV implements IMediaWriter
{
    private IMediaStream parent = null;
    private MediaWriterItem mediaWriterItem = null;
    private long[] currentTCs = new long[3];
    private long duration = 0;
    private Map extraMetadata = new HashMap();
    private boolean versionFile = false;

    public void setMediaWriterItem(MediaWriterItem mediaWriterItem)
    {
        this.mediaWriterItem = mediaWriterItem;
    }

    public void setParent(IMediaStream parent)
    {
        this.parent = parent;
    }

    public void writePackets(List audioPackets, List videoPackets,
        List dataPackets, List audioTCs, List videoTCs, List dataTCs, List
dataTypes,
        boolean isFirst, boolean isLast)
    {
        File newFile = this.parent.getStreamFile();

        boolean localAppend = this.parent.isAppend();

        if (isFirst)
        {
            long startTC = 0;
            if (newFile.exists())
            {
                if (localAppend)
                    startTC = FLVUtils.getLastTC(newFile);
                else
                {
                    if (versionFile)
                        FileUtils.versionFile(newFile);
                    else
                    {
                        try
```



```

        {
            newFile.delete();
        }
        catch (Exception e)
        {
        }
    }
}
else
    localAppend = false;

this.currentTCs[FLVUtils.FLV_TCINDEXAUDIO] = startTC;
this.currentTCs[FLVUtils.FLV_TCINDEXVIDEO] = startTC;
this.currentTCs[FLVUtils.FLV_TCINDEXDATA] = startTC;
}
else
    localAppend = true;

try
{
    if (newFile.getParentFile() == null)

WMSLoggerFactory.getLogger(MediaWriterFLV.class).warn("MediaWriterFLV: File path does not
exist: "+newFile.getPath());
        else if (!newFile.getParentFile().exists())

WMSLoggerFactory.getLogger(MediaWriterFLV.class).warn("MediaWriterFLV: Folder does not exist:
"+newFile.getParentFile().getPath());
        else if (newFile.exists() && !newFile.canWrite())

WMSLoggerFactory.getLogger(MediaWriterFLV.class).warn("MediaWriterFLV: Cannot write to file
(permission error): "+newFile.getPath());

        FileOutputStream ds = new FileOutputStream(newFile, localAppend);

        if (isFirst)
        {
            if (!localAppend)
            {
                FLVUtils.writeHeader(ds, 0.0, extraMetadata);

                boolean writeZeroPacket = true;
                while(true)
                {
                    if (audioPackets.size() == 0)
                        break;

                    ByteBuffer data =
(ByteBuffer)audioPackets.get(0);

                    long tcA = ((Long)audioTCs.get(0)).longValue();

```

```
        if (tcA == 0 && data.limit() == 0)
            writeZeroPacket = false;

        break;
    }

    if (writeZeroPacket)
    {
        FLVUtils.writeChunk(ds, null, 0,
this.currentTCs[FLVUtils.FLV_TCINDEXAUDIO],
                                                                    (byte) 0x08); //
write zero length audio block
    }
}

    FLVUtils.writePackets(ds, audioPackets, videoPackets, dataPackets,
        audioTCs, videoTCs, dataTCs, dataTypes, currentTCs);

    ds.flush();
    ds.close();
}
catch (Exception e)
{
    WMSLoggerFactory.getLogger(MediaWriterFLV.class).error(
        "MediaWriterFLV: Error writing to file:
"+newFile.getPath()+" :"+e.toString());
    e.printStackTrace();
}

    if (isLast)
    {
        duration = Math.max(Math.max(currentTCs[FLVUtils.FLV_TCINDEXAUDIO],
            currentTCs[FLVUtils.FLV_TCINDEXVIDEO]),
            currentTCs[FLVUtils.FLV_TCINDEXDATA]);
        double durationSecs = ((double)duration) / 1000.0;

        FLVUtils.writeDuration(newFile, durationSecs);
    }
}

public Map getExtraMetadata()
{
    return extraMetadata;
}

public void setExtraMetadata(Map extraMetadata)
{
    this.extraMetadata = extraMetadata;
}
```

```
    }

    public boolean isVersionFile()
    {
        return versionFile;
    }

    public void setVersionFile(boolean versionFile)
    {
        this.versionFile = versionFile;
    }

    public void putMetaData(String name, AMFData value)
    {
        this.extraMetadata.put(name, value);
    }
}
```

To use this class, edit [install-dir]/conf/MediaWriter and replace the definition for the **flv** MediaWriter:

```
<MediaWriter>
  <Name>flv</Name>
  <Description>FLV Media Writer</Description>
  <FileExtension>flv</FileExtension>
  <ClassBase>com.wowza.wms.plugin.mediawriter.flv.MediaWriterFLVBasic</ClassBase>
</MediaWriter>
```

Example IMediaWriter implementation: MediaWriterFLVMetadata

This example illustrates how to write custom metadata into the recorded flv file on the fly.

```
public class MediaWriterFLVMetadata implements IMediaWriter
{
    private IMediaStream parent = null;
    private MediaWriterItem mediaWriterItem = null;
    private long[] currentTCs = new long[3];
    private long duration = 0;
    private File tmpFile = null;
    private Map extraMetadata = new HashMap();
    private boolean versionFile = false;

    public void setMediaWriterItem(MediaWriterItem mediaWriterItem)
    {
        this.mediaWriterItem = mediaWriterItem;
    }

    public void setParent(IMediaStream parent)
    {
        this.parent = parent;
    }

    public void writePackets(List audioPackets, List videoPackets,
        List dataPackets, List audioTCs, List videoTCs, List dataTCs,
        boolean isFirst, boolean isLast)
    {
        File newFile = this.parent.getStreamFile();
        try
        {
            if (tmpFile == null)
                tmpFile = File.createTempFile("wowza", "flv");
        }
        catch (Exception e)
        {
            WMSLoggerFactory.getLogger(MediaWriterFLVBasic.class).error(
                "MediaWriterFLVMetadata: Error createTempFile: "+
                tmpFile+" :"+e.toString());
        }

        boolean localAppend = this.parent.isAppend();
        if (isFirst)
        {
            AMFDataArray keyFrames = null;

            long startTC = 0;
            if (newFile.exists())
            {
                if (localAppend)
                {
                    startTC = FLVUtils.getLastTC(newFile);
                    keyFrames = getKeyFrames(newFile);
                    copyPacketsToTmpFile(newFile, tmpFile);
                }
            }
        }
    }
}
```

```

        if (versionFile)
            FileUtils.versionFile(newFile);
        else
        {
            try
            {
                newFile.delete();
            }
            catch (Exception e)
            {
            }
        }
    }
    else
        localAppend = false;

    if (keyFrames == null)
        keyFrames = new AMFDataArray();
    extraMetadata.put("keyFrames", keyFrames);

    this.currentTCs[FLVUtils.FLV_TCINDEXAUDIO] = startTC;
    this.currentTCs[FLVUtils.FLV_TCINDEXVIDEO] = startTC;
    this.currentTCs[FLVUtils.FLV_TCINDEXDATA] = startTC;
}
else
    localAppend = true;

    AMFDataArray keyFrames = (AMFDataArray)extraMetadata.get("keyFrames");
    long timecode = this.currentTCs[FLVUtils.FLV_TCINDEXVIDEO];
    int size = videoPackets.size();
    for(int i=0;i<size;i++)
    {
        ByteBuffer data = (ByteBuffer)videoPackets.get(i);
        int firstByte = data.get(0);
        timecode += ((Long)videoTCs.get(i)).longValue();
        if (FLVUtils.getFrameType(firstByte) == FLVUtils.FLV_KFRAME)
        {
            double durationSecs = ((double)timecode) / 1000.0;
            AMFDataObj dataObj = new AMFDataObj();
            dataObj.put("name", new AMFDataItem("keyframe
"+durationSecs));

            dataObj.put("time", new AMFDataItem(durationSecs));
            keyFrames.add(dataObj);
        }
    }

    try
    {
        FileOutputStream ds = new FileOutputStream(tmpFile, localAppend);
        FLVUtils.writePackets(ds, audioPackets, videoPackets, dataPackets,

```

```

        audioTCs, videoTCs, dataTCs, currentTCs);
        ds.flush();
        ds.close();
    }
    catch (Exception e)
    {
        WMSLoggerFactory.getLogger(MediaWriterFLVBasic.class).error(
            "MediaWriterFLVMetadata: Error writing to tmp file:
"+
            newFile.getPath()+" "+e.toString());
    }

    if (isLast)
    {
        duration = Math.max(Math.max(currentTCs[FLVUtils.FLV_TCINDEXAUDIO],
            currentTCs[FLVUtils.FLV_TCINDEXVIDEO]),
            currentTCs[FLVUtils.FLV_TCINDEXDATA]);
        double durationSecs = ((double)duration) / 1000.0;

        try
        {
            AMFPacket packet = null;
            FileOutputStream ds = new FileOutputStream(newFile);

            FileInputStream di = new FileInputStream(tmpFile);
            FLVUtils.writeHeader(ds, durationSecs, extraMetadata);
            while((packet = FLVUtils.readChunk(di)) != null)
            {
                FLVUtils.writeChunk(ds, packet.getDataBuffer(),
packet.getSize(),
                                packet.getTimecode(),
(byte)packet.getType());
            }
            di.close();

            ds.flush();
            ds.close();

            tmpFile.delete();
        }
        catch (Exception e)
        {
            WMSLoggerFactory.getLogger(MediaWriterFLVBasic.class).error(
                "MediaWriterFLVMetadata: Error tmp writing to
file: "+
                newFile.getPath()+" "+e.toString());
        }
    }
}

private void copyPacketsToTmpFile(File newFile, File tmpFile)

```

```

    {
        AMFDataArray keyFrames = null;
        try
        {
            AMFPacket packet = null;
            FileOutputStream ds = new FileOutputStream(tmpFile);

            FileInputStream di = new FileInputStream(newFile);
            FLVUtils.readHeader(di);
            FLVUtils.readChunk(di); // skip metaData packet
            while((packet = FLVUtils.readChunk(di)) != null)
            {
                FLVUtils.writeChunk(ds, packet.getDataBuffer(),
packet.getSize(),
                                packet.getTimecode(),
(byte)packet.getType());
            }
            di.close();

            ds.flush();
            ds.close();
        }
        catch (Exception e)
        {
            WMSLoggerFactory.getLogger(MediaWriterFLVBasic.class).error(
                "MediaWriterFLVMetadata: Error copyPacketsToTmpFile:
"+
                newFile.getPath()+" "+e.toString());
        }
    }

    private AMFDataArray getKeyFrames(File newFile)
    {
        AMFDataArray keyFrames = null;
        try
        {
            BufferedInputStream inStream = new BufferedInputStream(new
FileInputStream(newFile));
            FLVUtils.readHeader(inStream);
            AMFPacket packet = FLVUtils.readChunk(inStream);
            if (packet.getType() == IVHost.CONTENTTYPE_DATA0 || packet.getType()
== IVHost.CONTENTTYPE_DATA3)
            {
                byte[] mbytes = packet.getData();
                int moffset = 0;
                if (packet.getType() == IVHost.CONTENTTYPE_DATA3 &&
mbytes.length > 0)
                {
                    if (mbytes[0] == 0)
                        moffset = 1;
                }
            }
        }
    }

```

```

        AMFDataList dataList = new AMFDataList(mbytes, moffset,
mbytes.length-moffset);
        if (dataList.size() > 1)
        {
            if (dataList.get(1).getType() ==
AMFData.DATA_TYPE_MIXED_ARRAY)
            {
                AMFDataMixedArray metaValues =
                (AMFDataMixedArray)dataList.get(1);
                if (metaValues.containsKey("keyFrames"))
                    keyFrames =
                (AMFDataArray)metaValues.get("keyFrames");
            }
        }
        inStream.close();
    }
    catch (Exception e)
    {
        WMSLoggerFactory.getLogger(MediaWriterFLVBasic.class).error(
            "MediaWriterFLVMetadata: Error getKeyFrames: "+
            newFile.getPath()+" "+e.toString());
    }

    return keyFrames;
}

public boolean isVersionFile()
{
    return versionFile;
}

public void setVersionFile(boolean versionFile)
{
    this.versionFile = versionFile;
}

public void putMetaData(String name, AMFData value)
{
    this.extraMetadata.put(name, value);
}
}

```

To use this class, edit [install-dir]/conf/MediaWriter and replace the definition for the **flv** MediaWriter:


```

<MediaWriter>
  <Name>flv</Name>
  <Description>FLV Media Writer</Description>
  <FileExtension>flv</FileExtension>
  <ClassBase>com.wowza.wms.plugin.mediawriter.flv.MediaWriterFLVMetadata</ClassBase>
</MediaWriter>

```

Method Summary

long	getDuration() Get the recorded duration of the file in seconds
boolean	isAudioWaitForVideoKeyFrame() Set to true if waiting for first video key frame to start recording audio
boolean	isDataWaitForVideoKeyFrame()
boolean	isUseCalculatedAudioTimecodes() Set to true to calculate timecodes based on samples per-frame (more accurate, default is true)
boolean	isVersionFile() Return true if the old file is to be versioned
boolean	isWaitForVideoKeyFrame() get wait for key frame
void	putMetaData(String name, AMFData value) Add metadata to the metadata packet.
void	setAudioWaitForVideoKeyFrame(boolean audioWaitForVideoKeyFrame) Set to true if waiting for first video key frame to start recording audio
void	setDataWaitForVideoKeyFrame(boolean dataWaitForVideoKeyFrame)
void	setMediaWriterItem(MediaWriterItem mediaWriterItem) Set the media write definition
void	setParent(IMediaStream parent) Set the parent stream for this media write object
void	setUseCalculatedAudioTimecodes(boolean calculateTimecodes) Set to true to calculate timecodes based on samples per-frame (more accurate, default is true)
void	setVersionFile(boolean versionFile) Set to true if the old file is to be versioned
void	setWaitForVideoKeyFrame(boolean waitForVideoKeyFrame) Set to true if you want the recorder to skip opening frames until it hits a key frame
void	writePackets(java.util.List audioPackets, java.util.List videoPackets, java.util.List dataPackets, java.util.List audioTCs, java.util.List videoTCs, java.util.List dataTCs, java.util.List dataTypes, boolean isFirst, boolean isLast) Invoked each time a set of packets are ready to be persisted.

Methods

writePackets

```
public void writePackets(java.util.List audioPackets,  
    java.util.List videoPackets,  
    java.util.List dataPackets,  
    java.util.List audioTCs,  
    java.util.List videoTCs,  
    java.util.List dataTCs,  
    java.util.List dataTypes,  
    boolean isFirst,  
    boolean isLast)
```

Invoked each time a set of packets are ready to be presisted.

Parameters:

audioPackets - List of audio packets

videoPackets - List of video packets

dataPackets - List of data packets

audioTCs - List of audio timecodes

videoTCs - List of video timecodes

dataTCs - List of data timecodes

dataTypes - list of integer packets types (IVHost.CONTENTTYPE_DATA0, IVHost.CONTENTTYPE_DATA3) - if null assumed to be IVHost.CONTENTTYPE_DATA0

isFirst - true if first packet to be written

isLast - false if last packet to be written

setMediaWriterItem

```
public void setMediaWriterItem(MediaWriterItem mediaWriterItem)
```

Set the media write definition

Parameters:

mediaWriterItem - media write definition

setParent

```
public void setParent(IMediaStream parent)
```

Set the parent stream for this media write object

Parameters:

parent

isVersionFile

```
public boolean isVersionFile()
```

Return true if the old file is to be versioned

Returns:

true if the old file is to be versioned

(continued from last page)

setVersionFile

```
public void setVersionFile(boolean versionFile)
```

Set to true if the old file is to be versioned

Parameters:

versionFile

isWaitForVideoKeyFrame

```
public boolean isWaitForVideoKeyFrame()
```

get wait for key frame

Returns:

wait for key frame

setWaitForVideoKeyFrame

```
public void setWaitForVideoKeyFrame(boolean waitForVideoKeyFrame)
```

Set to true if you want the recorder to skip opening frames until it hits a key frame

Parameters:

waitForVideoKeyFrame - wait for key frame

putMetaData

```
public void putMetaData(String name,  
    AMFData value)
```

Add metadata to the metadata packet. Only metadata added before the first call to writePackets will be included in the file

Parameters:

name - field name

value - metadata value

getDuration

```
public long getDuration()
```

Get the recorded duration of the file in seconds

Returns:

recorded duration of the file in seconds

isAudioWaitForVideoKeyFrame

```
public boolean isAudioWaitForVideoKeyFrame()
```

Set to true if waiting for first video key frame to start recording audio

Returns:

true if waiting for first video key frame to start recording audio

(continued from last page)

setAudioWaitForVideoKeyFrame

```
public void setAudioWaitForVideoKeyFrame(boolean audioWaitForVideoKeyFrame)
```

Set to true if waiting for first video key frame to start recording audio

Parameters:

audioWaitForVideoKeyFrame - true if waiting for first video key frame to start recording audio

isDataWaitForVideoKeyFrame

```
public boolean isDataWaitForVideoKeyFrame()
```

setDataWaitForVideoKeyFrame

```
public void setDataWaitForVideoKeyFrame(boolean dataWaitForVideoKeyFrame)
```

isUseCalculatedAudioTimecodes

```
public boolean isUseCalculatedAudioTimecodes()
```

Set to true to calculate timecodes based on samples per-frame (more accurate, default is true)

Returns:

true to calculate timecodes based on samples per-frame

setUseCalculatedAudioTimecodes

```
public void setUseCalculatedAudioTimecodes(boolean calculateTimecodes)
```

Set to true to calculate timecodes based on samples per-frame (more accurate, default is true)

Parameters:

calculateTimecodes - true to calculate timecodes based on samples per-frame

com.wowza.wms.stream Interface IMediaWriterActionNotify

All Known Implementing Classes:
[MediaWriterActionNotifyBase](#)

public interface **IMediaWriterActionNotify**
extends

IMediaWriterActionNotify: listener interface for file writing. See
IApplicationInstance.addMediaWriterListener(IMediaWriterActionNotify listener)

Method Summary

void	onFLVAddMetadata (IMediaStream stream, java.util.Map extraMetadata) Called just before metadata is written to the file (FLV only)
void	onWriteComplete (IMediaStream stream, java.io.File file) Called when writing is complete

Methods

onWriteComplete

```
public void onWriteComplete(IMediaStream stream,  
    java.io.File file)
```

Called when writing is complete

Parameters:

stream - stream
file - file handle

onFLVAddMetadata

```
public void onFLVAddMetadata(IMediaStream stream,  
    java.util.Map extraMetadata)
```

Called just before metadata is written to the file (FLV only)

Parameters:

stream - stream
extraMetadata - additional metadata, add to this collection to add items to onMetadata event written to FLV file.

com.wowza.wms.stream Class MediaReaderActionNotifyBase

java.lang.Object

↳ `com.wowza.wms.stream.MediaReaderActionNotifyBase`

All Implemented Interfaces:

[IMediaReaderActionNotify](#)

public abstract class **MediaReaderActionNotifyBase**
extends Object
implements [IMediaReaderActionNotify](#)

Abstract base class for IMediaReaderActionNotify interface

Constructor Summary

public	MediaReaderActionNotifyBase()
--------	---

Method Summary

void	onMediaReaderClose (IMediaReader mediaReader, IMediaStream stream)
void	onMediaReaderCreate (IMediaReader mediaReader)
void	onMediaReaderExtractMetaData (IMediaReader mediaReader, IMediaStream stream)
void	onMediaReaderInit (IMediaReader mediaReader, IMediaStream stream)
void	onMediaReaderOpen (IMediaReader mediaReader, IMediaStream stream)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.IMediaReaderActionNotify](#)

[onMediaReaderClose](#), [onMediaReaderCreate](#), [onMediaReaderExtractMetaData](#), [onMediaReaderInit](#), [onMediaReaderOpen](#)

Constructors

MediaReaderActionNotifyBase

public **MediaReaderActionNotifyBase**()

Methods

onMediaReaderCreate

```
public void onMediaReaderCreate(IMediaReader mediaReader)
```

onMediaReaderInit

```
public void onMediaReaderInit(IMediaReader mediaReader,  
    IMediaStream stream)
```

onMediaReaderOpen

```
public void onMediaReaderOpen(IMediaReader mediaReader,  
    IMediaStream stream)
```

onMediaReaderExtractMetaData

```
public void onMediaReaderExtractMetaData(IMediaReader mediaReader,  
    IMediaStream stream)
```

onMediaReaderClose

```
public void onMediaReaderClose(IMediaReader mediaReader,  
    IMediaStream stream)
```

com.wowza.wms.stream Class MediaReaderEncInfo

java.lang.Object

└─com.wowza.wms.stream.MediaReaderEncInfo

public class **MediaReaderEncInfo**
extends Object

Field Summary

public static final	METHOD_NONE Value: 0
public static final	METHOD_SAMPLE_PLAYREADY Value: 1

Constructor Summary

public	MediaReaderEncInfo()
--------	--------------------------------------

Method Summary

void	addPlayReadyDecryptorKey (com.wowza.wms.drm.playready.PlayReadyKeyInfo decryptorKey)
int	getEncMethod ()
com.wowza.wms.drm.playready.PlayReadyKeyInfo	getPlayReadyDecryptorKey ()
com.wowza.wms.drm.playready.PlayReadyKeyInfo	getPlayReadyDecryptorKey (String keyId)
void	setEncMethod (int encMethod)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

METHOD_NONE

public static final int **METHOD_NONE**

(continued from last page)

Constant value: **0**

METHOD_SAMPLE_PLAYREADY

```
public static final int METHOD_SAMPLE_PLAYREADY
```

Constant value: **1**

Constructors

MediaReaderEncInfo

```
public MediaReaderEncInfo()
```

Methods

addPlayReadyDecryptorKey

```
public void addPlayReadyDecryptorKey(com.wowza.wms.drm.playready.PlayReadyKeyInfo  
decryptorKey)
```

getPlayReadyDecryptorKey

```
public com.wowza.wms.drm.playready.PlayReadyKeyInfo getPlayReadyDecryptorKey()
```

getPlayReadyDecryptorKey

```
public com.wowza.wms.drm.playready.PlayReadyKeyInfo getPlayReadyDecryptorKey(String  
keyId)
```

getEncMethod

```
public int getEncMethod()
```

setEncMethod

```
public void setEncMethod(int encMethod)
```

com.wowza.wms.stream Class MediaStreamActionNotify3Base

java.lang.Object

↳ com.wowza.wms.stream.MediaStreamActionNotify3Base

All Implemented Interfaces:

[IMediaStreamActionNotify3](#)

```
public class MediaStreamActionNotify3Base
    extends Object
    implements IMediaStreamActionNotify3
```

Constructor Summary

public	MediaStreamActionNotify3Base()
--------	--

Method Summary

void	onCodecInfoAudio (IMediaStream stream, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	onCodecInfoVideo (IMediaStream stream, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	onMetaData (IMediaStream stream, AMFPacket metaDataPacket)
void	onPause (IMediaStream stream, boolean isPause, double location)
void	onPauseRaw (IMediaStream stream, boolean isPause, double location)
void	onPlay (IMediaStream stream, String streamName, double playStart, double playLen, int playReset)
void	onPublish (IMediaStream stream, String streamName, boolean isRecord, boolean isAppend)
void	onSeek (IMediaStream stream, double location)
void	onStop (IMediaStream stream)
void	onUnPublish (IMediaStream stream, String streamName, boolean isRecord, boolean isAppend)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify3](#)

[onCodecInfoAudio](#), [onCodecInfoVideo](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify2](#)

[onMetaData](#), [onPauseRaw](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify](#)

[onPause](#), [onPlay](#), [onPublish](#), [onSeek](#), [onStop](#), [onUnPublish](#)

Constructors

MediaStreamActionNotify3Base

```
public MediaStreamActionNotify3Base()
```

Methods

onMetaData

```
public void onMetaData(IMediaStream stream,  
    AMFPacket metaDataPacket)
```

onPauseRaw

```
public void onPauseRaw(IMediaStream stream,  
    boolean isPause,  
    double location)
```

onPlay

```
public void onPlay(IMediaStream stream,  
    String streamName,  
    double playStart,  
    double playLen,  
    int playReset)
```

onPublish

```
public void onPublish(IMediaStream stream,  
    String streamName,  
    boolean isRecord,  
    boolean isAppend)
```

(continued from last page)

onUnPublish

```
public void onUnPublish(IMediaStream stream,  
    String streamName,  
    boolean isRecord,  
    boolean isAppend)
```

onPause

```
public void onPause(IMediaStream stream,  
    boolean isPause,  
    double location)
```

onSeek

```
public void onSeek(IMediaStream stream,  
    double location)
```

onStop

```
public void onStop(IMediaStream stream)
```

onCodecInfoVideo

```
public void onCodecInfoVideo(IMediaStream stream,  
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
```

onCodecInfoAudio

```
public void onCodecInfoAudio(IMediaStream stream,  
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
```

com.wowza.wms.stream Class MediaStreamActionNotifyBase

java.lang.Object

↳ com.wowza.wms.stream.MediaStreamActionNotifyBase

All Implemented Interfaces:

[IMediaStreamActionNotify3](#), [IMediaStreamActionNotify2](#), [IMediaStreamActionNotify](#)

public abstract class **MediaStreamActionNotifyBase**

extends Object

implements [IMediaStreamActionNotify](#), [IMediaStreamActionNotify2](#), [IMediaStreamActionNotify3](#)

Abstract base class for IMediaCasterNotify interfaces

Constructor Summary

public	MediaStreamActionNotifyBase()
--------	---

Method Summary

void	onCodecInfoAudio (IMediaStream stream, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	onCodecInfoVideo (IMediaStream stream, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	onMetaData (IMediaStream stream, AMFPacket metaDataPacket)
void	onPause (IMediaStream stream, boolean isPause, double location)
void	onPauseRaw (IMediaStream stream, boolean isPause, double location)
void	onPlay (IMediaStream stream, String streamName, double playStart, double playLen, int playReset)
void	onPublish (IMediaStream stream, String streamName, boolean isRecord, boolean isAppend)
void	onSeek (IMediaStream stream, double location)
void	onStop (IMediaStream stream)
void	onUnPublish (IMediaStream stream, String streamName, boolean isRecord, boolean isAppend)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify](#)

[onPause](#), [onPlay](#), [onPublish](#), [onSeek](#), [onStop](#), [onUnPublish](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify2](#)

[onMetaData](#), [onPauseRaw](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify](#)

[onPause](#), [onPlay](#), [onPublish](#), [onSeek](#), [onStop](#), [onUnPublish](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify3](#)

[onCodecInfoAudio](#), [onCodecInfoVideo](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify2](#)

[onMetaData](#), [onPauseRaw](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify](#)

[onPause](#), [onPlay](#), [onPublish](#), [onSeek](#), [onStop](#), [onUnPublish](#)

Constructors

MediaStreamActionNotifyBase

```
public MediaStreamActionNotifyBase()
```

Methods

onCodecInfoVideo

```
public void onCodecInfoVideo(IMediaStream stream,  
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
```

onCodecInfoAudio

```
public void onCodecInfoAudio(IMediaStream stream,  
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
```

onMetaData

```
public void onMetaData(IMediaStream stream,  
    AMFPacket metaDataPacket)
```

onPauseRaw

```
public void onPauseRaw(IMediaStream stream,
    boolean isPause,
    double location)
```

onPlay

```
public void onPlay(IMediaStream stream,
    String streamName,
    double playStart,
    double playLen,
    int playReset)
```

onPublish

```
public void onPublish(IMediaStream stream,
    String streamName,
    boolean isRecord,
    boolean isAppend)
```

onUnPublish

```
public void onUnPublish(IMediaStream stream,
    String streamName,
    boolean isRecord,
    boolean isAppend)
```

onPause

```
public void onPause(IMediaStream stream,
    boolean isPause,
    double location)
```

onSeek

```
public void onSeek(IMediaStream stream,
    double location)
```

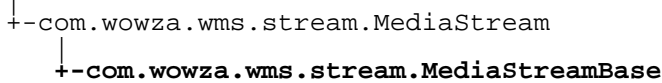
onStop

```
public void onStop(IMediaStream stream)
```

com.wowza.wms.stream

Class MediaStreamBase

java.lang.Object



All Implemented Interfaces:

[IMediaStream](#)

```

public class MediaStreamBase
extends MediaStream
  
```

Field Summary

public static	p Deprecated.
public static	sinfo Deprecated.

Fields inherited from class com.wowza.wms.stream.MediaStream

actionListeners, AMLST_STREAM_EXT, audioBytes, audioSize, audioTC, BASE_STREAM_EXT, bufferTime, callbackListeners, callbacks, client, dataBytes, dataSize, dataTC, dataType, dvrLock, dvrMap, dvrPlayer, dvrRecorder, dvrRecorderList, dvrRepeater, elapsedTime, ext, fastPlaySettings, FLV_STREAM_EXT, h264SEIListeners, headerSize, httpStreamerSession, ID3_STREAM_EXT, isAppend, isClustered, isMediaCasterPlay, isOpen, isPlay, isPlaying, isPublisherStream, isRecord, isTranscodeResult, livePacketListeners, liveStreamPacketizer, liveStreamPacketizerList, liveStreamRepeater, liveStreamTranscoderList, lock, mediaIOPerformance, mergeOnMetadata, metaDataProvider, MP3_STREAM_EXT, MP4_STREAM_EXT, name, netConnection, NGRP_STREAM_EXT, parent, player, playLen, playStart, playTransition, properties, queryStr, receiveAudio, receiveVideo, receiveVideoFPS, rtpStream, SEND_CONTROL0, SEND_CONTROL1, SEND_CONTROL3, SEND_CONTROL4, sendDirectLock, sendDirectMessages, sendPlayStopLogEvent, sendPublishStopLogEvent, sendRecordStopLogEvent, SMIL_STREAM_EXT, src, STREAM_DEFAULTNAME, streamType, transcoderLock, transcoderMap, tss, videoBytes, videoSize, videoTC

Fields inherited from interface [com.wowza.wms.stream.IMediaStream](#)

[AUDIOSAMPLEACCESS](#), [PACKET_COUNTS_AUDIO](#), [PACKET_COUNTS_DATA](#), [PACKET_COUNTS_SIZE](#), [PACKET_COUNTS_VIDEO](#), [PACKET_COUNTS_VIDEOKEY](#), [PUBLISH_BITRATE_SOURCE_MEASURE](#), [PUBLISH_BITRATE_SOURCE_METADATA](#), [PUBLISH_FRAMERATE_SOURCE_MEASURE](#), [PUBLISH_FRAMERATE_SOURCE_METADATA](#), [READACCESS](#), [VIDEOSAMPLEACCESS](#), [WRITEACCESS](#)

Constructor Summary

public	MediaStreamBase()
--------	-----------------------------------

Method Summary

void	init (MediaStreamMap parent, int src, WMSProperties properties)
void	publish ()
void	trim ()

Methods inherited from class `com.wowza.wms.stream.MediaStream`

addAudioCodecConfigPacket, addAudioData, addAudioExtraData, addCallbackListener, addClientListener, addClientListener, addClientListener, addDataData, addDataExtraData, addLivePacketListener, addVideoCodecConfigPacket, addVideoData, addVideoExtraData, addVideoH264SEILListener, clear, clearFastPlaySettings, clearLoggingValues, close, flush, getAccess, getAudioCodecConfigPacket, getAudioMissing, getAudioSize, getAudioTC, getBufferTime, getBurstStartStop, getCacheName, getClient, getClientId, getContextStr, getDataMissing, getDataSize, getDataTC, getDataType, getDvrRecorder, getDvrRecorder, getDvrRecorderList, getDvrRepeater, getElapsedTime, getExt, getFastPlaySettings, getHeaderSize, getHTTPStreamerSession, getLastKeyFrame, getLastPacket, getLiveStreamDvr, getLiveStreamDvrs, getLiveStreamPacketizer, getLiveStreamPacketizer, getLiveStreamPacketizerList, getLiveStreamRepeater, getLiveStreamTranscoder, getLiveStreamTranscoderList, getLiveStreamTranscoders, getMaxTimecode, getMediaIOPerformance, getMetaDataProvider, getName, getNetConnection, getPlayer, getPlayPackets, getProperties, getPublishAudioCodecId, getPublishBitrateAudio, getPublishBitrateAudio, getPublishBitrateVideo, getPublishBitrateVideo, getPublishFrameCountAudio, getPublishFrameCountData, getPublishFrameCounts, getPublishFrameCountVideo, getPublishFrameCountVideoKey, getPublishFramerateVideo, getPublishFramerateVideo, getPublishKeyFrameIntervalsVideo, getPublishVideoCodecId, getQueryStr, getReceiveVideoFPS, getRespAMFAudioObj, getRespAMFDataObj, getRespAMFVideoObj, getRTPStream, getSrc, getStreamFileForRead, getStreamFileForRead, getStreamFileForWrite, getStreamFileForWrite, getStreams, getStreamType, getTss, getUniqueStreamIdStr, getVideoCodecConfigPacket, getVideoMissing, getVideoSize, getVideoTC, handleCallback, idle, incrementMediaInBytes, incrementMediaLossBytes, incrementMediaOutBytes, init, initDvrRepeating, initLiveStreamRepeating, isAppend, isClustered, isMediaCasterPlay, isMergeOnMetadata, isOpen, isPlay, isPlaying, isPublisherStream, isPublishStreamReady, isReceiveAudio, isReceiveVideo, isRecord, isSendDirectMessages, isSendPlayStopLogEvent, isSendPublishStopLogEvent, isSendRecordStopLogEvent, isTranscodeResult, isVideoH264SEILListenerEmpty, length, notifyActionOnCodecInfoAudio, notifyActionOnCodecInfoVideo, notifyActionOnMetaData, notifyActionPause, notifyActionPauseRaw, notifyActionPlay, notifyActionPublish, notifyActionSeek, notifyActionStop, notifyActionUnPublish, notifyLivePacket, notifyVideoH264Packet, packetComplete, processSendDirectMessages, publish, putDvrRecorder, putLiveStreamTranscoder, registerCallback, registerOnPlayStatus, registerOnStatus, removeCallbackListener, removeClientListener, removeClientListener, removeClientListener, removeDvrRecorder, removeLivePacketListener, removeLiveStreamTranscoder, removeVideoH264SEILListener, reset, send, send, sendAMF3, sendAMF3, sendControlBytes, sendDataToCallback, sendDirect, sendDirect, sendDirectAMF3, sendDirectAMF3, sendDirectInternal, sendDirectInternal, sendInternal, sendInternal, sendLivePlaySeek, sendLivePlayStart, sendLivePlaySwitch, sendPauseNotify, sendPauseNotify, sendPlayReset, sendPlayReset, sendPlaySeek, sendPlaySeek, sendPlaySeek, sendPlayStart, sendPlayStart, sendPlayStart, sendPlayStart, sendPlayStatus, sendPlayStatus, sendPlayStop, sendPlayStop, sendPlaySwitch, sendPlaySwitch, sendStreamNotFound, sendStreamNotFound, sendUnpauseNotify, sendUnpauseNotify, sendUnpauseNotify, sendVODPlaySwitch, setAppend, setAudioSize, setAudioTC, setAudioTC, setBufferTime, setClient, setClustered, setDataSize, setDataTC, setDataTC, setDataTC, setDataType, setDvrRecorder, setDvrRecorderList, setDvrRepeater, setExt, setFastPlaySettings, setHeaderSize, setHTTPStreamerSession, setIsPlaying, setJustName, setLiveStreamPacketizer, setLiveStreamPacketizerList, setLiveStreamRepeater, setLiveStreamTranscoderList, setMediaCasterPlay, setMergeOnMetadata, setMetaDataProvider, setName, setName, setName, setName, setNetConnection, setOpen, setPlay, setPlayer, setPublishAudioCodecId, setPublisherStream, setPublishVideoCodecId, setQueryStr, setReceiveAudio, setReceiveVideo, setReceiveVideoFPS, setRecord, setRTPStream, setSendPlayStopLogEvent, setSendPublishStopLogEvent, setSendRecordStopLogEvent, setSrc, setStreamType, setTranscodeResult, setTss, setVideoSize, setVideoTC, setVideoTC, shutdown, size, startAudioPacket, startDataPacket, startPublishing,

startVideoPacket, stopName, stopPublishing, switchName, trim, unregisterCallback, unregisterOnPlayStatus, unregisterOnStatus, updateLoggingDuration, updateLoggingValues

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.IMediaStream](#)

[addAudioCodecConfigPacket](#), [addAudioData](#), [addAudioExtraData](#), [addCallbackListener](#), [addClientListener](#), [addClientListener](#), [addClientListener](#), [addDataData](#), [addDataExtraData](#), [addLivePacketListener](#), [addVideoCodecConfigPacket](#), [addVideoData](#), [addVideoExtraData](#), [addVideoH264SEIListener](#), [clear](#), [clearFastPlaySettings](#), [clearLoggingValues](#), [close](#), [flush](#), [getAccess](#), [getAudioCodecConfigPacket](#), [getAudioMissing](#), [getAudioSize](#), [getAudioTC](#), [getBufferTime](#), [getBurstStartStop](#), [getCacheName](#), [getClient](#), [getClientId](#), [getContextStr](#), [getDataMissing](#), [getDataSize](#), [getDataTC](#), [getDataType](#), [getDvrRecorder](#), [getDvrRecorder](#), [getDvrRecorderList](#), [getDvrRepeater](#), [getElapsedTime](#), [getExt](#), [getFastPlaySettings](#), [getHeaderSize](#), [getHTTPStreamerSession](#), [getLastKeyFrame](#), [getLastPacket](#), [getLiveStreamPacketizer](#), [getLiveStreamPacketizer](#), [getLiveStreamPacketizerList](#), [getLiveStreamRepeater](#), [getLiveStreamTranscoder](#), [getLiveStreamTranscoderList](#), [getLiveStreamTranscoders](#), [getMaxTimecode](#), [getMediaIOPerformance](#), [getMetaDataProvider](#), [getName](#), [getNetConnection](#), [getPlayer](#), [getPlayPackets](#), [getProperties](#), [getPublishAudioCodecId](#), [getPublishBitrateAudio](#), [getPublishBitrateAudio](#), [getPublishBitrateVideo](#), [getPublishBitrateVideo](#), [getPublishFrameCountAudio](#), [getPublishFrameCountData](#), [getPublishFrameCounts](#), [getPublishFrameCountVideo](#), [getPublishFrameCountVideoKey](#), [getPublishFramerateVideo](#), [getPublishFramerateVideo](#), [getPublishKeyFrameIntervalsVideo](#), [getPublishVideoCodecId](#), [getQueryStr](#), [getReceiveVideoFPS](#), [getRespAMFAudioObj](#), [getRespAMFDataObj](#), [getRespAMFVideoObj](#), [getRTPStream](#), [getSrc](#), [getStreamFileForRead](#), [getStreamFileForRead](#), [getStreamFileForWrite](#), [getStreamFileForWrite](#), [getStreams](#), [getStreamType](#), [getUniqueStreamIdStr](#), [getVideoCodecConfigPacket](#), [getVideoMissing](#), [getVideoSize](#), [getVideoTC](#), [handleCallback](#), [idle](#), [incrementMediaInBytes](#), [incrementMediaLossBytes](#), [incrementMediaOutBytes](#), [init](#), [initLiveStreamRepeating](#), [isAppend](#), [isClustered](#), [isMediaCasterPlay](#), [isMergeOnMetadata](#), [isOpen](#), [isplay](#), [isplaying](#), [isPublisherStream](#), [isPublishStreamReady](#), [isReceiveAudio](#), [isReceiveVideo](#), [isRecord](#), [isSendPlayStopLogEvent](#), [isSendPublishStopLogEvent](#), [isSendRecordStopLogEvent](#), [isTranscodeResult](#), [isVideoH264SEIListenerEmpty](#), [length](#), [notifyActionOnCodecInfoAudio](#), [notifyActionOnCodecInfoVideo](#), [notifyActionOnMetaData](#), [notifyActionPause](#), [notifyActionPauseRaw](#), [notifyActionPlay](#), [notifyActionPublish](#), [notifyActionSeek](#), [notifyActionStop](#), [notifyActionUnPublish](#), [notifyLivePacket](#), [notifyVideoH264Packet](#), [packetComplete](#), [publish](#), [putDvrRecorder](#), [putLiveStreamTranscoder](#), [registerCallback](#), [registerOnPlayStatus](#), [registerOnStatus](#), [removeCallbackListener](#), [removeClientListener](#), [removeClientListener](#), [removeClientListener](#), [removeDvrRecorder](#), [removeLivePacketListener](#), [removeLiveStreamTranscoder](#), [removeVideoH264SEIListener](#), [send](#), [send](#), [sendAMF3](#), [sendAMF3](#), [sendControlBytes](#), [sendDirect](#), [sendDirect](#), [sendDirectAMF3](#), [sendDirectAMF3](#), [sendLivePlaySeek](#), [sendLivePlayStart](#), [sendLivePlaySwitch](#), [sendPauseNotify](#), [sendPauseNotify](#), [sendPlayReset](#), [sendPlayReset](#), [sendPlaySeek](#), [sendPlaySeek](#), [sendPlaySeek](#), [sendPlayStart](#), [sendPlayStart](#), [sendPlayStart](#), [sendPlayStart](#), [sendPlayStatus](#), [sendPlayStatus](#), [sendPlayStop](#), [sendPlayStop](#), [sendPlaySwitch](#), [sendPlaySwitch](#), [sendStreamNotFound](#), [sendStreamNotFound](#), [sendUnpauseNotify](#), [sendUnpauseNotify](#), [sendUnpauseNotify](#), [sendVODPlaySwitch](#), [setAppend](#), [setAudioSize](#), [setAudioTC](#), [setAudioTC](#), [setBufferTime](#), [setClient](#), [setClustered](#), [setDataSize](#), [setDataTC](#), [setDataTC](#), [setDataType](#), [setDvrRecorder](#), [setDvrRecorderList](#), [setExt](#), [setFastPlaySettings](#), [setHeaderSize](#), [setHTTPStreamerSession](#), [setIsPlaying](#), [setLiveStreamPacketizer](#), [setLiveStreamPacketizerList](#), [setLiveStreamRepeater](#), [setLiveStreamTranscoderList](#), [setMediaCasterPlay](#), [setMergeOnMetadata](#), [setMetaDataProvider](#), [setName](#), [setName](#), [setName](#), [setNetConnection](#), [setOpen](#), [setPlay](#), [setPlayer](#), [setPublishAudioCodecId](#), [setPublisherStream](#), [setPublishVideoCodecId](#), [setQueryStr](#), [setReceiveAudio](#), [setReceiveVideo](#), [setReceiveVideoFPS](#), [setRecord](#), [setRTPStream](#), [setSendPlayStopLogEvent](#), [setSendPublishStopLogEvent](#), [setSendRecordStopLogEvent](#), [setSrc](#), [setStreamType](#), [setTranscodeResult](#), [setVideoSize](#), [setVideoTC](#), [setVideoTC](#), [shutdown](#), [size](#), [startAudioPacket](#), [startDataPacket](#), [startPublishing](#), [startVideoPacket](#), [stopName](#), [stopPublishing](#), [switchName](#), [trim](#), [unregisterCallback](#), [unregisterOnPlayStatus](#), [unregisterOnStatus](#), [updateLoggingDuration](#), [updateLoggingValues](#)

Fields

sinfo

```
public static java.util.Map sinfo
```

Deprecated.

p

```
public static java.lang.String p
```

Deprecated.

Constructors

MediaStreamBase

```
public MediaStreamBase()
```

Methods

init

```
public void init(MediaStreamMap parent,  
                 int src,  
                 WMSProperties properties)
```

publish

```
public void publish()
```

trim

```
public void trim()
```

com.wowza.wms.stream Class MediaStreamLivePacketNotifyBase

java.lang.Object

↳ com.wowza.wms.stream.MediaStreamLivePacketNotifyBase

All Implemented Interfaces:

[IMediaStreamLivePacketNotify](#)

public abstract class **MediaStreamLivePacketNotifyBase**
extends Object
implements [IMediaStreamLivePacketNotify](#)

Constructor Summary

public	MediaStreamLivePacketNotifyBase()
--------	---

Method Summary

void	onLivePacket (IMediaStream stream, AMFPacket packet)
------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamLivePacketNotify](#)

[onLivePacket](#)

Constructors

MediaStreamLivePacketNotifyBase

public **MediaStreamLivePacketNotifyBase**()

Methods

onLivePacket

public void **onLivePacket**([IMediaStream](#) stream, [AMFPacket](#) packet)

com.wowza.wms.stream Class MediaStreamMap

java.lang.Object

└-com.wowza.wms.stream.MediaStreamMap

```
public class MediaStreamMap
extends Object
```

MediaStreamMap: collection of IMediaStream object. This collection is usually attached to an IApplicationInstance object.

Field Summary

protected	appInstance
public	debugDVRShutdown
protected	dvrRecorders
protected	liveStreamPacketizers
public static final	MAXSTREAMINDEX Value: 65536
protected	mediaStreamListeners
protected	nameGroupDelayRemoveMap
protected	nameGroupId
protected	nameGroupRemoveDelayTime
protected	nameGroups
protected	nextStreamId
protected	packetizerLicenses
protected	streamLicenses
protected	streamLock
protected	streamNames
protected	streamNamesLock

protected	streamNameToGroup
protected	streams

Constructor Summary

public	MediaStreamMap (IApplicationInstance appInstance) Create empty MediaStreamMap collection
--------	--

Method Summary

LicenseHolder	addLicense (ILiveStreamPacketizer liveStreamPacketizer, int licenseType)
LicenseHolder	addLicense (IMediaStream stream, int licenseType)
void	addMediaStreamListener (IMediaStreamNotify mediaStreamListener) Add a media stream listener.
MediaStreamMapGroup	addNameGroup (MediaStreamMapGroup newGroup)
void	broadcastPlayMessage (IMediaStream stream, long timecode, java.nio.ByteBuffer msg, int objectEncoding) Send a broadcast message to all play stream that are listening to this live published stream.
int	broadcastGetObjectEncoding (IMediaStream stream) Get the minimum object encoding level for the clients playing this stream.
void	clearStreamName (String name) Unregister a published live media stream name.
void	clearStreamName (String name, IMediaStream stream) Unregister a published live media stream name.
void	doWatchdog ()
IApplicationInstance	getAppInstance () Get the parent applicationInstance.
String	getAppInstanceName () Get the name of the parent applicationInstance.
String	getAppName () Get the name of the parent application.
int	getCount () Get the total number of streams stored in the mediaStreamMap
ILiveStreamDvrRecorder	getDvrRecorder (String streamName, String recorderName, boolean doCreate) Get a DVR recorder by name and recorder name
java.util.List	getDvrRecorders () Returns a list of ILiveStreamDvrRecorder objects

ILiveStreamPacketizer	getLiveStreamPacketizer (String streamName, String packetizerName, boolean doCreate) Get a live stream packetizer by name and packetizer id
Object	getLiveStreamPacketizerLock () Get the lock to the live stream packetizer system
MediaStreamMapGroup	getNameGroupByGroupName (String groupName)
int	getNameGroupRemoveDelayTime ()
java.util.Set	getNameGroups ()
java.util.Set	getNameGroups (String streamName)
java.util.Set	getNameGroupStreamNames (String streamName)
long	getNextNameGroupId (MediaStreamMapGroup newGroup)
int	getNextStreamIndex () Reserve a clientless stream id for a new media stream.
int	getNextStreamIndex (IClient client) Reserve a stream for a client connection.
int	getNextStreamIndex (INetConnection netConnection) Reserve a stream for a netConnection connection.
java.util.List	getPublishStreamNames () Returns a List of published stream names
IMediaStream	getStream (IClient client, int index) Get a media stream reference by stream id.
IMediaStream	getStream (IClient client, int index, boolean doCreate) Get a media stream reference by stream id.
IMediaStream	getStream (INetConnection netConnection, int index) Get a media stream object that is owned by a server to server netConnection object (not yet implemented).
IMediaStream	getStream (INetConnection netConnection, int index, boolean doCreate) Get a media stream reference by stream id.
IMediaStream	getStream (String name) Get a media stream by stream name.
IMediaStream	getStreamClientless (int index, String streamTypeStr) Get a media stream reference by stream id.
edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock	getStreamListLock () Get the underlying read/write lock associated with the list of streams

edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock	getStreamNameLock() Get the underlying read/write lock associated with the stream names list
java.util.List	getStreams() Returns a list of IMediaStream objects
IVHost	getVHost() Get the parent vHost.
void	notifyMediaStreamCreate(IMediaStream mediaStream) Notify all media stream listeners that a new media stream object has been created.
void	notifyMediaStreamDestroy(IMediaStream mediaStream) Notify all media stream listeners that a media stream object is being destroyed.
void	notifyPlayPublish(IMediaStream stream) Notify all play streams that are listening to this stream that the stream is going into a state of publish (NetStream.Play.PublishNotify).
void	notifyPlayUnpublish(IMediaStream stream) Notify all play streams that are listening to this stream that the stream is going into a state of unpublished (NetStream.Play.UnpublishNotify).
void	notifyPlayUnpublish(String streamName) Notify all play streams that are listening to this stream name that the stream is going into a state of unpublished (NetStream.Play.UnpublishNotify).
void	removeDvrRecorder(String streamName)
ILiveStreamDvrRecorder	removeDvrRecorder(String streamName, String recorderName) Remove DVR Recorder
void	removeLiveStreamPacketizer(String streamName) Remove all live stream packetizers for this stream name
ILiveStreamPacketizer	removeLiveStreamPacketizer(String streamName, String packetizerName) Remove live stream packetizer
void	removeMediaStreamListener(IMediaStreamNotify mediaStreamListener) Remove a media stream listener.
MediaStreamMapGroup	removeNameGroup(int groupId)
MediaStreamMapGroup	removeNameGroup(MediaStreamMapGroup nameGroup)
void	removeStream(IClient client, int index) Remove a stream associated with a client connection
void	removeStream(INetConnection netConnection, int index) Remove a stream associated with a netConnection object
void	removeStream(int index) Remove a clientless media stream
void	setNameGroupRemoveDelayTime(int nameGroupRemoveDelayTime)

void	setStreamName (IMediaStream stream, String name) Insert live media stream into the mediaStreamMap by name.
long	streamToIndex (IMediaStream stream) Get the unique stream identifier for a given stream

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

MAXSTREAMINDEX

```
public static final int MAXSTREAMINDEX
```

Constant value: **65536**

streams

```
protected java.util.Map streams
```

streamNames

```
protected java.util.Map streamNames
```

streamLicenses

```
protected java.util.Map streamLicenses
```

packetizerLicenses

```
protected java.util.Map packetizerLicenses
```

streamNameToGroup

```
protected java.util.Map streamNameToGroup
```

nameGroups

```
protected java.util.List nameGroups
```

nameGroupId

protected long **nameGroupId**

nameGroupRemoveDelayTime

protected int **nameGroupRemoveDelayTime**

nameGroupDelayRemoveMap

protected java.util.Map **nameGroupDelayRemoveMap**

streamLock

protected edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock
streamLock

streamNamesLock

protected edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock
streamNamesLock

appInstance

protected com.wowza.wms.application.IApplicationInstance **appInstance**

mediaStreamListeners

protected java.util.List **mediaStreamListeners**

nextStreamId

protected java.util.concurrent.atomic.AtomicLong **nextStreamId**

liveStreamPacketizers

protected java.util.Map **liveStreamPacketizers**

(continued from last page)

dvrRecorders

```
protected java.util.Map dvrRecorders
```

debugDVRShutdown

```
public boolean debugDVRShutdown
```

Constructors

MediaStreamMap

```
public MediaStreamMap(IApplicationInstance appInstance)
```

Create empty MediaStreamMap collection

Parameters:

appInstance - parent applicationInstance

Methods

getStreamListLock

```
public edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock  
getStreamListLock()
```

Get the underlying read/write lock associated with the list of streams

Returns:

underlying read/write lock associated with the list of streams

getStreamNameLock

```
public edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock  
getStreamNameLock()
```

Get the underlying read/write lock associated with the stream names list

Returns:

underlying read/write lock associated with the stream names list

getPublishStreamNames

```
public java.util.List getPublishStreamNames()
```

Returns a List of published stream names

Returns:

List of published stream names

getStreams

```
public java.util.List getStreams()
```

(continued from last page)

Returns a list of IMediaStream objects

Returns:

list of IMediaStream objects

getStream

```
public IMediaStream getStream(IClient client,  
    int index)
```

Get a media stream reference by stream id.

Parameters:

client - client
index - stream id

Returns:

media stream object or null if does not exist.

getStreamClientless

```
public IMediaStream getStreamClientless(int index,  
    String streamTypeStr)
```

Get a media stream reference by stream id. If it does not exist, create a new one with the given id. This is a clientless stream that is served by the backend of the server. If creating a new media stream object, its id must first be obtained by calling [getNextStreamIndex\(\)](#).

Parameters:

index - stream id
streamTypeStr - stream type

Returns:

media stream object

getStream

```
public IMediaStream getStream(IClient client,  
    int index,  
    boolean doCreate)
```

Get a media stream reference by stream id. If it does not exist, create a new one with the given id. If creating a new media stream object, its id must first be obtained by calling [getNextStreamIndex\(IClient\)](#).

Parameters:

client - client
index - stream id
doCreate - true to create if it does not exist

Returns:

media stream object

getStream

```
public IMediaStream getStream(INetConnection netConnection,  
    int index)
```

Get a media stream object that is owned by a server to server netConnection object (not yet implemented).

Parameters:

(continued from last page)

netConnection - netConnection to remote server
index - stream id

Returns:

media stream object or null if does not exist

getStream

```
public IMediaStream getStream(INetConnection netConnection,  
    int index,  
    boolean doCreate)
```

Get a media stream reference by stream id. If it does not exist, create a new one with the given id. If creating a new media stream object, its id must first be obtained by calling [getNextStreamIndex\(INetConnection\)](#).

Parameters:

netConnection - netConnection to remote server
index - stream id
doCreate - true to create if it does not exist

Returns:

media stream object

getStream

```
public IMediaStream getStream(String name)
```

Get a media stream by stream name. Only published live streams are stored in the mediaStreamMap by name. This method is used to lookup a published live stream by name.

Parameters:

name - stream name

Returns:

media stream object or null if does not exist

setStreamName

```
public void setStreamName(IMediaStream stream,  
    String name)
```

Insert live media stream into the mediaStreamMap by name.

Parameters:

stream - media stream object
name - media stream name

clearStreamName

```
public void clearStreamName(String name)
```

Unregister a published live media stream name.

Parameters:

name - stream name

streamToIndex

```
public long streamToIndex(IMediaStream stream)
```

(continued from last page)

Get the unique stream identifier for a given stream

Parameters:

stream - stream

Returns:

unique stream identifier

clearStreamName

```
public void clearStreamName(String name,  
    IMediaStream stream)
```

Unregister a published live media stream name.

Parameters:

name - stream name

stream - stream

getNextStreamIndex

```
public int getNextStreamIndex(INetConnection netConnection)
```

Reserve a stream for a netConnection connection. Use [getStream\(INetConnection, int, boolean\)](#) to create stream.

Parameters:

netConnection

Returns:

next stream index

getNextStreamIndex

```
public int getNextStreamIndex(IClient client)
```

Reserve a stream for a client connection. Use [getStream\(IClient, int, boolean\)](#) to create stream.

Parameters:

client - parent client

Returns:

stream index

getNextStreamIndex

```
public int getNextStreamIndex()
```

Reserve a clientless stream id for a new media stream. Use this method to obtain a stream id for a new media stream object that is then created with a call to [getClientlessStream\(\)](#).

Returns:

new reserved stream id

getCount

```
public int getCount()
```

Get the total number of streams stored in the mediaStreamMap

(continued from last page)

Returns:

total number of streams stored in the mediaStreamMap

removeStream

```
public void removeStream(INetConnection netConnection,  
    int index)
```

Remove a stream associated with a netConnection object

Parameters:

netConnection - net connection
index - stream index

removeStream

```
public void removeStream(IClient client,  
    int index)
```

Remove a stream associated with a client connection

Parameters:

client - client
index - stream index

removeStream

```
public void removeStream(int index)
```

Remove a clientless media stream

Parameters:

index - stream index

getAppName

```
public String getAppName()
```

Get the name of the parent application.

Returns:

parent application name.

getAppInstanceName

```
public String getAppInstanceName()
```

Get the name of the parent applicationInstance.

Returns:

parent applicationInstance name

getVHost

```
public IVHost getVHost()
```

Get the parent vHost.

(continued from last page)

Returns:

parent vHost

getAppInstance

```
public IApplicationInstance getAppInstance()
```

Get the parent applicationInstance.

Returns:

parent applicationInstance

notifyPlayUnpublish

```
public void notifyPlayUnpublish(IMediaStream stream)
```

Notify all play streams that are listening to this stream that the stream is going into a state of unpublished (NetStream.Play.UnpublishNotify).

Parameters:

stream - live published stream that is being unpublished

notifyPlayUnpublish

```
public void notifyPlayUnpublish(String streamName)
```

Notify all play streams that are listening to this stream name that the stream is going into a state of unpublished (NetStream.Play.UnpublishNotify).

Parameters:

streamName - live published stream that is being unpublished

broadcastGetObjectEncoding

```
public int broadcastGetObjectEncoding(IMediaStream stream)
```

Get the minimum object encoding level for the clients playing this stream.

Parameters:

stream - publish stream

Returns:

object encoding level (AMF0 or AMF3)

broadcasePlayMessage

```
public void broadcasePlayMessage(IMediaStream stream,  
    long timecode,  
    java.nio.ByteBuffer msg,  
    int objectEncoding)
```

Send a broadcast message to all play stream that are listening to this live published stream.

Parameters:

stream - media stream

timecode - timecode (milliseconds)

msg - byte[] of data that will be deserialized as an AMFData object.

objectEncoding - object encoding (AMF0 or AMF3)

notifyPlayPublish

```
public void notifyPlayPublish(IMediaStream stream)
```

Notify all play streams that are listening to this stream that the stream is going into a state of publish (NetStream.Play.PublishNotify).

Parameters:

stream - live published stream that is being published

addMediaStreamListener

```
public void addMediaStreamListener(IMediaStreamNotify mediaStreamListener)
```

Add a media stream listener. A media stream listener will receive the following events: onMediaStreamCreate, onMediaStreamDestroy.

Parameters:

mediaStreamListener - media stream listener

removeMediaStreamListener

```
public void removeMediaStreamListener(IMediaStreamNotify mediaStreamListener)
```

Remove a media stream listener.

Parameters:

mediaStreamListener - media stream listener

notifyMediaStreamCreate

```
public void notifyMediaStreamCreate(IMediaStream mediaStream)
```

Notify all media stream listeners that a new media stream object has been created.

Parameters:

mediaStream - new media stream object

notifyMediaStreamDestroy

```
public void notifyMediaStreamDestroy(IMediaStream mediaStream)
```

Notify all media stream listeners that a media stream object is being destroyed.

Parameters:

mediaStream - media stream object being destroyed

removeLiveStreamPacketizer

```
public void removeLiveStreamPacketizer(String streamName)
```

Remove all live stream packetizers for this stream name

Parameters:

streamName - streamName

(continued from last page)

removeLiveStreamPacketizer

```
public ILiveStreamPacketizer removeLiveStreamPacketizer(String streamName,  
String packetizerName)
```

Remove live stream packetizer

Parameters:

streamName - stream name
packetizerName - packetizer id

Returns:

live stream packetizer

getLiveStreamPacketizerLock

```
public Object getLiveStreamPacketizerLock()
```

Get the lock to the live stream packetizer system

Returns:

lock to the live stream packetizer system

getLiveStreamPacketizer

```
public ILiveStreamPacketizer getLiveStreamPacketizer(String streamName,  
String packetizerName,  
boolean doCreate)
```

Get a live stream packetizer by name and packetizer id

Parameters:

streamName - stream name
packetizerName - packetizer id
doCreate - create if does not exist

Returns:

live stream packetizer

getNextNameGroupId

```
public long getNextNameGroupId(MediaStreamMapGroup newGroup)
```

addNameGroup

```
public MediaStreamMapGroup addNameGroup(MediaStreamMapGroup newGroup)
```

removeNameGroup

```
public MediaStreamMapGroup removeNameGroup(int groupId)
```

(continued from last page)

removeNameGroup

```
public MediaStreamMapGroup removeNameGroup(MediaStreamMapGroup nameGroup)
```

getNameGroups

```
public java.util.Set getNameGroups()
```

getNameGroupByGroupName

```
public MediaStreamMapGroup getNameGroupByGroupName(String groupName)
```

getNameGroups

```
public java.util.Set getNameGroups(String streamName)
```

getNameGroupStreamNames

```
public java.util.Set getNameGroupStreamNames(String streamName)
```

getDvrRecorder

```
public ILiveStreamDvrRecorder getDvrRecorder(String streamName,  
String recorderName,  
boolean doCreate)
```

Get a DVR recorder by name and recorder name

Parameters:

streamName - stream name
recorderName - packetizer id
doCreate - create if does not exist

Returns:

dvr recorder

removeDvrRecorder

```
public void removeDvrRecorder(String streamName)
```

removeDvrRecorder

```
public ILiveStreamDvrRecorder removeDvrRecorder(String streamName,  
String recorderName)
```

Remove DVR Recorder

(continued from last page)

Parameters:

streamName - stream name
recorderName - recorder name

Returns:

DVR Recorder

getDvrRecorders

```
public java.util.List getDvrRecorders()
```

Returns a list of `ILiveStreamDvrRecorder` objects

Returns:

list of `ILiveStreamDvrRecorder` objects

addLicense

```
public LicenseHolder addLicense(IMediaStream stream,  
int licenseType)
```

addLicense

```
public LicenseHolder addLicense(ILiveStreamPacketizer liveStreamPacketizer,  
int licenseType)
```

doWatchdog

```
public void doWatchdog()
```

getNameGroupRemoveDelayTime

```
public int getNameGroupRemoveDelayTime()
```

setNameGroupRemoveDelayTime

```
public void setNameGroupRemoveDelayTime(int nameGroupRemoveDelayTime)
```

com.wowza.wms.stream Class MediaStreamNameAliasProviderBase

java.lang.Object

└-com.wowza.wms.stream.MediaStreamNameAliasProviderBase

All Implemented Interfaces:

[IMediaStreamNameAliasProvider2](#), [IMediaStreamNameAliasProvider](#)

public abstract class **MediaStreamNameAliasProviderBase**

extends Object

implements [IMediaStreamNameAliasProvider](#), [IMediaStreamNameAliasProvider2](#)

Abstract base class for IMediaStreamNameAliasProvider interfaces

Constructor Summary

public	MediaStreamNameAliasProviderBase()
--------	--

Method Summary

String	resolvePlayAlias (IApplicationInstance appInstance, String name)
String	resolvePlayAlias (IApplicationInstance appInstance, String name, IClient client)
String	resolvePlayAlias (IApplicationInstance appInstance, String name, IHTTPStreamerSession httpSession)
String	resolvePlayAlias (IApplicationInstance appInstance, String name, ILiveStreamPacketizer liveStreamPacketizer)
String	resolvePlayAlias (IApplicationInstance appInstance, String name, RTPSession rtpSession)
String	resolveStreamAlias (IApplicationInstance appInstance, String name)
String	resolveStreamAlias (IApplicationInstance appInstance, String name, IMediaCaster mediaCaster)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamNameAliasProvider](#)

[resolvePlayAlias](#), [resolveStreamAlias](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamNameAliasProvider2](#)

```
resolvePlayAlias, resolvePlayAlias, resolvePlayAlias, resolvePlayAlias,  
resolveStreamAlias
```

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamNameAliasProvider](#)

```
resolvePlayAlias, resolveStreamAlias
```

Constructors

MediaStreamNameAliasProviderBase

```
public MediaStreamNameAliasProviderBase()
```

Methods

resolvePlayAlias

```
public String resolvePlayAlias(IApplicationInstance appInstance,  
    String name,  
    IClient client)
```

resolvePlayAlias

```
public String resolvePlayAlias(IApplicationInstance appInstance,  
    String name,  
    IHTTPStreamerSession httpSession)
```

resolvePlayAlias

```
public String resolvePlayAlias(IApplicationInstance appInstance,  
    String name,  
    RTPSession rtpSession)
```

resolvePlayAlias

```
public String resolvePlayAlias(IApplicationInstance appInstance,  
    String name,  
    ILiveStreamPacketizer liveStreamPacketizer)
```

resolveStreamAlias

```
public String resolveStreamAlias(IApplicationInstance appInstance,  
    String name,  
    IMediaCaster mediaCaster)
```

resolvePlayAlias

```
public String resolvePlayAlias(IApplicationInstance appInstance,  
    String name)
```

resolveStreamAlias

```
public String resolveStreamAlias(IApplicationInstance appInstance,  
    String name)
```

com.wowza.wms.stream Class MediaWriterActionNotifyBase

java.lang.Object

↳ com.wowza.wms.stream.MediaWriterActionNotifyBase

All Implemented Interfaces:

[IMediaWriterActionNotify](#)

public abstract class **MediaWriterActionNotifyBase**
 extends Object
 implements [IMediaWriterActionNotify](#)

Abstract base class for IMediaWriterActionNotify interface

Constructor Summary

public	MediaWriterActionNotifyBase()
--------	---

Method Summary

void	onFLVAddMetadata (IMediaStream stream, java.util.Map extraMetadata)
------	--

void	onWriteComplete (IMediaStream stream, java.io.File file)
------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.IMediaWriterActionNotify](#)

[onFLVAddMetadata](#), [onWriteComplete](#)

Constructors

MediaWriterActionNotifyBase

public **MediaWriterActionNotifyBase**()

Methods

onWriteComplete

public void **onWriteComplete**([IMediaStream](#) stream,
 java.io.File file)

onFLVAddMetadata

```
public void onFLVAddMetadata(IMediaStream stream,  
    java.util.Map extraMetadata)
```

Package

com.wowza.wms.stream.live

com.wowza.wms.stream.live Interface ILivePlayer

public interface **ILivePlayer**
extends

Field Summary

public static final	BEHINDRESET Value: 60000
public static final	FILTER_NODFRAMES Value: 3
public static final	FILTER_NOKFRAMES Value: 0
public static final	FILTER_NOPFRAMES Value: 1
public static final	FILTER_OUTPUTALL Value: 7

Method Summary

void	close()
long	getLastSentAudioTC()
long	getLastSentDataTC()
long	getLastSentVideoTC()
long	getLastTimecodeOffset()
int	getLastVideoFilter()
void	init(IMediaStream parent, MediaStreamMap streams)
void	interruptPlay()
double	length()
void	pause(int pauseType, long timecode)

void	pauseRaw (int pauseType, long timecode)
boolean	play ()
boolean	play (IMediaStream stream)
int	play (IMediaStream stream, java.io.OutputStream out, AMFObj wmsObjAudio, AMFObj wmsObjVideo, AMFObj wmsObjData, long[] sizes)
int	play (java.io.OutputStream out, AMFObj wmsObjAudio, AMFObj wmsObjVideo, AMFObj wmsObjData, long[] sizes)
void	reset (boolean isReset)
void	resetNoLookup ()
void	seek (int location)
void	setBufferTime (int bufferTime)
void	setName (String name, String oldName, String ext, String queryStr, double playStart, double playLen, int playTransition)
void	shutdown ()
long	size ()
void	startPlay ()
void	stopName (String name, String oldName, String ext, String queryStr, double playStart, double playLen, int playTransition)
void	switchName (String name, String oldName, String ext, String queryStr, double playStart, double playLen, int playTransition)
void	switchPlay ()
void	updateLoggingValues ()

Fields

FILTER_OUTPUTALL

```
public static final int FILTER_OUTPUTALL
```

Constant value: **7**

(continued from last page)

FILTER_NODFRAMES

```
public static final int FILTER_NODFRAMES
```

Constant value: **3**

FILTER_NOPFRAMES

```
public static final int FILTER_NOPFRAMES
```

Constant value: **1**

FILTER_NOKFRAMES

```
public static final int FILTER_NOKFRAMES
```

Constant value: **0**

BEHINDRESET

```
public static final int BEHINDRESET
```

Constant value: **60000**

Methods

init

```
public void init(IMediaStream parent,  
                 MediaStreamMap streams)
```

play

```
public int play(IMediaStream stream,  
               java.io.OutputStream out,  
               AMFObj wmsObjAudio,  
               AMFObj wmsObjVideo,  
               AMFObj wmsObjData,  
               long[] sizes)
```

play

```
public int play(java.io.OutputStream out,  
               AMFObj wmsObjAudio,  
               AMFObj wmsObjVideo,  
               AMFObj wmsObjData,  
               long[] sizes)
```

(continued from last page)

play

```
public boolean play(IMediaStream stream)
```

play

```
public boolean play()
```

close

```
public void close()
```

resetNoLookup

```
public void resetNoLookup()
```

reset

```
public void reset(boolean isReset)
```

pause

```
public void pause(int pauseType,  
                 long timecode)
```

pauseRaw

```
public void pauseRaw(int pauseType,  
                    long timecode)
```

seek

```
public void seek(int location)
```

setBufferTime

```
public void setBufferTime(int bufferTime)
```

(continued from last page)

shutdown

```
public void shutdown()
```

setName

```
public void setName(String name,  
    String oldName,  
    String ext,  
    String queryStr,  
    double playStart,  
    double playLen,  
    int playTransition)
```

switchName

```
public void switchName(String name,  
    String oldName,  
    String ext,  
    String queryStr,  
    double playStart,  
    double playLen,  
    int playTransition)
```

stopName

```
public void stopName(String name,  
    String oldName,  
    String ext,  
    String queryStr,  
    double playStart,  
    double playLen,  
    int playTransition)
```

interruptPlay

```
public void interruptPlay()
```

startPlay

```
public void startPlay()
```

switchPlay

```
public void switchPlay()
```

(continued from last page)

updateLoggingValues

```
public void updateLoggingValues()
```

length

```
public double length()
```

size

```
public long size()
```

getLastTimecodeOffset

```
public long getLastTimecodeOffset()
```

getLastSentVideoTC

```
public long getLastSentVideoTC()
```

getLastSentAudioTC

```
public long getLastSentAudioTC()
```

getLastSentDataTC

```
public long getLastSentDataTC()
```

getLastVideoFilter

```
public int getLastVideoFilter()
```

com.wowza.wms.stream.live Interface ILiveReceiver

public interface **ILiveReceiver**
extends

Method Summary

void	addAudioCodecConfigPacket (long timecode, AMFPacket packet)
void	addAudioData (byte[] data, int offset, int size, int totalSize, long audioTC)
void	addAudioExtraData (java.util.Map extraData)
void	addDataData (byte[] data, int offset, int size, int totalSize, long dataTC)
void	addDataExtraData (java.util.Map extraData)
void	addVideoCodecConfigPacket (long timecode, AMFPacket packet)
void	addVideoData (byte[] data, int offset, int size, int totalSize, long videoTC)
void	addVideoExtraData (java.util.Map extraData)
void	close ()
void	flush ()
AMFPacket	getAudioCodecConfigPacket (long timecode)
int	getAudioCodecId ()
int	getAudioMissing (int totalSize)
int	getDataMissing (int totalSize)
long	getFirstPacketTC ()
long	getLastFlushAudioTC ()
long	getLastFlushDataTC ()
long	getLastFlushRTTimecode ()

long	getLastFlushTime()
long	getLastFlushTimecode()
long	getLastFlushVideoTC()
AMFPacket	getLastKeyFrame()
AMFPacket	getLastPacket()
long	getLastPacketTC()
long	getLastReceivedAudioTC()
long	getLastReceivedDataTC()
long	getLastReceivedVideoTC()
long	getLastSentAudioTC()
long	getLastSentDataTC()
long	getLastSentVideoTC()
ILiveStreamPacketizer	getLiveStreamPacketizer (String name)
int	getMaximumLiveLatency()
long	getMaxTimecode()
int	getPacketCount()
java.util.List	getPlayPackets()
int	getPublishBitrateAudio()
int	getPublishBitrateAudio (int source)
int	getPublishBitrateVideo()
int	getPublishBitrateVideo (int source)
long	getPublishFrameCountAudio()
long	getPublishFrameCountData()
long	getPublishFrameCounts (long[] counts)

long	getPublishFrameCountVideo()
long	getPublishFrameCountVideoKey()
double	getPublishFramerateVideo()
double	getPublishFramerateVideo(int source)
int[]	getPublishKeyFrameIntervalsVideo()
int	getSrc()
long	getTimecodeOffset()
AMFPacket	getVideoCodecConfigPacket(long timecode)
int	getVideoCodecId()
int	getVideoMissing(int totalSize)
void	init(IMediaStream stream)
boolean	isPublishStreamReady(boolean checkAudio, boolean checkVideo)
void	onStreamStart(java.util.List metaDataList, long timecode)
void	resetTimecodes()
void	setAudioCodecId(int publishAudioCodecId)
void	setMaximumLiveLatency(int maximumLiveLatency)
void	setMaximumPacketsPerSecond(int maximumPacketsPerSecond)
void	setSrc(int src)
void	setVideoCodecId(int publishVideoCodecId)
void	shutdown()
void	startAudioPacket()
void	startDataPacket()
void	startVideoPacket()
void	trim()

void	trim (java.util.List dataObjs)
void	updateLoggingValues ()

Methods

init

```
public void init(IMediaStream stream)
```

resetTimecodes

```
public void resetTimecodes()
```

getVideoMissing

```
public int getVideoMissing(int totalSize)
```

getDataMissing

```
public int getDataMissing(int totalSize)
```

getAudioMissing

```
public int getAudioMissing(int totalSize)
```

startVideoPacket

```
public void startVideoPacket()
```

addVideoData

```
public void addVideoData(byte[] data,  
    int offset,  
    int size,  
    int totalSize,  
    long videoTC)
```

startDataPacket

```
public void startDataPacket()
```

(continued from last page)

addDataData

```
public void addDataData(byte[] data,  
    int offset,  
    int size,  
    int totalSize,  
    long dataTC)
```

startAudioPacket

```
public void startAudioPacket()
```

addAudioData

```
public void addAudioData(byte[] data,  
    int offset,  
    int size,  
    int totalSize,  
    long audioTC)
```

getPacketCount

```
public int getPacketCount()
```

getLastPacketTC

```
public long getLastPacketTC()
```

getFirstPacketTC

```
public long getFirstPacketTC()
```

getLastPacket

```
public AMFPacket getLastPacket()
```

getPlayPackets

```
public java.util.List getPlayPackets()
```

(continued from last page)

getLastKeyFrame

```
public AMFPacket getLastKeyFrame()
```

trim

```
public void trim(java.util.List dataObjs)
```

trim

```
public void trim()
```

getMaximumLiveLatency

```
public int getMaximumLiveLatency()
```

setMaximumLiveLatency

```
public void setMaximumLiveLatency(int maximumLiveLatency)
```

getSrc

```
public int getSrc()
```

setSrc

```
public void setSrc(int src)
```

close

```
public void close()
```

getMaxTimecode

```
public long getMaxTimecode()
```

getTimecodeOffset

```
public long getTimecodeOffset()
```

(continued from last page)

updateLoggingValues

```
public void updateLoggingValues()
```

getLastReceivedAudioTC

```
public long getLastReceivedAudioTC()
```

getLastReceivedVideoTC

```
public long getLastReceivedVideoTC()
```

getLastReceivedDataTC

```
public long getLastReceivedDataTC()
```

getLastSentAudioTC

```
public long getLastSentAudioTC()
```

getLastSentVideoTC

```
public long getLastSentVideoTC()
```

getLastSentDataTC

```
public long getLastSentDataTC()
```

getLastFlushAudioTC

```
public long getLastFlushAudioTC()
```

getLastFlushVideoTC

```
public long getLastFlushVideoTC()
```

(continued from last page)

getLastFlushDataTC

```
public long getLastFlushDataTC()
```

getLastFlushTimecode

```
public long getLastFlushTimecode()
```

getLastFlushRTTimecode

```
public long getLastFlushRTTimecode()
```

getLastFlushTime

```
public long getLastFlushTime()
```

addAudioCodecConfigPacket

```
public void addAudioCodecConfigPacket(long timecode,  
    AMFPacket packet)
```

getVideoCodecConfigPacket

```
public AMFPacket getVideoCodecConfigPacket(long timecode)
```

addVideoCodecConfigPacket

```
public void addVideoCodecConfigPacket(long timecode,  
    AMFPacket packet)
```

onStreamStart

```
public void onStreamStart(java.util.List metaDataList,  
    long timecode)
```

flush

```
public void flush()
```

(continued from last page)

getLiveStreamPacketizer

```
public ILiveStreamPacketizer getLiveStreamPacketizer(String name)
```

getAudioCodecConfigPacket

```
public AMFPacket getAudioCodecConfigPacket(long timecode)
```

getVideoCodecId

```
public int getVideoCodecId()
```

getAudioCodecId

```
public int getAudioCodecId()
```

setVideoCodecId

```
public void setVideoCodecId(int publishVideoCodecId)
```

setAudioCodecId

```
public void setAudioCodecId(int publishAudioCodecId)
```

isPublishStreamReady

```
public boolean isPublishStreamReady(boolean checkAudio,  
    boolean checkVideo)
```

setMaximumPacketsPerSecond

```
public void setMaximumPacketsPerSecond(int maximumPacketsPerSecond)
```

shutdown

```
public void shutdown()
```

addAudioExtraData

```
public void addAudioExtraData(java.util.Map extraData)
```

(continued from last page)

addVideoExtraData

```
public void addVideoExtraData(java.util.Map extraData)
```

addDataExtraData

```
public void addDataExtraData(java.util.Map extraData)
```

getPublishBitrateVideo

```
public int getPublishBitrateVideo()
```

getPublishBitrateAudio

```
public int getPublishBitrateAudio()
```

getPublishBitrateVideo

```
public int getPublishBitrateVideo(int source)
```

getPublishBitrateAudio

```
public int getPublishBitrateAudio(int source)
```

getPublishFramerateVideo

```
public double getPublishFramerateVideo()
```

getPublishKeyFrameIntervalsVideo

```
public int[] getPublishKeyFrameIntervalsVideo()
```

getPublishFramerateVideo

```
public double getPublishFramerateVideo(int source)
```

(continued from last page)

getPublishFrameCounts

```
public long getPublishFrameCounts(long[] counts)
```

getPublishFrameCountVideo

```
public long getPublishFrameCountVideo()
```

getPublishFrameCountVideoKey

```
public long getPublishFrameCountVideoKey()
```

getPublishFrameCountAudio

```
public long getPublishFrameCountAudio()
```

getPublishFrameCountData

```
public long getPublishFrameCountData()
```

Package

com.wowza.wms.stream.livedvr

com.wowza.wms.stream.livedvr Interface IDvrStreamManagerActionNotify

All Subinterfaces:

[IDvrStreamManagerActionNotify2](#)

public interface **IDvrStreamManagerActionNotify**
extends

IDvrStreamManagerActionNotify notify interface for dvr stores. See
IApplicationInstance.addDvrStreamManagerListener(IDvrStreamManagerActionNotify listener)

Method Summary

void	onDvrStreamManagerCreate (IDvrStreamManager dvrMgr) Called when DVR stream manager created but before it is initialized.
void	onDvrStreamManagerDestroy (IDvrStreamManager dvrMgr) Called when DVR stream manager destroyed.
void	onDvrStreamManagerInit (IDvrStreamManager dvrMgr) Called when DVR stream manager initialized.

Methods

onDvrStreamManagerCreate

public void **onDvrStreamManagerCreate**([IDvrStreamManager](#) dvrMgr)

Called when DVR stream manager created but before it is initialized.

Parameters:

dvrMgr - DVR stream manager

onDvrStreamManagerInit

public void **onDvrStreamManagerInit**([IDvrStreamManager](#) dvrMgr)

Called when DVR stream manager initialized.

Parameters:

dvrMgr - DVR stream manager

onDvrStreamManagerDestroy

public void **onDvrStreamManagerDestroy**([IDvrStreamManager](#) dvrMgr)

Called when DVR stream manager destroyed.

Parameters:

dvrMgr - DVR stream manager

com.wowza.wms.stream.livedvr Interface IDvrStreamManagerActionNotify2

All Superinterfaces:

[IDvrStreamManagerActionNotify](#)

public interface **IDvrStreamManagerActionNotify2**
extends [IDvrStreamManagerActionNotify](#)

IDvrStreamManagerActionNotify notify interface for dvr stores. See
IApplicationInstance.addDvrStreamManagerListener(IDvrStreamManagerActionNotify listener)

Method Summary

void	onDvrStreamManagerCreate (IDvrStreamManager dvrMgr) Called when DVR stream manager created but before it is initialized.
void	onDvrStreamManagerDestroy (IDvrStreamManager dvrMgr) Called when DVR stream manager destroyed.
void	onDvrStreamManagerInit (IDvrStreamManager dvrMgr) Called when DVR stream manager initialized.
void	onDvrStreamManagerInitStreamName (IDvrStreamManager dvrManager, String streamName)

Methods inherited from interface [com.wowza.wms.stream.livedvr.IDvrStreamManagerActionNotify](#)

[onDvrStreamManagerCreate](#), [onDvrStreamManagerDestroy](#), [onDvrStreamManagerInit](#)

Methods

onDvrStreamManagerCreate

public void **onDvrStreamManagerCreate**([IDvrStreamManager](#) dvrMgr)

Called when DVR stream manager created but before it is initialized.

Parameters:

dvrMgr - DVR stream manager

onDvrStreamManagerInit

public void **onDvrStreamManagerInit**([IDvrStreamManager](#) dvrMgr)

Called when DVR stream manager initialized.

Parameters:

dvrMgr - DVR stream manager

(continued from last page)

onDvrStreamManagerDestroy

```
public void onDvrStreamManagerDestroy(IDvrStreamManager dvrMgr)
```

Called when DVR stream manager destroyed.

Parameters:

dvrMgr - DVR stream manager

onDvrStreamManagerInitStreamName

```
public void onDvrStreamManagerInitStreamName(IDvrStreamManager dvrManager,  
String streamName)
```

com.wowza.wms.stream.livedvr Interface **ILiveStreamDvrRecorder**

public interface **ILiveStreamDvrRecorder**
extends

ILiveStreamDvrRecorder: DVR Recorder interface.

Method Summary	
boolean	canRecordAudio() True if audio is being recorded
boolean	canRecordData() True if data is being recorded
boolean	canRecordVideo() True if video is being recorded
IMediaStream	getAndSetStartStream(IMediaStream stream)
IApplicationInstance	getAppInstance() Get associated applicationInstance.
IDvrStreamManager	getDvrManager() Get DVR recorder's associated DVR stream manager
int	getDvrRecorderId() Get the DVR recorder id
LicenseHolder	getLicenseHolder()
WMSProperties	getProperties() Get properties
String	getRecordingName()
IMediaStream	getStream() Get the current stream that is being recorded
void	handlePacket(IMediaStream stream, AMFPacket packet) Called to handle an incoming packet
void	init(String streamName, String recorderName, IApplicationInstance appInstance, DvrRecorderItem dvrRecorderItem) Initialize DVR recorder.
boolean	isActive() Is the DVR recorder active
boolean	isRecording() Is this stream currently recording.

boolean	isRecordingPaused() Is this stream currently paused from recording.
boolean	pauseRecording() Request that stream recording pause.
void	resetStream(IMediaStream stream) Called when something happens that forces the stream to reset
boolean	resumeRecording() Request that stream recording resume.
void	setDvrRecorderId(int liveStreamId) Set the DVR recorder id
void	setRecordAudio(boolean recordAudio) Set to true to record audio
void	setRecordData(boolean recordVideo) Set to true to record data
void	setRecordingName(String name)
void	setRecordVideo(boolean recordVideo) Set to true to record video
void	setStartRecordingOnStartup(boolean shouldStartRecordingOnStartup) Set recording behavior of DVR Manager on startup.
boolean	shouldStartRecordingOnStartup() Should DVR start recording when packets start flowing.
void	shutdown() Called to shutdown the DVR recorder
IDvrStreamManager	startRecording() Request that stream recording start.
void	startStream(IMediaStream stream) Called when the stream starts
boolean	stopRecording() Request that stream recording stop.
void	touch(long timecode) Touch the stream to keep it active

Methods

init

```
public void init(String streamName,
                String recorderName,
                IApplicationInstance appInstance,
                DvrRecorderItem dvrRecorderItem)
```

Initialize DVR recorder.

(continued from last page)

Parameters:

streamName - stream name
recorderName - DVR recorder name
appInstance - application instance
dvrRecorderItem - DVR recorder

shutdown

```
public void shutdown()
```

Called to shutdown the DVR recorder

getStream

```
public IMediaStream getStream()
```

Get the current stream that is being recorded

Returns:

stream

getAppInstance

```
public IApplicationInstance getAppInstance()
```

Get associated applicationInstance.

Returns:

application Instance

handlePacket

```
public void handlePacket(IMediaStream stream,  
    AMFPacket packet)
```

Called to handle an incoming packet

Parameters:

stream - stream
packet - packet

startStream

```
public void startStream(IMediaStream stream)
```

Called when the stream starts

Parameters:

stream - stream

resetStream

```
public void resetStream(IMediaStream stream)
```

Called when something happens that forces the stream to reset

Parameters:

stream - stream

touch

```
public void touch(long timecode)
```

Touch the stream to keep it active

Parameters:

timecode - timecode of touch in milliseconds

isActive

```
public boolean isActive()
```

Is the DVR recorder active

Returns:

true if active

getProperties

```
public WMSProperties getProperties()
```

Get properties

Returns:

properties

getDvrRecorderId

```
public int getDvrRecorderId()
```

Get the DVR recorder id

Returns:

DVR recorder id

setDvrRecorderId

```
public void setDvrRecorderId(int liveStreamId)
```

Set the DVR recorder id

Parameters:

liveStreamId

getDvrManager

```
public IDvrStreamManager getDvrManager()
```

Get DVR recorder's associated DVR stream manager

Returns:

DVR manager

canRecordAudio

```
public boolean canRecordAudio()
```

(continued from last page)

True if audio is being recorded

Returns:

True if audio is being recorded

setRecordAudio

```
public void setRecordAudio(boolean recordAudio)
```

Set to true to record audio

Parameters:

recordAudio - true to record audio

canRecordVideo

```
public boolean canRecordVideo()
```

True if video is being recorded

Returns:

True if video is being recorded

setRecordVideo

```
public void setRecordVideo(boolean recordVideo)
```

Set to true to record video

Parameters:

recordVideo - true to record video

canRecordData

```
public boolean canRecordData()
```

True if data is being recorded

Returns:

True if data is being recorded

setRecordData

```
public void setRecordData(boolean recordVideo)
```

Set to true to record data

Parameters:

recordVideo - true to record data

startRecording

```
public IDvrStreamManager startRecording()
```

Request that stream recording start.

Returns:

stream manager if successful. null otherwise.

isRecording

```
public boolean isRecording()
```

Is this stream currently recording. If this stream is not recordable, the method returns false.

Returns:

true if has a recording stream and it is recording.

isRecordingPaused

```
public boolean isRecordingPaused()
```

Is this stream currently paused from recording. If this stream is not recording and not paused, the method returns false.

Returns:

true if has a recording is paused.

stopRecording

```
public boolean stopRecording()
```

Request that stream recording stop. Note that this call places the DVR stream in the *not* recording state.

A successful stop will result in registered [IDvrRecordingListeners](#) to have their [IDvrRecordingListener.recordingStopped\(IDvrStreamStore\)](#) method called.

Success only occurs if the stream is already in the recording state [IDvrStreamStore.isRecording\(\)](#).

Returns:

store if successful. null otherwise.

pauseRecording

```
public boolean pauseRecording()
```

Request that stream recording pause. The stream does not have to be actively recording to be paused. For example, it could be paused before packets start flowing.

A successful pause will result in registered [IDvrRecordingListeners](#) to have their [IDvrRecordingListener.recordingPaused\(IDvrStreamStore\)](#) method called.

Returns:

store if successful. null otherwise.

resumeRecording

```
public boolean resumeRecording()
```

Request that stream recording resume. The stream does not have to be actively recording to be resumed. For example, it could have been paused before the stream started, and this call would move it out of the paused state.

A successful resume will result in registered [IDvrRecordingListeners](#) to have their [IDvrRecordingListener.recordingResumed\(IDvrStreamStore\)](#) method called.

Returns:

store if successful. null otherwise.

(continued from last page)

setRecordingName

```
public void setRecordingName(String name)
```

getRecordingName

```
public String getRecordingName()
```

shouldStartRecordingOnStartup

```
public boolean shouldStartRecordingOnStartup()
```

Should DVR start recording when packets start flowing.

Returns:

true if should start recording initially, false otherwise

setStartRecordingOnStartup

```
public void setStartRecordingOnStartup(boolean shouldStartRecordingOnStartup)
```

Set recording behavior of DVR Manager on startup.

Parameters:

shouldStartRecordingOnStartup - should recording start when DVR manager starts.

getLicenseHolder

```
public LicenseHolder getLicenseHolder()
```

getAndSetStartStream

```
public IMediaStream getAndSetStartStream(IMediaStream stream)
```

com.wowza.wms.stream.livedvr Interface **ILiveStreamDvrRecorderActionNotify**

public interface **ILiveStreamDvrRecorderActionNotify**
extends

ILiveStreamDvrRecorderActionNotify: notify interface for dvr recorders.

See Also:

[ApplicationInstance.addDvrRecorderListener\(ILiveStreamDvrRecorderActionNotify\)](#),

Method Summary

void	onLiveStreamDvrRecorderCreate (ILiveStreamDvrRecorder recorder, String streamName) Called when recorder created
void	onLiveStreamDvrRecorderDestroy (ILiveStreamDvrRecorder recorder) Called when recorder destroyed
void	onLiveStreamDvrRecorderInit (ILiveStreamDvrRecorder recorder, String streamName) Called after recorder is initialized

Methods

onLiveStreamDvrRecorderCreate

public void **onLiveStreamDvrRecorderCreate**([ILiveStreamDvrRecorder](#) recorder, String streamName)

Called when recorder created

Parameters:

recorder - recorder
streamName - stream name

onLiveStreamDvrRecorderInit

public void **onLiveStreamDvrRecorderInit**([ILiveStreamDvrRecorder](#) recorder, String streamName)

Called after recorder is initialized

Parameters:

recorder - recorder
streamName - stream name

onLiveStreamDvrRecorderDestroy

public void **onLiveStreamDvrRecorderDestroy**([ILiveStreamDvrRecorder](#) recorder)

Called when recorder destroyed

(continued from last page)

Parameters:

recorder - recorder

com.wowza.wms.stream.livedvr Interface **ILiveStreamDvrRecorderControl**

public interface **ILiveStreamDvrRecorderControl**
extends

ILiveStreamDvrRecorderControl: interface to control which recorders are run for which streams.

See Also:

[IApplicationInstance.setLiveStreamDvrRecorderControl\(ILiveStreamDvrRecorderControl\)](#)

Method Summary

boolean	shouldDvrRecord (String recorderName, IMediaStream stream) Returns true if given string should be recorded.;
---------	---

Methods

shouldDvrRecord

public boolean **shouldDvrRecord**(String recorderName, [IMediaStream](#) stream)

Returns true if given string should be recorded.;

Parameters:

recorderName - recorder name
stream - stream

Returns:

true to record

Package

com.wowza.wms.stream.livepacketizer

com.wowza.wms.stream.livepacketizer Interface **ILiveStreamPacketizer**

All Subinterfaces:

[IDvrStreamManager](#)

public interface **ILiveStreamPacketizer**

extends

ILiveStreamPacketizer: live stream packetizer interface.

Method Summary	
IMediaStream	getAndSetStartStream (IMediaStream stream) Get the current stream that is being packetized
IApplicationInstance	getApplicationInstance () Get the application instance associated with this live stream packetizer.
int	getLiveStreamPacketizerId () Get the live stream packetizer id
WMSProperties	getProperties () Get properties
long	getRepeaterLastSequence () Get the sequence number of the last added repeater item
void	handlePacket (IMediaStream stream, AMFPacket packet) Called to handle an incoming packet
void	init (String streamName, String packetizerName, IApplicationInstance appInstance, LiveStreamPacketizerItem liveStreamPacketizerItem) Initialize live stream packetizer
boolean	isActive () Is the live stream packetizer active
boolean	isPacketizeAudio () True if audio is being packetized
boolean	isPacketizeData () True if data is being packetized
boolean	isPacketizeVideo () True if video is being packetized
boolean	isRepeaterEdge () Is this packetizer a live repeater edge
void	resetStream (IMediaStream stream) Called when something happens that forces the stream to reset
void	setLiveStreamPacketizerId (int id) Set the live stream packetizer id

void	setPacketizeAudio (boolean packetizeAudio) Set to true to packetize audio
void	setPacketizeData (boolean packetizeVideo) Set to true to packetize data
void	setPacketizeVideo (boolean packetizeVideo) Set to true to packetize video
void	setRepeaterEdge (boolean isRepeaterEdge) Set is live repeater edge
void	shutdown () Called to shutdown the live stream packetizer
void	startStream (IMediaStream stream) Called when the stream starts
void	touch (long timecode) Touch the stream to keep it active

Methods

init

```
public void init(String streamName,
String packetizerName,
IApplicationInstance appInstance,
LiveStreamPacketizerItem liveStreamPacketizerItem)
```

Initialize live stream packetizer

Parameters:

streamName - stream name
packetizerName - packetizer name
appInstance - application instance
liveStreamPacketizerItem - live stream packetizer

shutdown

```
public void shutdown()
```

Called to shutdown the live stream packetizer

isActive

```
public boolean isActive()
```

Is the live stream packetizer active

Returns:

true if active

getProperties

```
public WMSProperties getProperties()
```

(continued from last page)

Get properties

Returns:

properties

getRepeaterLastSequence

```
public long getRepeaterLastSequence()
```

Get the sequence number of the last added repeater item

Returns:

sequence number

getLiveStreamPacketizerId

```
public int getLiveStreamPacketizerId()
```

Get the live stream packetizer id

Returns:

live stream packetizer id

setLiveStreamPacketizerId

```
public void setLiveStreamPacketizerId(int id)
```

Set the live stream packetizer id

Parameters:

id

handlePacket

```
public void handlePacket(IMediaStream stream,  
    AMFPacket packet)
```

Called to handle an incoming packet

Parameters:

stream - stream

packet - packet

startStream

```
public void startStream(IMediaStream stream)
```

Called when the stream starts

Parameters:

stream - stream

resetStream

```
public void resetStream(IMediaStream stream)
```

Called when something happens that forces the stream to reset

Parameters:

(continued from last page)

stream - stream

touch

```
public void touch(long timecode)
```

Touch the stream to keep it active

Parameters:

timecode - timecode of touch in milliseconds

isRepeaterEdge

```
public boolean isRepeaterEdge()
```

Is this packetizer a live repeater edge

Returns:

true if live repeater edge

setRepeaterEdge

```
public void setRepeaterEdge(boolean isRepeaterEdge)
```

Set is live repeater edge

Parameters:

isRepeaterEdge - is live repeater edge

isPacketizeAudio

```
public boolean isPacketizeAudio()
```

True if audio is being packetized

Returns:

True if audio is being packetized

setPacketizeAudio

```
public void setPacketizeAudio(boolean packetizeAudio)
```

Set to true to packetize audio

Parameters:

packetizeAudio - true to packetize audio

isPacketizeVideo

```
public boolean isPacketizeVideo()
```

True if video is being packetized

Returns:

True if video is being packetized

(continued from last page)

setPacketizeVideo

```
public void setPacketizeVideo(boolean packetizeVideo)
```

Set to true to packetize video

Parameters:

packetizeVideo - true to packetize video

isPacketizeData

```
public boolean isPacketizeData()
```

True if data is being packetized

Returns:

True if data is being packetized

setPacketizeData

```
public void setPacketizeData(boolean packetizeVideo)
```

Set to true to packetize data

Parameters:

packetizeVideo - true to packetize data

getAndSetStartStream

```
public IMediaStream getAndSetStartStream(IMediaStream stream)
```

Get the current stream that is being packetized

Returns:

stream

getApplicationInstance

```
public IApplicationInstance getApplicationInstance()
```

Get the application instance associated with this live stream packetizer.

Returns:

application instance

com.wowza.wms.stream.livepacketizer Interface **ILiveStreamPacketizerActionNotify**

public interface **ILiveStreamPacketizerActionNotify**
extends

ILiveStreamPacketizerActionNotify: notify interface for live stream packetizers. See
IApplicationInstance.addLiveStreamPacketizerListener(ILiveStreamPacketizerActionNotify liveStreamPacketizerListener)

Method Summary

void	onLiveStreamPacketizerCreate (ILiveStreamPacketizer liveStreamPacketizer, String streamName) Called when packetizer created
void	onLiveStreamPacketizerDestroy (ILiveStreamPacketizer liveStreamPacketizer) Called when packetizer destroyed
void	onLiveStreamPacketizerInit (ILiveStreamPacketizer liveStreamPacketizer, String streamName) Called after packetizer is initialized

Methods

onLiveStreamPacketizerCreate

public void **onLiveStreamPacketizerCreate**([ILiveStreamPacketizer](#) liveStreamPacketizer, String streamName)

Called when packetizer created

Parameters:

liveStreamPacketizer - packetizer
streamName - stream name

onLiveStreamPacketizerDestroy

public void **onLiveStreamPacketizerDestroy**([ILiveStreamPacketizer](#) liveStreamPacketizer)

Called when packetizer destroyed

Parameters:

liveStreamPacketizer - packetizer

onLiveStreamPacketizerInit

public void **onLiveStreamPacketizerInit**([ILiveStreamPacketizer](#) liveStreamPacketizer, String streamName)

Called after packetizer is initialized

Parameters:

(continued from last page)

liveStreamPacketizer - packetizer
streamName - stream name

com.wowza.wms.stream.livepacketizer Interface **ILiveStreamPacketizerControl**

public interface **ILiveStreamPacketizerControl**
extends

ILiveStreamPacketizerControl: interface to control which packetizers are run for which streams. See:
IApplicationInstance.setLiveStreamPacketizerControl(ILiveStreamPacketizerControl liveStreamPacketizerControl)

Method Summary

boolean	isLiveStreamPacketize (String packetizer, IMediaStream stream) Return true to packetize stream
---------	---

Methods

isLiveStreamPacketize

public boolean **isLiveStreamPacketize**(String packetizer,
[IMediaStream](#) stream)

Return true to packetize stream

Parameters:

packetizer - packetizer name
stream - stream

Returns:

true to packetize

Package

com.wowza.wms.stream.livetranscoder

com.wowza.wms.stream.livetranscoder Interface **ILiveStreamTranscoder**

public interface **ILiveStreamTranscoder**
extends

ILiveStreamTranscoder: Interface to live stream transcoder.

Field Summary

public static final	TRANSCODERTYPE_LIVE Value: 1
public static final	TRANSCODERTYPE_VOD Value: 2

Method Summary

void	close (IMediaStream stream) Called when live stream transcoder is stream is closed
IApplicationInstance	getAppInstance () Get the application instance associated with this live stream transcoder.
String	getContextStr () Get the streaming context for this live stream transcoder.
LicenseHolder	getLicenseHolder () Get license holder.
LiveStreamTranscoderItem	getLiveStreamTranscoderItem () Get the definition for live stream transcoder.
WMSProperties	getProperties () Get the user properties
java.util.List	getPublisherNames () Get a list of publisher stream names for this transcoder (resultant streams)
java.util.List	getPublishers () Get a list of publishers for this transcoder (resultant streams)
String	getStreamName () Get the stream name of the source stream.
String	getTranscoderName () Get the live stream transcoder name
int	getTranscoderType () Get the live stream transcoder type.

void	handleOnMetadata (IMediaStream stream, AMFPacket packet, long timecode, boolean isSetDataFrame) Called for each new onMetaData packet
void	handlePacket (IMediaStream stream, AMFPacket packet) Called for each new source packet
void	init (String streamName, IMediaStream stream, String transcoderName, IApplicationInstance appInstance, LiveStreamTranscoderItem liveStreamTranscoderItem) Called when live stream transcoder interface is initialized.
boolean	isTemplateLoaded () Is the transcoder template loaded.
boolean	isTranscoderActive (long currTime) Returns true if the transcoder is actively receiving packets
void	resetStream (IMediaStream stream) Called when source stream changes.
void	setAppInstance (IApplicationInstance appInstance) Set the application instance associated with this live stream transcoder.
void	setLiveStreamTranscoderItem (LiveStreamTranscoderItem liveStreamTranscoderItem) Set the definition for live stream transcoder.
void	setStreamName (String streamName) Set source stream name.
void	setTranscoderName (String transcoderName) Get the live stream transcoder name
void	setTranscoderType (int transcoderType) Set the live stream transcoder type.
void	shutdown (IMediaStream stream) Called when live stream transcoder is shutdown

Fields

TRANSCODERTYPE_LIVE

```
public static final int TRANSCODERTYPE_LIVE
```

Constant value: **1**

TRANSCODERTYPE_VOD

```
public static final int TRANSCODERTYPE_VOD
```

Constant value: **2**

Methods

(continued from last page)

init

```
public void init(String streamName,  
    IMediaStream stream,  
    String transcoderName,  
    IApplicationInstance appInstance,  
    LiveStreamTranscoderItem liveStreamTranscoderItem)
```

Called when live stream transcoder interface is initialized.

Parameters:

streamName - stream name
transcoderName - transcoder name
appInstance - application instance
liveStreamTranscoderItem - live stream transcoder config item

handlePacket

```
public void handlePacket(IMediaStream stream,  
    AMFPacket packet)
```

Called for each new source packet

Parameters:

stream - stream
packet - packet

handleOnMetadata

```
public void handleOnMetadata(IMediaStream stream,  
    AMFPacket packet,  
    long timecode,  
    boolean isSetDataFrame)
```

Called for each new onMetaData packet

Parameters:

stream - stream
packet - packet
timecode - timecode (milliseconds)
isSetDataFrame - is SetDataFrame call

resetStream

```
public void resetStream(IMediaStream stream)
```

Called when source stream changes.

Parameters:

stream - stream interface

close

```
public void close(IMediaStream stream)
```

Called when live stream transcoder is stream is closed

Parameters:

stream - stream interface

shutdown

```
public void shutdown(IMediaStream stream)
```

Called when live stream transcoder is shutdown

Parameters:

stream - stream interface

getStreamName

```
public String getStreamName()
```

Get the stream name of the source stream.

Returns:

stream name of the source stream

setStreamName

```
public void setStreamName(String streamName)
```

Set source stream name.

Parameters:

streamName - source stream name

getTranscoderName

```
public String getTranscoderName()
```

Get the live stream transcoder name

Returns:

live stream transcoder name

setTranscoderName

```
public void setTranscoderName(String transcoderName)
```

Get the live stream transcoder name

Parameters:

transcoderName - live stream transcoder name

getAppInstance

```
public IApplicationInstance getAppInstance()
```

Get the application instance associated with this live stream transcoder.

Returns:

application instance associated with this live stream transcoder

setAppInstance

```
public void setAppInstance(IApplicationInstance appInstance)
```

(continued from last page)

Set the application instance associated with this live stream transcoder.

Parameters:

appInstance - application instance associated with this live stream transcoder

getLiveStreamTranscoderItem

```
public LiveStreamTranscoderItem getLiveStreamTranscoderItem()
```

Get the definition for live stream transcoder.

Returns:

definition for live stream transcoder

setLiveStreamTranscoderItem

```
public void setLiveStreamTranscoderItem(LiveStreamTranscoderItem  
liveStreamTranscoderItem)
```

Set the definition for live stream transcoder.

Parameters:

liveStreamTranscoderItem - definition for live stream transcoder

getProperties

```
public WMSProperties getProperties()
```

Get the user properties

Returns:

user properties

getLicenseHolder

```
public LicenseHolder getLicenseHolder()
```

Get license holder.

Returns:

license holder

isTranscoderActive

```
public boolean isTranscoderActive(long currTime)
```

Returns true if the transcoder is actively receiving packets

Parameters:

currTime - current timecode in milliseconds

Returns:

true if the transcoder is actively receiving packets

isTemplateLoaded

```
public boolean isTemplateLoaded()
```

(continued from last page)

Is the transcoder template loaded.

Returns:

true if transcoder template is loaded.

getContextStr

```
public String getContextStr()
```

Get the streaming context for this live stream transcoder.

Returns:

streaming context for this live stream transcoder

getTranscoderType

```
public int getTranscoderType()
```

Get the live stream transcoder type. See `ILiveStreamTranscoder.TRANSCODERTYPE_*`

Returns:

live stream transcoder type

setTranscoderType

```
public void setTranscoderType(int transcoderType)
```

Set the live stream transcoder type. See `ILiveStreamTranscoder.TRANSCODERTYPE_*`

Parameters:

transcoderType - live stream transcoder type

getPublishers

```
public java.util.List getPublishers()
```

Get a list of publishers for this transcoder (resultant streams)

Returns:

list of publishers for this transcoder

getPublisherNames

```
public java.util.List getPublisherNames()
```

Get a list of publisher stream names for this transcoder (resultant streams)

Returns:

list of publishers names

com.wowza.wms.stream.livetranscoder Interface **ILiveStreamTranscoderControl**

public interface **ILiveStreamTranscoderControl**
extends

Interface used to control if stream is transcoded. See
`IApplicationInstance.setLiveStreamTranscoderControl(ILiveStreamTranscoderControl)`

Method Summary

boolean	isLiveStreamTranscode (String transcoder, IMediaStream stream) Called each time a new publishing stream is started.
---------	--

Methods

isLiveStreamTranscode

public boolean **isLiveStreamTranscode**(String transcoder,
[IMediaStream](#) stream)

Called each time a new publishing stream is started. Return true if you wish stream to be transcoded. See
`IApplicationInstance.setLiveStreamTranscoderControl(ILiveStreamTranscoderControl)`

Parameters:

transcoder - name of transcoder
stream - stream interface

Returns:

true if wish stream to be transcoded

com.wowza.wms.stream.livetranscoder Interface **ILiveStreamTranscoderNotify**

public interface **ILiveStreamTranscoderNotify**
extends

ILiveStreamTranscoderNotify: Listener interface for listening for new live stream transcoders. See
IApplicationInstance.addLiveStreamTranscoderListener(ILiveStreamTranscoderNotify)

Method Summary

void	onLiveStreamTranscoderCreate (ILiveStreamTranscoder liveStreamTranscoder, IMediaStream stream) Triggered when live stream transcoder is created.
void	onLiveStreamTranscoderDestroy (ILiveStreamTranscoder liveStreamTranscoder, IMediaStream stream) Triggered when live stream transcoder is destroyed.
void	onLiveStreamTranscoderInit (ILiveStreamTranscoder liveStreamTranscoder, IMediaStream stream) Triggered after live stream transcoder is initialized.

Methods

onLiveStreamTranscoderCreate

```
public void onLiveStreamTranscoderCreate(ILiveStreamTranscoder liveStreamTranscoder,
IMediaStream stream)
```

Triggered when live stream transcoder is created.

Parameters:

liveStreamTranscoder - live stream transcoder
stream - source stream

onLiveStreamTranscoderDestroy

```
public void onLiveStreamTranscoderDestroy(ILiveStreamTranscoder liveStreamTranscoder,
IMediaStream stream)
```

Triggered when live stream transcoder is destroyed.

Parameters:

liveStreamTranscoder - live stream transcoder
stream - source stream

onLiveStreamTranscoderInit

```
public void onLiveStreamTranscoderInit(ILiveStreamTranscoder liveStreamTranscoder,
IMediaStream stream)
```

Triggered after live stream transcoder is initialized.

(continued from last page)

Parameters:

liveStreamTranscoder - live stream transcoder

stream - source stream

Package

com.wowza.wms.stream.publish

com.wowza.wms.stream.publish Interface IPublishingProvider

All Known Implementing Classes:

[PublishingProviderMediaReader](#), [PublishingProviderLive](#)

public interface **IPublishingProvider**

extends

IPublishingProvider: publishing provider interface.

Method Summary

void	close() Invoked on stream close
boolean	isSendOnMetadata() Get to send onMetadata event when stream starts
boolean	play(Publisher publisher) Invoked on play
boolean	seek(long timecode) Invoked on seek
boolean	seek(long timecode, int seekType) Invoked on seek
void	setDuration(long duration) Set target duration for playback (milliseconds)
void	setRealTimeStartTime(long realTimeStartTime) Set real start time (milliseconds)
void	setSendOnMetadata(boolean sendOnMetadata) Set to send onMetadata event when stream starts

Methods

play

public boolean **play**([Publisher](#) publisher)

Invoked on play

Parameters:

publisher - publisher

Returns:

true if successful

(continued from last page)

close

```
public void close()
```

Invoked on stream close

seek

```
public boolean seek(long timecode,  
                    int seekType)
```

Invoked on seek

Parameters:

timecode - target timecode

seekType - seek type, see IMediaReader.SEEKTARGET_*

Returns:

true, if seek successful

seek

```
public boolean seek(long timecode)
```

Invoked on seek

Parameters:

timecode - target timecode

Returns:

true, if seek successful

setDuration

```
public void setDuration(long duration)
```

Set target duration for playback (milliseconds)

Parameters:

duration - duration for playback (milliseconds)

setRealTimeStartTime

```
public void setRealTimeStartTime(long realTimeStartTime)
```

Set real start time (milliseconds)

Parameters:

realTimeStartTime - real start time (milliseconds)

setSendOnMetadata

```
public void setSendOnMetadata(boolean sendOnMetadata)
```

Set to send onMetadata event when stream starts

Parameters:

sendOnMetadata - true to send onMetadata event

isSendOnMetadata

```
public boolean isSendOnMetadata()
```

Get to send onMetadata event when stream starts

Returns:

true to send onMetadata event

com.wowza.wms.stream.publish Interface IStreamActionNotify

public interface **IStreamActionNotify**
extends

IStreamActionNotify: listener interface to Stream class for playlist items. See Stream.addListener(IStreamActionNotify listener)

Method Summary

void	onPlaylistItemStart (Stream stream, PlaylistItem playlistItem) Invoked when playlist item playback is started
void	onPlaylistItemStop (Stream stream, PlaylistItem playlistItem) Invoked when playlist item playback has ended

Methods

onPlaylistItemStart

```
public void onPlaylistItemStart(Stream stream,  
    PlaylistItem playlistItem)
```

Invoked when playlist item playback is started

Parameters:

stream - stream
playlistItem - playlist item

onPlaylistItemStop

```
public void onPlaylistItemStop(Stream stream,  
    PlaylistItem playlistItem)
```

Invoked when playlist item playback has ended

Parameters:

stream - stream
playlistItem - playlist item

com.wowza.wms.stream.publish Class Playlist

java.lang.Object

└─com.wowza.wms.stream.publish.Playlist

public class **Playlist**
extends Object

Constructor Summary

public	Playlist (String sName) Class constructor - A simple structure that maintains a list of playlist items.
--------	--

Method Summary

void	addItem (String sName, int start, int length) Appends an item to this playlist
java.util.List	getItems () Get the items in the playlist (returns a copy of the list)
String	getName () Returns the name of this playlist as defined in the XML definition file
boolean	getRepeat ()
boolean	open (Stream s) Opens this playlist on the given stream...
void	removeItem (int index) Remove an item from the list
void	setRepeat (boolean repeat)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

Playlist

public **Playlist**(String sName)

Class constructor - A simple structure that maintains a list of playlist items.

Parameters:

sName -- name of playlist - as defined in the XML definition file

Methods

getItems

```
public java.util.List getItems()
```

Get the items in the playlist (returns a copy of the list)

Returns:

items in the playlist (returns a copy of the list)

getRepeat

```
public boolean getRepeat()
```

setRepeat

```
public void setRepeat(boolean repeat)
```

addItem

```
public void addItem(String sName,  
                    int start,  
                    int length)
```

Appends an item to this playlist

Parameters:

sName -- item name

start -- start seconds

length -- playlength seconds

removeItem

```
public void removeItem(int index)
```

Remove an item from the list

Parameters:

index - index of item to remove

open

```
public boolean open(Stream s)
```

Opens this playlist on the given stream... stopping anything currently playing on that stream and switching over.

Parameters:

s -- stream to play on

Returns:

- true if successful

getName

```
public String getName()
```

Returns the name of this playlist as defined in the XML definition file

Returns:

name of this playlist

com.wowza.wms.stream.publish Class PlaylistItem

java.lang.Object

└-com.wowza.wms.stream.publish.PlaylistItem

```
public class PlaylistItem
extends Object
```

Constructor Summary

public	PlaylistItem (String name, int start, int length, int index) Class constructor - A simple structure to define parameters associated with a playlist item
--------	---

Method Summary

int	getIndex ()
int	getLength () Number of seconds of track to play
String	getName () Name of playlist stream
int	getStart () Number of seconds into track to start from
void	setIndex (int index)
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

PlaylistItem

```
public PlaylistItem(String name,
                    int start,
                    int length,
                    int index)
```

Class constructor - A simple structure to define parameters associated with a playlist item

Parameters:

name - - name of the playlist stream

start - - number of seconds into the track to start from (-2 means live stream)

(continued from last page)

length - - number of seconds of track to play

index - - index in the playlist

Methods

getName

```
public String getName()
```

Name of playlist stream

Returns:

- name of stream

getStart

```
public int getStart()
```

Number of seconds into track to start from

Returns:

- number of seconds

getLength

```
public int getLength()
```

Number of seconds of track to play

Returns:

- number of seconds

getIndex

```
public int getIndex()
```

setIndex

```
public void setIndex(int index)
```

toString

```
public String toString()
```

com.wowza.wms.stream.publish Class Publisher

```
java.lang.Object  
  |  
  +--com.wowza.wms.stream.publish.Publisher
```

```
public class Publisher  
extends Object
```

Publisher: clientless stream publisher. This class can be used to publish raw video, audio and metadata packets to the Wowza Pro server. Here is a quick snippet of code that illustrates how to use it.

This code below will publish data the stream named "myStream". It will be streamed to the default virtual host and available at the rtmp address `rtmp://[server-ip-address]/streamtest`.

```
IVHost vhost = VHostSingleton.getInstance(VHost.VHOST_DEFAULT);
Publisher publisher = Publisher.createInstance(vhost, "streamtest");

publisher.setFileExtension("flv");
publisher.setStreamType("live");

publisher.publish("myStream", "live");

// sit in a loop adding data
boolean done = false;
while(true)
{
    AMFPacket amfPacket;

    // read packet from audio, video, data source
    // amfPacket = readPacketFromSomewhere();

    switch (amfPacket.getType())
    {
    case IVHost.CONTENTTYPE_AUDIO:
        publisher.addAudioData(amfPacket.getData(), amfPacket.getSize(),
amfPacket.getTimecode());
        break;
    case IVHost.CONTENTTYPE_VIDEO:
        publisher.addVideoData(amfPacket.getData(), amfPacket.getSize(),
amfPacket.getTimecode());
        break;
    case IVHost.CONTENTTYPE_DATA:
        publisher.addDataData(amfPacket.getData(), amfPacket.getSize(),
amfPacket.getTimecode());
        break;
    }
    if (done)
        break;
}

publisher.unpublish();
publisher.close();
```

Basic packet format:

Audio:

AAC

[1-byte header]

[1-byte codec config indicator (1 - audio data, 0 - codec config packet)]

[n-bytes audio content or codec config data]

All others

[1-byte header]

[n-bytes audio content]

Below is the bit

layout of the header byte of data (table goes from least significant bit to most significant bit):

1 bit Number of channels:

- 0 mono
- 1 stereo

1 bit Sample size:

- 0 8 bits per sample
- 1 16 bits per sample

2 bits Sample rate:

- 0 special or 8KHz
- 1 11KHz
- 2 22KHz
- 3 44KHz

4 bits Audio type:

- 0 PCM (big endian)
- 1 PCM (swf - ADPCM)
- 2 MP3
- 3 PCM (little endian)
- 4 Nelly Moser ASAO 16KHz Mono
- 5 Nelly Moser ASAO 8KHz Mono
- 6 Nelly Moser ASAO
- 7 G.711 ALaw
- 8 G.711 MULaw
- 9 Reserved
- a AAC
- b Speex
- f MP3 8Khz

Note: For AAC the codec config data is generally a two byte packet that describes the stream. It must be published first. Here is the basic code to fill in the codec config data.

```
AACFrame frame = new AACFrame();
```

```

int sampleRate = 22100;
int channels = 2;
frame.setSampleRate(sampleRate);
frame.setRateIndex(AACUtils.sampleRateToIndex(sampleRate));
frame.setChannels(channels);
frame.setChannelIndex(AACUtils.channelCountToIndex(sampleRate));
byte[] codecConfig = new byte[2];
AACUtils.encodeAACCodecConfig(frame, codecConfig, 0);

```

Note: For AAC the header byte is always 0xaf

Note: For Speex the audio data must be encoded as 16000Hz wide band

Video:

H.264

```

[1-byte header]
[1-byte codec config indicator (1 - video data, 0 - codec config packet)]
[3-byte time difference between dts and pts in milliseconds]
[n-bytes video content or codec config data]

```

All others

```

[1-byte header]
[n-bytes audio content]

```

Below is the bit layout of the header byte of data (table goes from least significant bit to most significant bit):

4 bits Video type:

2	Sorenson Spark (H.263)
3	Screen
4	On2 VP6
5	On2 VP6A
6	Screen2
7	H.264

2 bit Frame type:

1	K frame (key frame)
2	P frame
3	B frame

Note: H.264 codec config data is the same as the AVCc packet in a QuickTime container.

Note: All timecode data is in milliseconds

Method Summary

void	addAudioData (byte[] data, int offset, int len, long timecode)
------	--

void	addAudioData (byte[] data, int offset, int len, long timecode, java.util.Map extraData) Add audio data
void	addAudioData (byte[] data, int len, long timecode) Add audio data
void	addAudioData (byte[] data, long timecode) Add audio data
void	addAudioDataInc (byte[] data, int offset, int len)
void	addDataData (byte[] data, int offset, int len, long timecode)
void	addDataData (byte[] data, int offset, int len, long timecode, java.util.Map extraData) Add metadata
void	addDataData (byte[] data, int len, long timecode) Add metadata
void	addDataData (byte[] data, long timecode) Add metadata
void	addDataDataInc (byte[] data, int offset, int len)
void	addVideoData (byte[] data, int offset, int len, long timecode) Add video data
void	addVideoData (byte[] data, int offset, int len, long timecode, java.util.Map extraData) Add video data
void	addVideoData (byte[] data, int len, long timecode) Add video data
void	addVideoData (byte[] data, long timecode) Add video data
void	addVideoDataInc (byte[] data, int offset, int len)
void	close () Close the publisher
static Publisher	createInstance (IApplicationInstance appInstance)
static Publisher	createInstance (IVHost vhost, String applicationName)
static Publisher	createInstance (IVHost vhost, String applicationName, String appInstanceName)
void	createStream () Create underlying IMediaStream object if not already created
void	flush () Flush the packets from the input buffer to the output buffer

IApplicationInstance	getAppInstance()
String	getFileExtension() Get the file extension (default flv)
long	getLastAudioTimecode() Get last audio timecode written through this publisher (milliseconds).
long	getLastDataTimecode() Get last data timecode written through this publisher (milliseconds).
long	getLastGapAudioTimecode() Get gap time from last audio timecode.
long	getLastGapVideoTimecode() Get gap time from last video timecode.
long	getLastVideoTimecode() Get last video timecode written through this publisher (milliseconds).
long	getMaxTimecode() Highest timecode written through this publisher (milliseconds).
IMediaStream	getStream() Get the media stream object
String	getStreamType()
boolean	isPublishDataEvents()
void	publish(String streamName) Publish a stream (null to stop publishing)
void	publish(String streamName, String howToPublish) Start publishing a stream (streamName = null to stop).
void	setFileExtension(String fileExtension) Set the file extension
void	setPublishDataEvents(boolean publishDataEvents)
void	setStreamType(String streamType) Set the stream type (default live)
void	startAudioData(int len, long timecode)
void	startAudioData(int len, long timecode, java.util.Map extraData)
void	startDataData(int len, long timecode)
void	startDataData(int len, long timecode, java.util.Map extraData)
void	startVideoData(int len, long timecode)
void	startVideoData(int len, long timecode, java.util.Map extraData)

void	unpublish()
------	-----------------------------

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods

createInstance

```
public static Publisher createInstance(IVHost vhost,  
    String applicationName)
```

createInstance

```
public static Publisher createInstance(IVHost vhost,  
    String applicationName,  
    String appInstanceName)
```

createInstance

```
public static Publisher createInstance(IApplicationInstance appInstance)
```

getStream

```
public IMediaStream getStream()
```

Get the media stream object

Returns:

media stream object

getStreamType

```
public String getStreamType()
```

setStreamType

```
public void setStreamType(String streamType)
```

Set the stream type (default live)

Parameters:

streamType - stream type

(continued from last page)

publish

```
public void publish(String streamName)
```

Publish a stream (null to stop publishing)

Parameters:

streamName - stream name

getFileExtension

```
public String getFileExtension()
```

Get the file extension (default flv)

Returns:

file extension

setFileExtension

```
public void setFileExtension(String fileExtension)
```

Set the file extension

Parameters:

fileExtension - file extension

getAppInstance

```
public IApplicationInstance getAppInstance()
```

unpublish

```
public void unpublish()
```

createStream

```
public void createStream()
```

Create underlying IMediaStream object if not already created

publish

```
public void publish(String streamName,  
String howToPublish)
```

Start publishing a stream (streamName = null to stop). Valid howToPublish values are (live, record, append)

Parameters:

streamName - stream name

howToPublish - publish method (live, record, append)

(continued from last page)

addVideoData

```
public void addVideoData(byte[] data,  
    long timecode)
```

Add video data

Parameters:

data - data
timecode - absolute timecode (milliseconds)

addVideoData

```
public void addVideoData(byte[] data,  
    int len,  
    long timecode)
```

Add video data

Parameters:

data - data
len - data length
timecode - absolute timecode (milliseconds)

addVideoData

```
public void addVideoData(byte[] data,  
    int offset,  
    int len,  
    long timecode)
```

Add video data

Parameters:

data - data
offset - offset
len - data length
timecode - absolute timecode (milliseconds)

addVideoData

```
public void addVideoData(byte[] data,  
    int offset,  
    int len,  
    long timecode,  
    java.util.Map extraData)
```

Add video data

Parameters:

data - data
offset - offset
len - data length
timecode - absolute timecode (milliseconds)
extraData - extra data

startVideoData

```
public void startVideoData(int len,  
    long timecode)
```

(continued from last page)

startVideoData

```
public void startVideoData(int len,  
    long timecode,  
    java.util.Map extraData)
```

addVideoDataInc

```
public void addVideoDataInc(byte[] data,  
    int offset,  
    int len)
```

startAudioData

```
public void startAudioData(int len,  
    long timecode)
```

startAudioData

```
public void startAudioData(int len,  
    long timecode,  
    java.util.Map extraData)
```

addAudioDataInc

```
public void addAudioDataInc(byte[] data,  
    int offset,  
    int len)
```

addAudioData

```
public void addAudioData(byte[] data,  
    long timecode)
```

Add audio data

Parameters:

data - data

timecode - absolute timecode (milliseconds)

addAudioData

```
public void addAudioData(byte[] data,  
    int len,  
    long timecode)
```

Add audio data

(continued from last page)

Parameters:

data - data
len - data length
timecode - absolute timecode (milliseconds)

addAudioData

```
public void addAudioData(byte[] data,  
    int offset,  
    int len,  
    long timecode)
```

addAudioData

```
public void addAudioData(byte[] data,  
    int offset,  
    int len,  
    long timecode,  
    java.util.Map extraData)
```

Add audio data

Parameters:

data - data
len - data length
offset - offset
timecode - absolute timecode (milliseconds)

addDataData

```
public void addDataData(byte[] data,  
    long timecode)
```

Add metadata

Parameters:

data - data
timecode - absolute timecode (milliseconds)

addDataData

```
public void addDataData(byte[] data,  
    int len,  
    long timecode)
```

Add metadata

Parameters:

data - data
len - data length
timecode - absolute timecode (milliseconds)

addDataData

```
public void addDataData(byte[] data,  
    int offset,  
    int len,  
    long timecode)
```

(continued from last page)

addDataData

```
public void addDataData(byte[] data,  
    int offset,  
    int len,  
    long timecode,  
    java.util.Map extraData)
```

Add metadata

Parameters:

data - data
offset - offset
len - data length
timecode - absolute timecode (milliseconds)

startDataData

```
public void startDataData(int len,  
    long timecode)
```

startDataData

```
public void startDataData(int len,  
    long timecode,  
    java.util.Map extraData)
```

addDataDataInc

```
public void addDataDataInc(byte[] data,  
    int offset,  
    int len)
```

flush

```
public void flush()
```

Flush the packets from the input buffer to the output buffer

close

```
public void close()
```

Close the publisher

getMaxTimecode

```
public long getMaxTimecode()
```

Highest timecode written through this publisher (milliseconds).

(continued from last page)

Returns:

highest timecode written through this publisher (milliseconds)

getLastAudioTimecode

```
public long getLastAudioTimecode()
```

Get last audio timecode written through this publisher (milliseconds).

Returns:

last audio timecode written through this publisher (milliseconds).

getLastGapAudioTimecode

```
public long getLastGapAudioTimecode()
```

Get gap time from last audio timecode.

Returns:

gap time from audio timecode written through this publisher (milliseconds).

getLastVideoTimecode

```
public long getLastVideoTimecode()
```

Get last video timecode written through this publisher (milliseconds).

Returns:

last video timecode written through this publisher (milliseconds).

getLastGapVideoTimecode

```
public long getLastGapVideoTimecode()
```

Get gap time from last video timecode.

Returns:

gap time from video timecode written through this publisher (milliseconds).

getLastDataTimecode

```
public long getLastDataTimecode()
```

Get last data timecode written through this publisher (milliseconds).

Returns:

last data timecode written through this publisher (milliseconds).

isPublishDataEvents

```
public boolean isPublishDataEvents()
```

setPublishDataEvents

```
public void setPublishDataEvents(boolean publishDataEvents)
```

(continued from last page)

com.wowza.wms.stream.publish Class PublishingProviderBase

java.lang.Object

└─com.wowza.wms.stream.publish.PublishingProviderBase

Direct Known Subclasses:

[PublishingProviderMediaReader](#), [PublishingProviderLive](#)

```
public class PublishingProviderBase
extends Object
```

PublishingProviderBase: Base class for publishing providers.

Field Summary

protected	sendOnMetadata
-----------	--------------------------------

Constructor Summary

public	PublishingProviderBase()
--------	--

Method Summary

boolean	isSendOnMetadata() True to send onMetadata event on stream start
void	setSendOnMetadata(boolean sendOnMetadata) True to send onMetadata event on stream start

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

sendOnMetadata

protected boolean **sendOnMetadata**

Constructors

PublishingProviderBase

public **PublishingProviderBase()**

(continued from last page)

Methods

isSendOnMetadata

```
public boolean isSendOnMetadata()
```

True to send onMetadata event on stream start

Returns:

True to send onMetadata event on stream start

setSendOnMetadata

```
public void setSendOnMetadata(boolean sendOnMetadata)
```

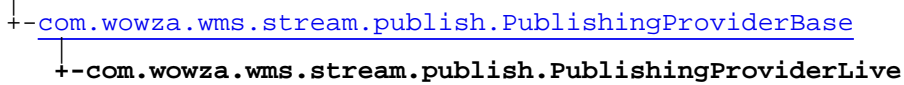
True to send onMetadata event on stream start

Parameters:

sendOnMetadata - True to send onMetadata event on stream start

com.wowza.wms.stream.publish Class PublishingProviderLive

java.lang.Object



All Implemented Interfaces:

[IPublishingProvider](#)

public class **PublishingProviderLive**

extends [PublishingProviderBase](#)

implements [IPublishingProvider](#)

Fields inherited from class [com.wowza.wms.stream.publish.PublishingProviderBase](#)

[sendOnMetadata](#)

Constructor Summary

public	PublishingProviderLive (Publisher publisher, long timeoffset, String streamName)
--------	---

Method Summary

void	close ()
long	getDuration ()
long	getStartOnPreviousBufferTime ()
boolean	isStartOnPreviousKeyFrame ()
boolean	isStopIfStreamMissing ()
boolean	play (Publisher publisher)
boolean	seek (long timecode)
boolean	seek (long timecode, int seekType)
void	setDuration (long duration)
void	setRealTimeStartTime (long realTimeStartTime)
void	setStartOnPreviousBufferTime (long startOnPreviousBufferTime)

void	setStartOnPreviousKeyFrame (boolean startOnPreviousKeyFrame)
void	setStopIfStreamMissing (boolean stopIfStreamMissing)

Methods inherited from class [com.wowza.wms.stream.publish.PublishingProviderBase](#)

[isSendOnMetadata](#), [setSendOnMetadata](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.stream.publish.IPublishingProvider](#)

[close](#), [isSendOnMetadata](#), [play](#), [seek](#), [seek](#), [setDuration](#), [setRealTimeStartTime](#), [setSendOnMetadata](#)

Constructors

PublishingProviderLive

```
public PublishingProviderLive(Publisher publisher,
                             long timeoffset,
                             String streamName)
```

Methods

close

```
public void close()
```

play

```
public boolean play(Publisher publisher)
```

seek

```
public boolean seek(long timecode)
```

seek

```
public boolean seek(long timecode,
                   int seekType)
```

getDuration

```
public long getDuration()
```

setDuration

```
public void setDuration(long duration)
```

setRealTimeStartTime

```
public void setRealTimeStartTime(long realTimeStartTime)
```

isStartOnPreviousKeyFrame

```
public boolean isStartOnPreviousKeyFrame()
```

setStartOnPreviousKeyFrame

```
public void setStartOnPreviousKeyFrame(boolean startOnPreviousKeyFrame)
```

getStartOnPreviousBufferTime

```
public long getStartOnPreviousBufferTime()
```

setStartOnPreviousBufferTime

```
public void setStartOnPreviousBufferTime(long startOnPreviousBufferTime)
```

isStopIfStreamMissing

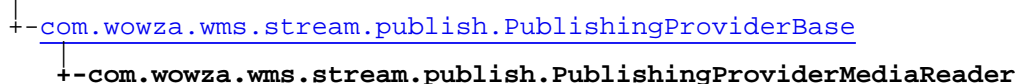
```
public boolean isStopIfStreamMissing()
```

setStopIfStreamMissing

```
public void setStopIfStreamMissing(boolean stopIfStreamMissing)
```

com.wowza.wms.stream.publish Class PublishingProviderMediaReader

java.lang.Object



All Implemented Interfaces:

[IPublishingProvider](#)

public class **PublishingProviderMediaReader**

extends [PublishingProviderBase](#)

implements [IPublishingProvider](#)

PublishingProviderMediaReader: Publishing provider for media reader based stream (vod).

Field Summary

public static final	ONMETADATA_FILTER_DURATION Value: 1
public static final	ONMETADATA_FILTER_NONE Value: 0

Fields inherited from class [com.wowza.wms.stream.publish.PublishingProviderBase](#)

[sendOnMetadata](#)

Constructor Summary

public	PublishingProviderMediaReader (Publisher publisher, long timeoffset, String streamName) Constructor
--------	---

Method Summary

void	close ()
byte[]	filterMetadata (byte[] dataDataBytes)
String	getCaptionFilenameQueryParameter ()
String	getCaptionFilenameStr ()
String	getCaptionLanguageQueryParameter ()
String	getCaptionLanguageStr ()

long	getDuration() Get the target playback duration (milliseconds)
long	getOnMetadataFilter() Filter that control what metadata items are removed from onMetaData event.
double	getSpeed()
String	getTimedTextEventName()
void	getTimeTextedReader() (IMediaReader mediaReader, IApplicationInstance appInstance, String mediaName, String mediaExtension, String queryStr, IMediaStream stream)
boolean	isTimedTextEnabled()
boolean	play() (Publisher publisher)
boolean	seek() (long timecode)
boolean	seek() (long timecode, int seekType)
void	setCaptionFilenameQueryParameter() (String captionFilenameQueryParameter)
void	setCaptionFilenameStr() (String captionFilenameStr)
void	setCaptionLanguageQueryParameter() (String captionLanguageQueryParameter)
void	setCaptionLanguageStr() (String captionLanguageStr)
void	setDuration() (long duration)
void	setOnMetadataFilter() (long onMetadataFilter) Filter that control what metadata items are removed from onMetaData event.
void	setRealTimeStartTime() (long realTimeStartTime)
void	setSpeed() (double speed)
void	setTimedTextEnabled() (boolean timedTextEnabled)
void	setTimedTextEventName() (String timedTextEventName)

Methods inherited from class [com.wowza.wms.stream.publish.PublishingProviderBase](#)

[isSendOnMetadata](#), [setSendOnMetadata](#)

Methods inherited from class [java.lang.Object](#)

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.publish.IPublishingProvider](#)

[close](#), [isSendOnMetadata](#), [play](#), [seek](#), [seek](#), [setDuration](#), [setRealTimeStartTime](#), [setSendOnMetadata](#)

Fields

ONMETADATA_FILTER_NONE

```
public static final long ONMETADATA_FILTER_NONE
```

Constant value: **0**

ONMETADATA_FILTER_DURATION

```
public static final long ONMETADATA_FILTER_DURATION
```

Constant value: **1**

Constructors

PublishingProviderMediaReader

```
public PublishingProviderMediaReader(Publisher publisher,  
                                     long timeoffset,  
                                     String streamName)
```

Constructor

Parameters:

`publisher` - publisher
`timeoffset` - timeoffset (milliseconds)
`streamName` - stream name

Methods

getTimeTextedReader

```
public void getTimeTextedReader(IMediaReader mediaReader,  
                                IApplicationInstance appInstance,  
                                String mediaName,  
                                String mediaExtension,  
                                String queryStr,  
                                IMediaStream stream)
```

seek

```
public boolean seek(long timecode)
```

(continued from last page)

seek

```
public boolean seek(long timecode,  
                    int seekType)
```

filterMetadata

```
public byte[] filterMetadata(byte[] dataDataBytes)
```

play

```
public boolean play(Publisher publisher)
```

close

```
public void close()
```

getDuration

```
public long getDuration()
```

Get the target playback duration (milliseconds)

Returns:

playback duration (milliseconds)

setDuration

```
public void setDuration(long duration)
```

setRealTimeStartTime

```
public void setRealTimeStartTime(long realTimeStartTime)
```

getSpeed

```
public double getSpeed()
```

setSpeed

```
public void setSpeed(double speed)
```

getOnMetadataFilter

```
public long getOnMetadataFilter()
```

Filter that control what metadata items are removed from onMetaData event. Default is ONMETADATA_FILTER_DURATION. Value is a bit mask of ONMETADATA_FILTER_* value.

Returns:

control what metadata items are removed from onMetaData event

setOnMetadataFilter

```
public void setOnMetadataFilter(long onMetadataFilter)
```

Filter that control what metadata items are removed from onMetaData event. Default is ONMETADATA_FILTER_DURATION. Value is a bit mask of ONMETADATA_FILTER_* value.

Parameters:

onMetadataFilter - control what metadata items are removed from onMetaData event

getCaptionLanguageQueryParameter

```
public String getCaptionLanguageQueryParameter()
```

setCaptionLanguageQueryParameter

```
public void setCaptionLanguageQueryParameter(String captionLanguageQueryParameter)
```

getCaptionFilenameQueryParameter

```
public String getCaptionFilenameQueryParameter()
```

setCaptionFilenameQueryParameter

```
public void setCaptionFilenameQueryParameter(String captionFilenameQueryParameter)
```

getCaptionLanguageStr

```
public String getCaptionLanguageStr()
```

setCaptionLanguageStr

```
public void setCaptionLanguageStr(String captionLanguageStr)
```

(continued from last page)

getCaptionFilenameStr

```
public String getCaptionFilenameStr()
```

setCaptionFilenameStr

```
public void setCaptionFilenameStr(String captionFilenameStr)
```

getTimedTextEventName

```
public String getTimedTextEventName()
```

setTimedTextEventName

```
public void setTimedTextEventName(String timedTextEventName)
```

isTimedTextEnabled

```
public boolean isTimedTextEnabled()
```

setTimedTextEnabled

```
public void setTimedTextEnabled(boolean timedTextEnabled)
```

com.wowza.wms.stream.publish Class Stream

java.lang.Object

└-com.wowza.wms.stream.publish.Stream

All Implemented Interfaces:

Runnable

public class **Stream**
extends Object
implements Runnable

Constructor Summary

public	Stream()
--------	--------------------------

Method Summary

void	addListener(IStreamActionNotify listener) Add a listener
boolean	addToPlaylist(int index, String name, int start, int length) Inserts a media source item to this playlist at a particular index, without interruption.
boolean	addToPlaylist(String existing, String name, int start, int length) Insert item into playlist just after the first item in the playlist with a given name.
void	close() Call this method when you have finished with the playlist object.
void	closeAndWait() Call this method when you have finished with the playlist object.
static Stream	createInstance(IApplicationInstance appInstance, String sName) Use this to create a named Stream on an application instance.
static Stream	createInstance(IVHost vhost, String applicationName, String sName) Use this to create a named Stream on the default instance (<code>_definst_</code>) of an application on a particular VHost.
static Stream	createInstance(IVHost vhost, String applicationName, String appInstanceName, String sName) Use this to create a named Stream on the non-default instance of an application on a particular VHost.
static Stream	createInstance(IVHost vhost, String applicationName, String appInstanceName, String sName, String streamType) Use this to create a named Stream on the non-default instance of an application on a particular VHost.
PlaylistItem	getCurrentItem() Get the currently playing playlist item

Object	getLock() Get the synchronization lock for this interface.
String	getName() Returns the name of the playlist stream - the client would play this stream by this name.
java.util.List	getPlaylist() Get the current playlist
int	getPollingInterval() Get the polling interval (milliseconds)
Publisher	getPublisher()
boolean	getRepeat() Use this to determine if the playlist is auto-repeating
long	getStartLiveOnPreviousBufferTime() Get time in milliseconds to go back in live stream buffer to get previous key frame
String	getStreamType()
int	getTimeOffsetBetweenItems() Get time in milliseconds to add to stream time between playlist items (default is zero)
double	getVODSpeed()
boolean	isMoveToNextIfLiveStreamMissing() If true, will move to next playlist item if live stream is missing or is unpublished.
boolean	isSendOnMetadata() True if sending onMetadata events
boolean	isStartLiveOnPreviousKeyFrame() Set to true to start live streams on most recent key frame (smoother switching)
boolean	isSwitchLog() Log when a playlist switch occurs
boolean	isTimesInMilliseconds() If true start time and duration and are milliseconds.
boolean	isUnpublishOnEnd() If true, stop publishing if end of playlist and repeat is false
void	next()
void	next(int n)
void	play(int n)
boolean	play(String sPlaylist) Add a media item to the playlist as defined by an XML file ..
boolean	play(String name, int start, int length, boolean reset) Adds a media source item to this playlist -

void	previous()
void	previous(int n)
boolean	removeFromPlaylist(int index) Remove item from playlist based on index.
boolean	removeFromPlaylist(String name) Remove all items matching the given stream name from the playlist.
void	removeListener(IStreamActionNotify listener) Remove a listener
void	run() Overridden from class Runnable
void	setMoveToNextIfLiveStreamMissing(boolean moveToNextIfLiveStreamMissing) If true, will move to next playlist item if live stream is missing or is unpublished.
void	setPollingInterval(int pollingInterval) Set the polling interval (milliseconds)
void	setRepeat(boolean repeat) Use this to make the playlist repeat or not...
void	setSendOnMetadata(boolean sendOnMetadata) True if sending onMetadata events
void	setStartLiveOnPreviousBufferTime(long startLiveOnPreviousBufferTime) Set time in milliseconds to go back in live stream buffer to get previous key frame
void	setStartLiveOnPreviousKeyFrame(boolean startLiveOnPreviousKeyFrame) Set to true to start live streams on most recent key frame (smoother switching)
void	setSwitchLog(boolean switchLog) Log when a playlist switch occurs
void	setTimeOffsetBetweenItems(int timeOffsetBetweenItems) Set time in milliseconds to add to stream time between playlist items (default is zero)
void	setTimesInMilliseconds(boolean timesInMilliseconds) If true start time and duration and are milliseconds.
void	setUnpublishOnEnd(boolean stopOnEnd) If true, stop publishing if end of playlist and repeat is false
void	setVODSpeed(double vodSpeed)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.lang.Runnable

run

Constructors

Stream

```
public Stream()
```

Methods

createInstance

```
public static Stream createInstance(IVHost vhost,  
    String applicationName,  
    String sName)
```

Use this to create a named Stream on the default instance (`_definst_`) of an application on a particular VHost.

Parameters:

vhost -- Virtual Host
applicationName -- Application name
sName -- Name of Stream

Returns:

stream interface

createInstance

```
public static Stream createInstance(IVHost vhost,  
    String applicationName,  
    String appInstanceName,  
    String sName)
```

Use this to create a named Stream on the non-default instance of an application on a particular VHost.

Parameters:

vhost -- Virtual Host
applicationName -- Application name
appInstanceName -- Instance name
sName -- Name of Stream

Returns:

stream interface

createInstance

```
public static Stream createInstance(IVHost vhost,  
    String applicationName,  
    String appInstanceName,  
    String sName,  
    String streamType)
```

Use this to create a named Stream on the non-default instance of an application on a particular VHost.

Parameters:

vhost -- Virtual Host
applicationName -- Application name
appInstanceName -- Instance name

(continued from last page)

sName -- Name of Stream
streamType -- Stream type

Returns:

stream interface

getLock

```
public Object getLock()
```

Get the synchronization lock for this interface.

Returns:

synchronization lock for this interface

createInstance

```
public static Stream createInstance(IApplicationInstance appInstance,  
String sName)
```

Use this to create a named Stream on an application instance.

Parameters:

appInstance -- Application instance
sName -- Name of Stream

Returns:

stream interface

run

```
public void run()
```

Overridden from class Runnable do NOT call this directly. This method handles switching between media sources in the playlist.

getPlaylist

```
public java.util.List getPlaylist()
```

Get the current playlist

Returns:

current playlist

getCurrentItem

```
public PlaylistItem getCurrentItem()
```

Get the currently playing playlist item

Returns:

currently playing playlist item

(continued from last page)

play

```
public boolean play(String name,  
    int start,  
    int length,  
    boolean reset)
```

Adds a media source item to this playlist -

Parameters:

name - - name of media item
start - - where to start playing the item. (-2 implies play a live stream)
length - - how much of the item to play (-1 implies play the entire file or live stream)
reset - - if true, will begin a new playlist, otherwise items are appended

Returns:

- returns true if item was added successfully ...otherwise false.

addToPlaylist

```
public boolean addToPlaylist(int index,  
    String name,  
    int start,  
    int length)
```

Inserts a media source item to this playlist at a particular index, without interruption.

Parameters:

index - - insertion index
name - - name of media item being inserted
start - - where to start playing the item. (-2 implies play a live stream)
length - - how much of the item to play (-1 implies play the entire file or live stream)

Returns:

- returns true if item was inserted successfully ...otherwise false. this should not interrupt anything that might be currently playing... will do nothing if existing item does not exist.. if existing == "" insert at head of list

addToPlaylist

```
public boolean addToPlaylist(String existing,  
    String name,  
    int start,  
    int length)
```

Insert item into playlist just after the first item in the playlist with a given name.

Parameters:

existing - name of playlist item in which to insert the item after
name - name of new item
start - where to start playing the item. (-2 implies play a live stream)
length - how much of the item to play (-1 implies play the entire file or live stream)

Returns:

true if item inserted

removeFromPlaylist

```
public boolean removeFromPlaylist(int index)
```

Remove item from playlist based on index.

(continued from last page)

Parameters:

index - item index

Returns:

true if at least one item from removed

removeFromPlaylist

```
public boolean removeFromPlaylist(String name)
```

Remove all items matching the given stream name from the playlist. If the item is currently being played, it is not removed.

Parameters:

name - stream name

Returns:

true if at least one item from removed

play

```
public boolean play(String sPlaylist)
```

Add a media item to the playlist as defined by an XML file ..

Parameters:

sPlaylist -- the playlist XML definition file

Returns:

- returns true if item was added successfully ...otherwise false.

close

```
public void close()
```

Call this method when you have finished with the playlist object. It will terminate the playlist thread. The playlist object cannot be used after this call.

closeAndWait

```
public void closeAndWait()
```

Call this method when you have finished with the playlist object. It will terminate the playlist thread. The playlist object cannot be used after this call. This method will wait for the thread to exit.

getName

```
public String getName()
```

Returns the name of the playlist stream - the client would play this stream by this name.

Returns:

- the name of the playlist stream

getRepeat

```
public boolean getRepeat()
```

Use this to determine if the playlist is auto-repeating

(continued from last page)

Returns:

- true if repeating otherwise false.

setRepeat

```
public void setRepeat(boolean repeat)
```

Use this to make the playlist repeat or not...

Parameters:

repeat -- true to repeat otherwise false

play

```
public void play(int n)
```

next

```
public void next(int n)
```

next

```
public void next()
```

previous

```
public void previous()
```

previous

```
public void previous(int n)
```

getPollingInterval

```
public int getPollingInterval()
```

Get the polling interval (milliseconds)

Returns:

polling interval (milliseconds)

setPollingInterval

```
public void setPollingInterval(int pollingInterval)
```

Set the polling interval (milliseconds)

(continued from last page)

Parameters:

pollingInterval - polling interval (milliseconds)

getPublisherpublic [Publisher](#) **getPublisher**()

addListenerpublic void **addListener**([IStreamActionNotify](#) listener)

Add a listener

Parameters:

listener - listener

removeListenerpublic void **removeListener**([IStreamActionNotify](#) listener)

Remove a listener

Parameters:

listener - listener

isSwitchLogpublic boolean **isSwitchLog**()

Log when a playlist switch occurs

Returns:

log when a playlist switch occurs

setSwitchLogpublic void **setSwitchLog**(boolean switchLog)

Log when a playlist switch occurs

Parameters:

switchLog - log when a playlist switch occurs

isSendOnMetadatapublic boolean **isSendOnMetadata**()

True if sending onMetadata events

Returns:

True if sending onMetadata events

setSendOnMetadatapublic void **setSendOnMetadata**(boolean sendOnMetadata)

(continued from last page)

True if sending onMetadata events

Parameters:

sendOnMetadata - True if sending onMetadata events

isTimesInMilliseconds

```
public boolean isTimesInMilliseconds()
```

If true start time and duration and are milliseconds. If false startTime and duration are in seconds.

Returns:

true start time and duration and are milliseconds

setTimesInMilliseconds

```
public void setTimesInMilliseconds(boolean timesInMilliseconds)
```

If true start time and duration and are milliseconds. If false startTime and duration are in seconds.

Parameters:

timesInMilliseconds - true start time and duration and are milliseconds

isStartLiveOnPreviousKeyFrame

```
public boolean isStartLiveOnPreviousKeyFrame()
```

Set to true to start live streams on most recent key frame (smoother switching)

Returns:

true to start live streams on most recent key frame

setStartLiveOnPreviousKeyFrame

```
public void setStartLiveOnPreviousKeyFrame(boolean startLiveOnPreviousKeyFrame)
```

Set to true to start live streams - most recent key frame (smoother switching)

Parameters:

startLiveOnPreviousKeyFrame - true to start live streams on most recent key frame

getStartLiveOnPreviousBufferTime

```
public long getStartLiveOnPreviousBufferTime()
```

Get time in milliseconds to go back in live stream buffer to get previous key frame

Returns:

time in milliseconds to go back in live stream buffer to get previous key frame

setStartLiveOnPreviousBufferTime

```
public void setStartLiveOnPreviousBufferTime(long startLiveOnPreviousBufferTime)
```

Set time in milliseconds to go back in live stream buffer to get previous key frame

Parameters:

startLiveOnPreviousBufferTime - time in milliseconds to go back in live stream buffer to get previous key frame

getTimeOffsetBetweenItems

```
public int getTimeOffsetBetweenItems()
```

Get time in milliseconds to add to stream time between playlist items (default is zero)

Returns:

time in milliseconds to add to stream time between playlist items

setTimeOffsetBetweenItems

```
public void setTimeOffsetBetweenItems(int timeOffsetBetweenItems)
```

Set time in milliseconds to add to stream time between playlist items (default is zero)

Parameters:

timeOffsetBetweenItems - time in milliseconds to add to stream time between playlist items

isMoveToNextIfLiveStreamMissing

```
public boolean isMoveToNextIfLiveStreamMissing()
```

If true, will move to next playlist item if live stream is missing or is unpublished.

Returns:

move to next playlist item if live stream is missing or is unpublished

setMoveToNextIfLiveStreamMissing

```
public void setMoveToNextIfLiveStreamMissing(boolean moveToNextIfLiveStreamMissing)
```

If true, will move to next playlist item if live stream is missing or is unpublished.

Parameters:

moveToNextIfLiveStreamMissing - move to next playlist item if live stream is missing or is unpublished

isUnpublishOnEnd

```
public boolean isUnpublishOnEnd()
```

If true, stop publishing if end of playlist and repeat is false

Returns:

stop publishing if end of playlist and repeat is false

setUnpublishOnEnd

```
public void setUnpublishOnEnd(boolean stopOnEnd)
```

If true, stop publishing if end of playlist and repeat is false

Parameters:

stopOnEnd - stop publishing if end of playlist and repeat is false

getVODSpeed

```
public double getVODSpeed()
```

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setVODSpeed

```
public void setVODSpeed(double vodSpeed)
```

getStreamType

```
public String getStreamType()
```

com.wowza.wms.stream.publish Class VODTimedTextDelegatePublisher

java.lang.Object

```

├--com.wowza.wms.timedtext.vod.model.VODTimedTextDelegateBase
    └--com.wowza.wms.stream.publish.VODTimedTextDelegatePublisher
  
```

All Implemented Interfaces:

IVODTimedTextDelegate, IVODTimedTextDelegate

```

public class VODTimedTextDelegatePublisher
    extends com.wowza.wms.timedtext.vod.model.VODTimedTextDelegateBase
    implements IVODTimedTextDelegate, IVODTimedTextDelegate
  
```

Fields inherited from class com.wowza.wms.timedtext.vod.model.VODTimedTextDelegateBase

captionDefaultLanguages, ctx, debugLanguageSelection, debugProviderDetermination, maximumLanguagesSupported, mediaReader, providers, supportedInterface

Constructor Summary

public	VODTimedTextDelegatePublisher()
--------	---

Method Summary

void	init (IMediaReader reader, com.wowza.wms.timedtext.vod.model.TimedTextMediaReaderContext ctx, Class inf)
void	initializeTimedTextProviders ()
boolean	shouldCreateTimedTextProvider (String providerName, VODTimedTextProviderItem item)

Methods inherited from class com.wowza.wms.timedtext.vod.model.VODTimedTextDelegateBase

determineCaptionLanguages, findAvailableProviders, findProvidersByExtension, findProvidersThatSupportInterface, getContext, getTimedTextProviders, getTimedTextProviders, getVODTimedTextProviders, indexTimedText, init, initializeTimedTextProviders, narrowAndOrderProviders, setTimedTextProviders, shouldCreateTimedTextProvider

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface com.wowza.wms.timedtext.model.IVODTimedTextDelegate

```
determineCaptionLanguages, getTimedTextProviders, getTimedTextProviders,  
getVODTimedTextProviders, indexTimedText, init, initializeTimedTextProviders,  
setTimedTextProviders
```

Methods inherited from interface `com.wowza.wms.timedtext.model.IVODTimedTextDelegate`

```
determineCaptionLanguages, getTimedTextProviders, getTimedTextProviders,  
getVODTimedTextProviders, indexTimedText, init, initializeTimedTextProviders,  
setTimedTextProviders
```

Constructors

VODTimedTextDelegatePublisher

```
public VODTimedTextDelegatePublisher()
```

Methods

init

```
public void init(IMediaReader reader,  
                 com.wowza.wms.timedtext.vod.model.TimedTextMediaReaderContext ctx,  
                 Class inf)
```

initializeTimedTextProviders

```
public void initializeTimedTextProviders()
```

shouldCreateTimedTextProvider

```
protected boolean shouldCreateTimedTextProvider(String providerName,  
                                                  VODTimedTextProviderItem item)
```

Package

com.wowza.wms.timedtext.cea608

com.wowza.wms.timedtext.cea608

Class ClosedCaptionCEA608Utils

java.lang.Object

└-com.wowza.wms.timedtext.cea608.CEA608Constants

└-com.wowza.wms.timedtext.cea608.ClosedCaptionCEA608Utils

Direct Known Subclasses:

[ClosedCaptionCEA608Utils](#)

```
public class ClosedCaptionCEA608Utils
extends CEA608Constants
```

Field Summary

public static final	CEA608_EXTENDED_FR_SP_MAP
public static final	CEA608_EXTENDED_NA_MAP
public static final	CEA608_EXTENDED_PORT_GERMAN_DANISH_MAP
public static	CEA608_MUSICAL_NOTE
public static	CEA608_SOLID_BLOCK
public static final	CHANNEL1 Value: 0
public static final	CHANNEL2 Value: 1
public static final	COL_0 Value: 0
public static final	COL_12 Value: 6
public static final	COL_16 Value: 8
public static final	COL_20 Value: 10
public static final	COL_24 Value: 12

public static final	COL_28 Value: 14
public static final	COL_4 Value: 2
public static final	COL_5 Value: 4
public static final	COL0_BLUE Value: 4
public static final	COL0_CYAN Value: 6
public static final	COL0_GREEN Value: 2
public static final	COL0_HIBYTE Move to set color (high-byte) [channel][row]
public static final	COL0_LOWBYTE Move to set color (low-byte) [color][row]
public static final	COL0_MAGENTA Value: 12
public static final	COL0_RED Value: 8
public static final	COL0_WHITE Value: 0
public static final	COL0_YELLOW Value: 10
public static final	COLN_LOWBYTE
public static final	CONTROLCODES_AOF AOF Reserved (formerly Alarm Off) [channel]
public static final	CONTROLCODES_AON AON Reserved (formerly Alarm On) [channel]
public static final	CONTROLCODES_BAO BAO Background Black, Opaque [channel]
public static final	CONTROLCODES_BAS BAS Background Black, Semi-transparent [channel]
public static final	CONTROLCODES_BBO BBO Background Blue, Opaque [channel]

public static final	CONTROLCODES_BBS BBS Background Blue, Semi-transparent [channel]
public static final	CONTROLCODES_BCO BCO Background Cyan, Opaque [channel]
public static final	CONTROLCODES_BCS BCS Background Cyan, Semi-transparent [channel]
public static final	CONTROLCODES_BGO BGO Background Green, Opaque [channel]
public static final	CONTROLCODES_BGS BGS Background Green, Semi-transparent [channel]
public static final	CONTROLCODES_BMO BMO Background Magenta, Opaque [channel]
public static final	CONTROLCODES_BMS BMS Background Magenta, Semi-transparent [channel]
public static final	CONTROLCODES_BRO BRO Background Red, Opaque [channel]
public static final	CONTROLCODES_BRS BRS Background Red, Semi-transparent [channel]
public static final	CONTROLCODES_BS BS Backspace [channel]
public static final	CONTROLCODES_BT BT Background Transparent [channel]
public static final	CONTROLCODES_BWO BWO Background White, Opaque [channel]
public static final	CONTROLCODES_BWS BWS Background White, Semi-transparent [channel]
public static final	CONTROLCODES_BYO BYO Background Yellow, Opaque [channel]
public static final	CONTROLCODES_BYS BYS Background Yellow, Semi-transparent [channel]
public static final	CONTROLCODES_CR CR Carriage Return [channel]
public static final	CONTROLCODES_DER DER Delete to End of Row [channel]
public static final	CONTROLCODES_EDM EDM Erase Displayed Memory [channel]
public static final	CONTROLCODES_ENM ENM Erase Non-Displayed Memory [channel]
public static final	CONTROLCODES_EOC EOC End of Caption (Flip Memories) [channel]

public static final	CONTROLCODES_FA FA Foreground Black [channel]
public static final	CONTROLCODES_FAU FAU Foreground Black Underline [channel]
public static final	CONTROLCODES_FON FON Flash On [channel]
public static final	CONTROLCODES_RCL RCL Resume caption loading [channel]
public static final	CONTROLCODES_RDC RDC Resume Direct Captioning [channel]
public static final	CONTROLCODES_RTD RTD Resume Text Display [channel]
public static final	CONTROLCODES_RU2 RU2 Roll-Up Captions-2 Rows [channel]
public static final	CONTROLCODES_RU3 RU3 Roll-Up Captions-3 Rows [channel]
public static final	CONTROLCODES_RU4 RU4 Roll-Up Captions-4 Rows [channel]
public static final	CONTROLCODES_TO1 TO1 Tab Offset 1 Column [channel]
public static final	CONTROLCODES_TO2 TO2 Tab Offset 2 Columns [channel]
public static final	CONTROLCODES_TO3 TO3 Tab Offset 3 Columns [channel]
public static final	CONTROLCODES_TR TR Text Restart [channel]
public static final	COUNT_COLS Total number of columns per frame Value: 31
public static final	COUNT_ROWS Total number of rows of characters per frame Value: 15
public static final	DONOTHING_BYTE Value: -128
public static final	DONOTHING_SHORT Value: -32640
public static final	FORMAT_COLOR
public static final	FORMAT_FLASH Value: -27480

public static final	FORMAT_ITALICS Value: -28242
public static final	FORMAT_ITALICS_UNDERLINE Value: -28369
public static final	LANG_ASCII Select the standard line 21 character set in normal size.
public static final	LANG_ASCII_DBL Select the standard line 21 character set in double size.
public static final	LANG_GB231280 Select the People's Republic of China character set: GB 2312-80.
public static final	LANG_KSC56011987 Select the Korean Standard character set: KSC 5601-1987.
public static final	LANG_PRIV1 Select the first private character set.
public static final	LANG_PRIV2 Select the second private character set.
public static final	LANG_REG1 Select the first registered character set.
public static final	MAX_CCCOUNT Maximum number of closed caption codes per SEI packet Value: 31
public static final	ODDPARITY Odd parity calculator
public static final	SEI_PAYLOADTYPE Value: 4
public static final	SEI_STARTCODE SEI start code
public static final	SEI_USERDATATYPECODE Value: 3
public static final	UTF8_BRITISH_POUND Value: 163
public static final	UTF8_BULLET Value: 8226
public static final	UTF8_CENTS Value: 162
public static final	UTF8_CLOSING_DOUBLE_QUOTE Value: 8221

public static final	UTF8_CLOSING_GUILLEMETS Value: 187
public static final	UTF8_CONNECTING_VERTICAL_BAR Value: 9474
public static final	UTF8_COPYRIGHT Value: 169
public static final	UTF8_CURRENCY Value: 164
public static final	UTF8_DASH Value: 45
public static final	UTF8_DEGREE Value: 176
public static final	UTF8_DOUBLEQUOTE Value: 34
public static final	UTF8_EM_DASH Value: 8212
public static final	UTF8_EXCLAMATION Value: 33
public static final	UTF8_GREATERTHAN Value: 62
public static final	UTF8_INVERTED_EXCLAMATION Value: 161
public static final	UTF8_LEFT_SINGLE_QUOTATION Value: 8216
public static final	UTF8_LEFTPAREN Value: 40
public static final	UTF8_LESSTHAN Value: 60
public static final	UTF8_LOWER_A Value: 97
public static final	UTF8_LOWER_A_WITH_CIRCUMFLEX Value: 226

public static final	<u>UTF8_LOWER_A_WITH_DIAERESIS</u> Value: 228
public static final	<u>UTF8_LOWER_A_WITH_GRAVE</u> Value: 224
public static final	<u>UTF8_LOWER_A_WITH_RING</u> Value: 229
public static final	<u>UTF8_LOWER_A_WITH_TILDE</u> Value: 227
public static final	<u>UTF8_LOWER_B</u> Value: 98
public static final	<u>UTF8_LOWER_C</u> Value: 99
public static final	<u>UTF8_LOWER_D</u> Value: 100
public static final	<u>UTF8_LOWER_E</u> Value: 101
public static final	<u>UTF8_LOWER_E_WITH_CIRCUMFLEX</u> Value: 234
public static final	<u>UTF8_LOWER_E_WITH_DIAERESIS</u> Value: 235
public static final	<u>UTF8_LOWER_E_WITH_GRAVE</u> Value: 232
public static final	<u>UTF8_LOWER_F</u> Value: 102
public static final	<u>UTF8_LOWER_G</u> Value: 103
public static final	<u>UTF8_LOWER_H</u> Value: 104
public static final	<u>UTF8_LOWER_I</u> Value: 105
public static final	<u>UTF8_LOWER_I_WITH_CIRCUMFLEX</u> Value: 238

public static final	UTF8_LOWER_I_WITH_DIAERESIS Value: 239
public static final	UTF8_LOWER_I_WITH_GRAVE Value: 236
public static final	UTF8_LOWER_J Value: 106
public static final	UTF8_LOWER_K Value: 107
public static final	UTF8_LOWER_L Value: 108
public static final	UTF8_LOWER_M Value: 109
public static final	UTF8_LOWER_N Value: 110
public static final	UTF8_LOWER_O Value: 111
public static final	UTF8_LOWER_O_WITH_CIRCUMFLEX Value: 244
public static final	UTF8_LOWER_O_WITH_DIAERESIS Value: 246
public static final	UTF8_LOWER_O_WITH_GRAVE Value: 242
public static final	UTF8_LOWER_O_WITH_STROKE Value: 248
public static final	UTF8_LOWER_O_WITH_TILDE Value: 245
public static final	UTF8_LOWER_P Value: 112
public static final	UTF8_LOWER_Q Value: 113
public static final	UTF8_LOWER_R Value: 114

public static final	UTF8_LOWER_S Value: 115
public static final	UTF8_LOWER_T Value: 116
public static final	UTF8_LOWER_U Value: 117
public static final	UTF8_LOWER_U_WITH_CIRCUMFLEX Value: 251
public static final	UTF8_LOWER_U_WITH_DIAERESIS Value: 252
public static final	UTF8_LOWER_U_WITH_GRAVE Value: 249
public static final	UTF8_LOWER_V Value: 118
public static final	UTF8_LOWER_W Value: 119
public static final	UTF8_LOWER_X Value: 120
public static final	UTF8_LOWER_Y Value: 121
public static final	UTF8_LOWER_Z Value: 122
public static final	UTF8_MINUSHYPHEN Value: 45
public static final	UTF8_MUSICAL_NOTE Value: 9834
public static final	UTF8_NBSP Value: 160
public static final	UTF8_NOTMATCH
public static final	UTF8_ONE_HALF Value: 189

public static final	UTF8_OPENING_DOUBLE_QUOTE Value: 8220
public static final	UTF8_OPENING_GUILLEMETS Value: 171
public static final	UTF8_PERIOD Value: 46
public static final	UTF8_PIPE Value: 124
public static final	UTF8_QUESTION Value: 63
public static final	UTF8_REGISTERED_MARK Value: 174
public static final	UTF8_REVERSE_QUERY Value: 191
public static final	UTF8_RIGHTPAREN Value: 41
public static final	UTF8_SERVICE_MARK Value: 8480
public static final	UTF8_SINGLEQUOTE Value: 39
public static final	UTF8_SPACE Value: 32
public static final	UTF8_TRADEMARK Value: 8482
public static final	UTF8_UNDERSCORE Value: 84
public static final	UTF8_UPPER_A Value: 65
public static final	UTF8_UPPER_A_WITH_ACUTE Value: 193
public static final	UTF8_UPPER_A_WITH_CURCUMFLEX Value: 194

public static final	UTF8_UPPER_A_WITH_DIAERESIS Value: 196
public static final	UTF8_UPPER_A_WITH_GRAVE Value: 192
public static final	UTF8_UPPER_A_WITH_RING Value: 197
public static final	UTF8_UPPER_A_WITH_TILDE Value: 195
public static final	UTF8_UPPER_B Value: 66
public static final	UTF8_UPPER_C Value: 67
public static final	UTF8_UPPER_C_WITH_CEDILLA Value: 199
public static final	UTF8_UPPER_D Value: 68
public static final	UTF8_UPPER_E Value: 69
public static final	UTF8_UPPER_E_WITH_ACUTE Value: 201
public static final	UTF8_UPPER_E_WITH_CIRCUMFLEX Value: 202
public static final	UTF8_UPPER_E_WITH_DIAERESIS Value: 203
public static final	UTF8_UPPER_E_WITH_GRAVE Value: 200
public static final	UTF8_UPPER_F Value: 70
public static final	UTF8_UPPER_G Value: 71
public static final	UTF8_UPPER_H Value: 72

public static final	UTF8_UPPER_I Value: 73
public static final	UTF8_UPPER_I_WITH_CIRCUMFLEX Value: 206
public static final	UTF8_UPPER_I_WITH_DIAERESIS Value: 207
public static final	UTF8_UPPER_I_WITH_GRAVE Value: 204
public static final	UTF8_UPPER_I_WITH_TILDE Value: 205
public static final	UTF8_UPPER_J Value: 74
public static final	UTF8_UPPER_K Value: 75
public static final	UTF8_UPPER_L Value: 76
public static final	UTF8_UPPER_M Value: 77
public static final	UTF8_UPPER_N Value: 78
public static final	UTF8_UPPER_O Value: 79
public static final	UTF8_UPPER_O_WITH_ACUTE Value: 211
public static final	UTF8_UPPER_O_WITH_CIRCUMFLEX Value: 212
public static final	UTF8_UPPER_O_WITH_DIAERESIS Value: 214
public static final	UTF8_UPPER_O_WITH_GRAVE Value: 210
public static final	UTF8_UPPER_O_WITH_STROKE Value: 216

public static final	<u>UTF8_UPPER_O_WITH_TILDE</u> Value: 213
public static final	<u>UTF8_UPPER_P</u> Value: 80
public static final	<u>UTF8_UPPER_Q</u> Value: 81
public static final	<u>UTF8_UPPER_R</u> Value: 82
public static final	<u>UTF8_UPPER_S</u> Value: 83
public static final	<u>UTF8_UPPER_T</u> Value: 84
public static final	<u>UTF8_UPPER_U</u> Value: 85
public static final	<u>UTF8_UPPER_U_WITH_ACUTE</u> Value: 218
public static final	<u>UTF8_UPPER_U_WITH_CIRCUMFLEX</u> Value: 219
public static final	<u>UTF8_UPPER_U_WITH_DIAERESIS</u> Value: 220
public static final	<u>UTF8_UPPER_U_WITH_GRAVE</u> Value: 217
public static final	<u>UTF8_UPPER_V</u> Value: 86
public static final	<u>UTF8_UPPER_W</u> Value: 87
public static final	<u>UTF8_UPPER_X</u> Value: 88
public static final	<u>UTF8_UPPER_Y</u> Value: 89
public static final	<u>UTF8_UPPER_Z</u> Value: 90

public static final	UTF8_YEN Value: 165
public static final	UTF8MAP
public static final	UTF8MAP_INDEX_OFFSET Value: 32

Fields inherited from class com.wowza.wms.timedtext.cea608.CEA608Constants

CC_CHANNEL_CC1, CC_CHANNEL_CC2, CC_CHANNEL_CC3, CC_CHANNEL_CC4, CC_TYPE_DTVCC_PACKET_DATA, CC_TYPE_DTVCC_PACKET_START, CC_TYPE_NTSC_FIELD_1, CC_TYPE_NTSC_FIELD_2

Constructor Summary

public	ClosedCaptionCEA608Utils()
--------	--

Method Summary

static byte	calcParity (byte inByte)
static short	calcParity (short inShort)
static char	cea608CharToCharUTF8 (short b)
static Character	cea608ExtendedCharacterToUTF8 (short command)
static byte[]	charUTF8ToCAE608 (CEACaptionConversionContext ceaContext, String text, int pos, String characterSet, int channel)
static byte[]	charUTF8ToCAE608 (String text, int pos, String characterSet, int channel)
static boolean	checkParity (byte inByte)
static boolean	checkParity (short inShort)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

SEI_PAYLOADTYPE

public static final byte **SEI_PAYLOADTYPE**

Constant value: **4**

SEI_USERDATATYPECODE

public static final byte **SEI_USERDATATYPECODE**

Constant value: **3**

UTF8_BULLET

public static final char **UTF8_BULLET**

Constant value: **8226**

UTF8_CLOSING_DOUBLE_QUOTE

public static final char **UTF8_CLOSING_DOUBLE_QUOTE**

Constant value: **8221**

UTF8_CLOSING_GUILLEMETS

public static final char **UTF8_CLOSING_GUILLEMETS**

Constant value: **187**

UTF8_CONNECTING_VERTICAL_BAR

public static final char **UTF8_CONNECTING_VERTICAL_BAR**

Constant value: **9474**

UTF8_COPYRIGHT

public static final char **UTF8_COPYRIGHT**

Constant value: **169**

UTF8_CURRENCY

public static final char **UTF8_CURRENCY**

Constant value: **164**

UTF8_DEGREE

public static final char **UTF8_DEGREE**

Constant value: **176**

(continued from last page)

UTF8_EM_DASHpublic static final char **UTF8_EM_DASH**Constant value: **8212**

UTF8_INVERTED_EXCLAMATIONpublic static final char **UTF8_INVERTED_EXCLAMATION**Constant value: **161**

UTF8_LEFT_SINGLE_QUOTATIONpublic static final char **UTF8_LEFT_SINGLE_QUOTATION**Constant value: **8216**

UTF8_OPENING_DOUBLE_QUOTEpublic static final char **UTF8_OPENING_DOUBLE_QUOTE**Constant value: **8220**

UTF8_OPENING_GUILLEMETSpublic static final char **UTF8_OPENING_GUILLEMETS**Constant value: **171**

UTF8_REGISTERED_MARKpublic static final char **UTF8_REGISTERED_MARK**Constant value: **174**

UTF8_SERVICE_MARKpublic static final char **UTF8_SERVICE_MARK**Constant value: **8480**

UTF8_YENpublic static final char **UTF8_YEN**Constant value: **165**

UTF8_LOWER_A_WITH_DIAERESISpublic static final char **UTF8_LOWER_A_WITH_DIAERESIS**

(continued from last page)

Constant value: **228**

UTF8_LOWER_A_WITH_RING

public static final char **UTF8_LOWER_A_WITH_RING**

Constant value: **229**

UTF8_LOWER_A_WITH_TILDE

public static final char **UTF8_LOWER_A_WITH_TILDE**

Constant value: **227**

UTF8_LOWER_E_WITH_DIAERESIS

public static final char **UTF8_LOWER_E_WITH_DIAERESIS**

Constant value: **235**

UTF8_LOWER_I_WITH_DIAERESIS

public static final char **UTF8_LOWER_I_WITH_DIAERESIS**

Constant value: **239**

UTF8_LOWER_I_WITH_GRAVE

public static final char **UTF8_LOWER_I_WITH_GRAVE**

Constant value: **236**

UTF8_LOWER_O_WITH_DIAERESIS

public static final char **UTF8_LOWER_O_WITH_DIAERESIS**

Constant value: **246**

UTF8_LOWER_O_WITH_GRAVE

public static final char **UTF8_LOWER_O_WITH_GRAVE**

Constant value: **242**

UTF8_LOWER_O_WITH_STROKE

public static final char **UTF8_LOWER_O_WITH_STROKE**

Constant value: **248**

UTF8_LOWER_O_WITH_TILDE

public static final char UTF8_LOWER_O_WITH_TILDE

Constant value: **245**

UTF8_LOWER_U_WITH_DIAERESIS

public static final char UTF8_LOWER_U_WITH_DIAERESIS

Constant value: **252**

UTF8_LOWER_U_WITH_GRAVE

public static final char UTF8_LOWER_U_WITH_GRAVE

Constant value: **249**

UTF8_UPPER_A_WITH_ACUTE

public static final char UTF8_UPPER_A_WITH_ACUTE

Constant value: **193**

UTF8_UPPER_A_WITH_CURCUMFLEX

public static final char UTF8_UPPER_A_WITH_CURCUMFLEX

Constant value: **194**

UTF8_UPPER_A_WITH_DIAERESIS

public static final char UTF8_UPPER_A_WITH_DIAERESIS

Constant value: **196**

UTF8_UPPER_A_WITH_GRAVE

public static final char UTF8_UPPER_A_WITH_GRAVE

Constant value: **192**

UTF8_UPPER_A_WITH_RING

public static final char UTF8_UPPER_A_WITH_RING

Constant value: **197**

(continued from last page)

UTF8_UPPER_A_WITH_TILDE

```
public static final char UTF8_UPPER_A_WITH_TILDE
```

Constant value: **195****UTF8_UPPER_C_WITH_CEDILLA**

```
public static final char UTF8_UPPER_C_WITH_CEDILLA
```

Constant value: **199****UTF8_UPPER_E_WITH_ACUTE**

```
public static final char UTF8_UPPER_E_WITH_ACUTE
```

Constant value: **201****UTF8_UPPER_E_WITH_CIRCUMFLEX**

```
public static final char UTF8_UPPER_E_WITH_CIRCUMFLEX
```

Constant value: **202****UTF8_UPPER_E_WITH_DIAERESIS**

```
public static final char UTF8_UPPER_E_WITH_DIAERESIS
```

Constant value: **203****UTF8_UPPER_E_WITH_GRAVE**

```
public static final char UTF8_UPPER_E_WITH_GRAVE
```

Constant value: **200****UTF8_UPPER_I_WITH_CIRCUMFLEX**

```
public static final char UTF8_UPPER_I_WITH_CIRCUMFLEX
```

Constant value: **206****UTF8_UPPER_I_WITH_DIAERESIS**

```
public static final char UTF8_UPPER_I_WITH_DIAERESIS
```

Constant value: **207****UTF8_UPPER_I_WITH_GRAVE**

```
public static final char UTF8_UPPER_I_WITH_GRAVE
```

(continued from last page)

Constant value: **204**

UTF8_UPPER_I_WITH_TILDE

public static final char **UTF8_UPPER_I_WITH_TILDE**

Constant value: **205**

UTF8_UPPER_O_WITH_ACUTE

public static final char **UTF8_UPPER_O_WITH_ACUTE**

Constant value: **211**

UTF8_UPPER_O_WITH_CIRCUMFLEX

public static final char **UTF8_UPPER_O_WITH_CIRCUMFLEX**

Constant value: **212**

UTF8_UPPER_O_WITH_DIAERESIS

public static final char **UTF8_UPPER_O_WITH_DIAERESIS**

Constant value: **214**

UTF8_UPPER_O_WITH_GRAVE

public static final char **UTF8_UPPER_O_WITH_GRAVE**

Constant value: **210**

UTF8_UPPER_O_WITH_STROKE

public static final char **UTF8_UPPER_O_WITH_STROKE**

Constant value: **216**

UTF8_UPPER_O_WITH_TILDE

public static final char **UTF8_UPPER_O_WITH_TILDE**

Constant value: **213**

UTF8_UPPER_U_WITH_ACUTE

public static final char **UTF8_UPPER_U_WITH_ACUTE**

Constant value: **218**

UTF8_UPPER_U_WITH_CIRCUMFLEX

```
public static final char UTF8_UPPER_U_WITH_CIRCUMFLEX
```

Constant value: **219**

UTF8_UPPER_U_WITH_DIAERESIS

```
public static final char UTF8_UPPER_U_WITH_DIAERESIS
```

Constant value: **220**

UTF8_UPPER_U_WITH_GRAVE

```
public static final char UTF8_UPPER_U_WITH_GRAVE
```

Constant value: **217**

MAX_CCCOUNT

```
public static final int MAX_CCCOUNT
```

Maximum number of closed caption codes per SEI packet
Constant value: **31**

SEI_STARTCODE

```
public static final byte SEI_STARTCODE
```

SEI start code

ODDPARITY

```
public static final byte ODDPARITY
```

Odd parity calculator

COLO_WHITE

```
public static final int COLO_WHITE
```

Constant value: **0**

COLO_GREEN

```
public static final int COLO_GREEN
```

Constant value: **2**

COLO_BLUE

```
public static final int COLO_BLUE
```

(continued from last page)

Constant value: **4**

COLO_CYAN

```
public static final int COLO_CYAN
```

Constant value: **6**

COLO_RED

```
public static final int COLO_RED
```

Constant value: **8**

COLO_YELLOW

```
public static final int COLO_YELLOW
```

Constant value: **10**

COLO_MAGENTA

```
public static final int COLO_MAGENTA
```

Constant value: **12**

CHANNEL1

```
public static final int CHANNEL1
```

Constant value: **0**

CHANNEL2

```
public static final int CHANNEL2
```

Constant value: **1**

DONOTHING_SHORT

```
public static final short DONOTHING_SHORT
```

Constant value: **-32640**

DONOTHING_BYTE

```
public static final byte DONOTHING_BYTE
```

Constant value: **-128**

(continued from last page)

CONTROLCODES_RCLpublic static final short **CONTROLCODES_RCL**

RCL Resume caption loading [channel]

CONTROLCODES_BSpublic static final short **CONTROLCODES_BS**

BS Backspace [channel]

CONTROLCODES_AOFpublic static final short **CONTROLCODES_AOF**

AOF Reserved (formerly Alarm Off) [channel]

CONTROLCODES_AONpublic static final short **CONTROLCODES_AON**

AON Reserved (formerly Alarm On) [channel]

CONTROLCODES_DERpublic static final short **CONTROLCODES_DER**

DER Delete to End of Row [channel]

CONTROLCODES_RU2public static final short **CONTROLCODES_RU2**

RU2 Roll-Up Captions-2 Rows [channel]

CONTROLCODES_RU3public static final short **CONTROLCODES_RU3**

RU3 Roll-Up Captions-3 Rows [channel]

CONTROLCODES_RU4public static final short **CONTROLCODES_RU4**

RU4 Roll-Up Captions-4 Rows [channel]

CONTROLCODES_FONpublic static final short **CONTROLCODES_FON**

FON Flash On [channel]

CONTROLCODES_RDCpublic static final short **CONTROLCODES_RDC**

(continued from last page)

RDC Resume Direct Captioning [channel]

CONTROLCODES_TR

public static final short **CONTROLCODES_TR**

TR Text Restart [channel]

CONTROLCODES_RTD

public static final short **CONTROLCODES_RTD**

RTD Resume Text Display [channel]

CONTROLCODES_EDM

public static final short **CONTROLCODES_EDM**

EDM Erase Displayed Memory [channel]

CONTROLCODES_CR

public static final short **CONTROLCODES_CR**

CR Carriage Return [channel]

CONTROLCODES_ENM

public static final short **CONTROLCODES_ENM**

ENM Erase Non-Displayed Memory [channel]

CONTROLCODES_EOC

public static final short **CONTROLCODES_EOC**

EOC End of Caption (Flip Memories) [channel]

CONTROLCODES_TO1

public static final short **CONTROLCODES_TO1**

TO1 Tab Offset 1 Column [channel]

CONTROLCODES_TO2

public static final short **CONTROLCODES_TO2**

TO2 Tab Offset 2 Columns [channel]

CONTROLCODES_TO3

public static final short **CONTROLCODES_TO3**

TO3 Tab Offset 3 Columns [channel]

(continued from last page)

CONTROLCODES_BWO

```
public static final short CONTROLCODES_BWO
```

BWO Background White, Opaque [channel]

CONTROLCODES_BWS

```
public static final short CONTROLCODES_BWS
```

BWS Background White, Semi-transparent [channel]

CONTROLCODES_BGO

```
public static final short CONTROLCODES_BGO
```

BGO Background Green, Opaque [channel]

CONTROLCODES_BGS

```
public static final short CONTROLCODES_BGS
```

BGS Background Green, Semi-transparent [channel]

CONTROLCODES_BBO

```
public static final short CONTROLCODES_BBO
```

BBO Background Blue, Opaque [channel]

CONTROLCODES_BBS

```
public static final short CONTROLCODES_BBS
```

BBS Background Blue, Semi-transparent [channel]

CONTROLCODES_BCO

```
public static final short CONTROLCODES_BCO
```

BCO Background Cyan, Opaque [channel]

CONTROLCODES_BCS

```
public static final short CONTROLCODES_BCS
```

BCS Background Cyan, Semi-transparent [channel]

CONTROLCODES_BRO

```
public static final short CONTROLCODES_BRO
```

BRO Background Red, Opaque [channel]

CONTROLCODES_BRS

```
public static final short CONTROLCODES_BRS
```

(continued from last page)

BRS Background Red, Semi-transparent [channel]

CONTROLCODES_BYO

public static final short **CONTROLCODES_BYO**

BYO Background Yellow, Opaque [channel]

CONTROLCODES_BYS

public static final short **CONTROLCODES_BYS**

BYS Background Yellow, Semi-transparent [channel]

CONTROLCODES_BMO

public static final short **CONTROLCODES_BMO**

BMO Background Magenta, Opaque [channel]

CONTROLCODES_BMS

public static final short **CONTROLCODES_BMS**

BMS Background Magenta, Semi-transparent [channel]

CONTROLCODES_BAO

public static final short **CONTROLCODES_BAO**

BAO Background Black, Opaque [channel]

CONTROLCODES_BAS

public static final short **CONTROLCODES_BAS**

BAS Background Black, Semi-transparent [channel]

CONTROLCODES_BT

public static final short **CONTROLCODES_BT**

BT Background Transparent [channel]

CONTROLCODES_FA

public static final short **CONTROLCODES_FA**

FA Foreground Black [channel]

CONTROLCODES_FAU

public static final short **CONTROLCODES_FAU**

FAU Foreground Black Underline [channel]

(continued from last page)

LANG_ASCII

```
public static final short LANG_ASCII
```

Select the standard line 21 character set in normal size. [channel]

LANG_ASCII_DBL

```
public static final short LANG_ASCII_DBL
```

Select the standard line 21 character set in double size. [channel]

LANG_PRIV1

```
public static final short LANG_PRIV1
```

Select the first private character set. [channel]

LANG_PRIV2

```
public static final short LANG_PRIV2
```

Select the second private character set. [channel]

LANG_GB231280

```
public static final short LANG_GB231280
```

Select the People's Republic of China character set: GB 2312-80. [channel]

LANG_KSC56011987

```
public static final short LANG_KSC56011987
```

Select the Korean Standard character set: KSC 5601-1987. [channel]

LANG_REG1

```
public static final short LANG_REG1
```

Select the first registered character set. [channel]

COUNT_ROWS

```
public static final int COUNT_ROWS
```

Total number of rows of characters per frame
Constant value: **15**

COUNT_COLS

```
public static final int COUNT_COLS
```

Total number of columns per frame
Constant value: **31**

(continued from last page)

COL0_HIBYTE

```
public static final short COL0_HIBYTE
```

Move to set color (high-byte) [channel][row]

COL0_LOWBYTE

```
public static final short COL0_LOWBYTE
```

Move to set color (low-byte) [color][row]

COL_0

```
public static final int COL_0
```

Constant value: 0

COL_4

```
public static final int COL_4
```

Constant value: 2

COL_5

```
public static final int COL_5
```

Constant value: 4

COL_12

```
public static final int COL_12
```

Constant value: 6

COL_16

```
public static final int COL_16
```

Constant value: 8

COL_20

```
public static final int COL_20
```

Constant value: 10

COL_24

```
public static final int COL_24
```

(continued from last page)

Constant value: **12**

COL_28public static final int **COL_28**Constant value: **14**

COLN_LOWBYTEpublic static final short **COLN_LOWBYTE**

FORMAT_COLORpublic static final short **FORMAT_COLOR**

FORMAT_ITALICSpublic static final short **FORMAT_ITALICS**Constant value: **-28242**

FORMAT_ITALICS_UNDERLINEpublic static final short **FORMAT_ITALICS_UNDERLINE**Constant value: **-28369**

FORMAT_FLASHpublic static final short **FORMAT_FLASH**Constant value: **-27480**

UTF8_NOTMATCHpublic static final byte **UTF8_NOTMATCH**

UTF8_PERIODpublic static final byte **UTF8_PERIOD**Constant value: **46**

UTF8_SINGLEQUOTEpublic static final byte **UTF8_SINGLEQUOTE**

(continued from last page)

Constant value: **39**

UTF8_DOUBLEQUOTE

public static final byte UTF8_DOUBLEQUOTE

Constant value: **34**

UTF8_DASH

public static final byte UTF8_DASH

Constant value: **45**

UTF8_UNDERSCORE

public static final byte UTF8_UNDERSCORE

Constant value: **84**

UTF8_LEFTPAREN

public static final byte UTF8_LEFTPAREN

Constant value: **40**

UTF8_RIGHTPAREN

public static final byte UTF8_RIGHTPAREN

Constant value: **41**

UTF8_SPACE

public static final byte UTF8_SPACE

Constant value: **32**

UTF8_EXCLAMATION

public static final byte UTF8_EXCLAMATION

Constant value: **33**

UTF8_QUESTION

public static final byte UTF8_QUESTION

Constant value: **63**

(continued from last page)

UTF8_LESSTHANpublic static final byte **UTF8_LESSTHAN**Constant value: **60**

UTF8_GREATERTHANpublic static final byte **UTF8_GREATERTHAN**Constant value: **62**

UTF8_MINUSHYPHENpublic static final byte **UTF8_MINUSHYPHEN**Constant value: **45**

UTF8_PIPEpublic static final byte **UTF8_PIPE**Constant value: **124**

UTF8_LOWER_Apublic static final byte **UTF8_LOWER_A**Constant value: **97**

UTF8_LOWER_Bpublic static final byte **UTF8_LOWER_B**Constant value: **98**

UTF8_LOWER_Cpublic static final byte **UTF8_LOWER_C**Constant value: **99**

UTF8_LOWER_Dpublic static final byte **UTF8_LOWER_D**Constant value: **100**

UTF8_LOWER_Epublic static final byte **UTF8_LOWER_E**

(continued from last page)

Constant value: **101**

UTF8_LOWER_F

public static final byte **UTF8_LOWER_F**

Constant value: **102**

UTF8_LOWER_G

public static final byte **UTF8_LOWER_G**

Constant value: **103**

UTF8_LOWER_H

public static final byte **UTF8_LOWER_H**

Constant value: **104**

UTF8_LOWER_I

public static final byte **UTF8_LOWER_I**

Constant value: **105**

UTF8_LOWER_J

public static final byte **UTF8_LOWER_J**

Constant value: **106**

UTF8_LOWER_K

public static final byte **UTF8_LOWER_K**

Constant value: **107**

UTF8_LOWER_L

public static final byte **UTF8_LOWER_L**

Constant value: **108**

UTF8_LOWER_M

public static final byte **UTF8_LOWER_M**

Constant value: **109**

UTF8_LOWER_N

public static final byte UTF8_LOWER_N

Constant value: **110**

UTF8_LOWER_O

public static final byte UTF8_LOWER_O

Constant value: **111**

UTF8_LOWER_P

public static final byte UTF8_LOWER_P

Constant value: **112**

UTF8_LOWER_Q

public static final byte UTF8_LOWER_Q

Constant value: **113**

UTF8_LOWER_R

public static final byte UTF8_LOWER_R

Constant value: **114**

UTF8_LOWER_S

public static final byte UTF8_LOWER_S

Constant value: **115**

UTF8_LOWER_T

public static final byte UTF8_LOWER_T

Constant value: **116**

UTF8_LOWER_U

public static final byte UTF8_LOWER_U

Constant value: **117**

(continued from last page)

UTF8_LOWER_Vpublic static final byte **UTF8_LOWER_V**Constant value: **118****UTF8_LOWER_W**public static final byte **UTF8_LOWER_W**Constant value: **119****UTF8_LOWER_X**public static final byte **UTF8_LOWER_X**Constant value: **120****UTF8_LOWER_Y**public static final byte **UTF8_LOWER_Y**Constant value: **121****UTF8_LOWER_Z**public static final byte **UTF8_LOWER_Z**Constant value: **122****UTF8_UPPER_A**public static final byte **UTF8_UPPER_A**Constant value: **65****UTF8_UPPER_B**public static final byte **UTF8_UPPER_B**Constant value: **66****UTF8_UPPER_C**public static final byte **UTF8_UPPER_C**Constant value: **67****UTF8_UPPER_D**public static final byte **UTF8_UPPER_D**

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Constant value: **68**

UTF8_UPPER_E

public static final byte **UTF8_UPPER_E**

Constant value: **69**

UTF8_UPPER_F

public static final byte **UTF8_UPPER_F**

Constant value: **70**

UTF8_UPPER_G

public static final byte **UTF8_UPPER_G**

Constant value: **71**

UTF8_UPPER_H

public static final byte **UTF8_UPPER_H**

Constant value: **72**

UTF8_UPPER_I

public static final byte **UTF8_UPPER_I**

Constant value: **73**

UTF8_UPPER_J

public static final byte **UTF8_UPPER_J**

Constant value: **74**

UTF8_UPPER_K

public static final byte **UTF8_UPPER_K**

Constant value: **75**

UTF8_UPPER_L

public static final byte **UTF8_UPPER_L**

Constant value: **76**

UTF8_UPPER_M

public static final byte UTF8_UPPER_M

Constant value: 77

UTF8_UPPER_N

public static final byte UTF8_UPPER_N

Constant value: 78

UTF8_UPPER_O

public static final byte UTF8_UPPER_O

Constant value: 79

UTF8_UPPER_P

public static final byte UTF8_UPPER_P

Constant value: 80

UTF8_UPPER_Q

public static final byte UTF8_UPPER_Q

Constant value: 81

UTF8_UPPER_R

public static final byte UTF8_UPPER_R

Constant value: 82

UTF8_UPPER_S

public static final byte UTF8_UPPER_S

Constant value: 83

UTF8_UPPER_T

public static final byte UTF8_UPPER_T

Constant value: 84

(continued from last page)

UTF8_UPPER_U

```
public static final byte UTF8_UPPER_U
```

Constant value: **85****UTF8_UPPER_V**

```
public static final byte UTF8_UPPER_V
```

Constant value: **86****UTF8_UPPER_W**

```
public static final byte UTF8_UPPER_W
```

Constant value: **87****UTF8_UPPER_X**

```
public static final byte UTF8_UPPER_X
```

Constant value: **88****UTF8_UPPER_Y**

```
public static final byte UTF8_UPPER_Y
```

Constant value: **89****UTF8_UPPER_Z**

```
public static final byte UTF8_UPPER_Z
```

Constant value: **90****UTF8_LOWER_A_WITH_CIRCUMFLEX**

```
public static final char UTF8_LOWER_A_WITH_CIRCUMFLEX
```

Constant value: **226****UTF8_LOWER_E_WITH_CIRCUMFLEX**

```
public static final char UTF8_LOWER_E_WITH_CIRCUMFLEX
```

Constant value: **234****UTF8_LOWER_I_WITH_CIRCUMFLEX**

```
public static final char UTF8_LOWER_I_WITH_CIRCUMFLEX
```

(continued from last page)

Constant value: **238**

UTF8_LOWER_O_WITH_CIRCUMFLEXpublic static final char **UTF8_LOWER_O_WITH_CIRCUMFLEX**Constant value: **244**

UTF8_LOWER_U_WITH_CIRCUMFLEXpublic static final char **UTF8_LOWER_U_WITH_CIRCUMFLEX**Constant value: **251**

UTF8_LOWER_A_WITH_GRAVEpublic static final char **UTF8_LOWER_A_WITH_GRAVE**Constant value: **224**

UTF8_LOWER_E_WITH_GRAVEpublic static final char **UTF8_LOWER_E_WITH_GRAVE**Constant value: **232**

UTF8_NBSPpublic static final char **UTF8_NBSP**Constant value: **160**

UTF8_MUSICAL_NOTEpublic static final char **UTF8_MUSICAL_NOTE**Constant value: **9834**

UTF8_BRITISH_POUNDpublic static final char **UTF8_BRITISH_POUND**Constant value: **163**

UTF8_CENTSpublic static final char **UTF8_CENTS**Constant value: **162**

UTF8_TRADEMARK

public static final char UTF8_TRADEMARK

Constant value: **8482**

UTF8_REVERSE_QUERY

public static final char UTF8_REVERSE_QUERY

Constant value: **191**

UTF8_ONE_HALF

public static final char UTF8_ONE_HALF

Constant value: **189**

CEA608_MUSICAL_NOTE

public static byte CEA608_MUSICAL_NOTE

CEA608_SOLID_BLOCK

public static byte CEA608_SOLID_BLOCK

UTF8MAP_INDEX_OFFSET

public static final int UTF8MAP_INDEX_OFFSET

Constant value: **32**

UTF8MAP

public static final byte UTF8MAP

CEA608_EXTENDED_NA_MAP

public static final char CEA608_EXTENDED_NA_MAP

CEA608_EXTENDED_FR_SP_MAP

public static final char CEA608_EXTENDED_FR_SP_MAP

CEA608_EXTENDED_PORT_GERMAN_DANISH_MAP

```
public static final char CEA608_EXTENDED_PORT_GERMAN_DANISH_MAP
```

Constructors

ClosedCaptionCEA608Utils

```
public ClosedCaptionCEA608Utils()
```

Methods

charUTF8ToCAE608

```
public static byte[] charUTF8ToCAE608(CEACaptionConversionContext ceaContext,  
    String text,  
    int pos,  
    String characterSet,  
    int channel)
```

charUTF8ToCAE608

```
public static byte[] charUTF8ToCAE608(String text,  
    int pos,  
    String characterSet,  
    int channel)
```

cea608CharToCharUTF8

```
public static char cea608CharToCharUTF8(short b)
```

calcParity

```
public static byte calcParity(byte inByte)
```

calcParity

```
public static short calcParity(short inShort)
```

checkParity

```
public static boolean checkParity(byte inByte)
```

checkParity

public static boolean **checkParity**(short inShort)

cea608ExtendedCharacterToUTF8

public static Character **cea608ExtendedCharacterToUTF8**(short command)

Package

com.wowza.wms.timedtext.model

com.wowza.wms.timedtext.model Interface ITimedTextConstants

public interface **ITimedTextConstants**
extends **ITimedTextPrivateConstants**

Field Summary

public static final	AMF_TEXTTYPE_ON_TEXT_DATA Value: onTextData
public static final	CEA608 Value: CEA608
public static final	DEFAULT_AMF_CONVERTER_TEXT_TYPE Value: onTextData
public static final	DEFAULT_AMF_CONVERTER_TRACK_INDEX Value: 99
public static final	DEFAULT_CAPTION_CHARACTER_SET Default value for Timed Text Property "captionCharacterSet". Value: UTF-8
public static final	DEFAULT_MAXIMUM_CAPTION_DURATION Default value for Timed Text Property "maximumCaptionDuration". Value: 5000
public static final	DEFAULT_PROPERTY_CAPTION_LANGUAGES Value: *
public static final	DEFAULT_PROPERTY_CAPTION_FILE_NAMING_RULE Default value for Timed Text Property "captionFileNamingRule". Value: \${SourceStreamName}.\${FileExtension}
public static final	DEFAULT_PROPERTY_CAPTION_LANGUAGES Default value for Timed Text Property "captionLanguages". Value: *
public static final	DEFAULT_PROPERTY_CAPTION_PATH_NAMING_RULE Default value for Timed Text Property "captionFileNamingRule". Value: \${SourceBasePath}
public static final	LANGUAGE_ID_ENGLISH Value: eng
public static final	LANGUAGE_LOCALE Value: locale

public static final	ON_CAPTION Value: onCaption
public static final	ON_CAPTION_INFO Value: onCaptionInfo
public static final	ON_TEXT_DATA Value: onTextData
public static final	OUTPUT_TYPE_AMF Value: AMF
public static final	OUTPUT_TYPE_CEA608 Value: CEA608
public static final	OUTPUT_TYPE_TTML Value: TTML
public static final	PROP_3GPP_CAPTION_CHARACTER_SET Timed Text Property "reader3GPPCaptionCharacterSet": used to determine character set when ingesting TTML captions Overrides general property "captionCharacterSet" Value: reader3GPPCaptionCharacterSet
public static final	PROP_AMF_CONVERTER_INSERT_ERASES_IN_GAPS Timed Text Property "amfCaptionConverterInsertErases": insert erase captions if gaps between captions are greater than PROP_MAXIMUM_CAPTION_DURATION Value: amfCaptionConverterInsertErases
public static final	PROP_AMF_CONVERTER_TEXT_TYPE Timed Text Property "amfCaptionConverterTextType": AMF text type used in conversion Value: amfCaptionConverterTextType
public static final	PROP_AMF_CONVERTER_TRACK_INDEX Timed Text Property "amfCaptionConverterTrackIndex": track index used for captions Value: amfCaptionConverterTrackIndex
public static final	PROP_CAPTION_CHARACTER_SET Timed Text Property "captionCharacterSet": used to determine character set when ingesting captions Value: captionCharacterSet
public static final	PROP_CAPTION_FILE_NAMING_RULE Timed Text Property "captionFileNamingRule": to change logic determining the caption companion file naming scheme Value: captionFileNamingRule
public static final	PROP_CAPTION_FILENAME_QUERY_PARAMETER HTTP Streamer Property "captionFilenameQueryParameter": used for changing query string param used for caption file selection. Value: captionFilenameQueryParameter

public static final	PROP_CAPTION_LANGUAGE_QUERY_PARAMETER HTTP Streamer Property "captionLanguageQueryParameter": used for changing query string param used for caption language selection. Value: captionLanguageQueryParameter
public static final	PROP_CAPTION_LANGUAGES Timed Text Property "captionLanguages": used to select presented caption Language. Value: captionLanguages
public static final	PROP_CAPTION_PATH_NAMING_RULE Timed Text Property "captionPathNamingRule": to change logic determining the caption companion path Value: captionPathNamingRule
public static final	PROP_CEA608_CONVERTER_CHARACTER_SET Timed Text Property "cea608CaptionConverterCharacterSet": character set in default CEA caption converter. Value: cea608CaptionConverterCharacterSet
public static final	PROP_CEA608_CONVERTER_CHARS_PER_LINE Timed Text Property "cea608CaptionConverterCharsPerLine": max number characters per line in default CEA caption converter. Value: cea608CaptionConverterCharsPerLine
public static final	PROP_CEA608_CONVERTER_COLOR Timed Text Property "cea608CaptionConverterColor": color of text in default CEA caption converter. Value: cea608CaptionConverterColor
public static final	PROP_CUPERTINO_CAPTION_LANGUAGES Timed Text Property "cupertinoCaptionLanguages": to enabled captionLanguage selection for Cupertino streaming. Value: cupertinoCaptionLanguages
public static final	PROP_CUPERTINO_LIVE_USE_WEBVTT Timed Text Property "cupertinoLiveCaptionsUseWebVTT" Value: cupertinoLiveCaptionsUseWebVTT
public static final	PROP_CUPERTINO_LIVE_WEBVTT_ADD_SPECIAL_EMPTY_CAPTION Timed Text Property "cupertinoLiveWebVTTAddSpecialEmptyCaption" Value: cupertinoLiveWebVTTAddSpecialEmptyCaption
public static final	PROP_CUPERTINO_VOD_CAPTIONS_ENABLED Timed Text Property "cupertinoVODCaptionsEnabled": to enabled VOD captions for Cupertino streaming. Value: cupertinoVODCaptionsEnabled
public static final	PROP_CUPERTINO_VOD_REMOVE_EXISTING_CEA608 Timed Text Property "cupertinoVODCaptionsRemoveExistingCEA608": if existing VOD has 608, remove them Value: cupertinoVODCaptionsRemoveExistingCEA608
public static final	PROP_CUPERTINO_VOD_USE_WEBVTT Timed Text Property "cupertinoVODCaptionsUseWebVTT" Value: cupertinoVODCaptionsUseWebVTT

public static final	PROP_DEBUG_3GPP_CAPTION_PARSER Timed Text Property "debug3GPPCaptionParser": adds info level logging regarding the 3GPP parser Value: debug3GPPCaptionParser
public static final	PROP_DEBUG_3GPP_CAPTION_PARSER_TIME Timed Text Property "debug3GPPCaptionParserTime": adds info level logging regarding how long it took parser to index Value: debug3GPPCaptionParserTime
public static final	PROP_DEBUG_CUPERTINO_VOD_CAPTION_LANGUAGE_SELECTION Timed Text Property "cupertinoDebugVODCaptionLanguageSelection": adds info level logging regarding language selection for Cupertino Streaming Value: cupertinoDebugVODCaptionLanguageSelection
public static final	PROP_DEBUG_CUPERTINO_VOD_CAPTION_PROVIDER_DETERMINATION Timed Text Property "cupertinoDebugVODCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset for Cupertino Streaming. Value: cupertinoDebugVODCaptionProviderDetermination
public static final	PROP_DEBUG_LIVE_CAPTION_INGEST Timed Text Property "debugCaptionLiveIngest" Value: debugCaptionLiveIngest
public static final	PROP_DEBUG_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_LOG_AS_RAW Timed Text Property "debugCaptionLiveIngestOnCaptionCEA608LogAsRaw" : Adds additional logging of decoding AMF onCaption events of type "708" (CEA-608) such that they are logged in a raw binary state Value: debugCaptionLiveIngestOnCaptionCEA608LogAsRaw
public static final	PROP_DEBUG_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_LOG_AS_SCC Timed Text Property "debugCaptionLiveIngestOnCaptionCEA608LogAsSCC" : Adds additional logging of decoding AMF onCaption events of type "708" (CEA-608) such that they are logged in SCC format Value: debugCaptionLiveIngestOnCaptionCEA608LogAsSCC
public static final	PROP_DEBUG_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_VERBOSE Timed Text Property "debugCaptionLiveIngestOnCaptionCEA608Verbose" : Adds verbose logging to AMF onCaption events of type "708" (CEA-608) Value: debugCaptionLiveIngestOnCaptionCEA608Verbose
public static final	PROP_DEBUG_LIVE_CAPTION_ONCAPTION_INGEST Timed Text Property "debugCaptionLiveOnCaptionIngest" Value: debugCaptionLiveOnCaptionIngest
public static final	PROP_DEBUG_LIVE_CAPTION_ONTEXTDATA_INGEST Timed Text Property "debugCaptionLiveOnTextDataIngest" Value: debugCaptionLiveOnTextDataIngest
public static final	PROP_DEBUG_MPEGDASH_VOD_CAPTION_LANGUAGE_SELECTION Timed Text Property "mpegdashDebugVODCaptionLanguageSelection": adds info level logging regarding language selection for Cupertino Streaming Value: mpegdashDebugVODCaptionLanguageSelection

public static final	PROP_DEBUG_MPEGDASH_VOD_CAPTION_PROVIDER_DETERMINATION Timed Text Property "mpegdashDebugVODCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset for MPEGDash Streaming. Value: mpegdashDebugVODCaptionProviderDetermination
public static final	PROP_DEBUG_RTMP_VOD_CAPTION_LANGUAGE_SELECTION Timed Text Property "rtmpDebugVODCaptionLanguageSelection": adds info level logging regarding language selection for RTMP Streaming Value: rtmpDebugVODCaptionLanguageSelection
public static final	PROP_DEBUG_RTMP_VOD_CAPTION_PROVIDER_DETERMINATION Timed Text Property "rtmpDebugVODCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset for RTMP Streaming. Value: rtmpDebugVODCaptionProviderDetermination
public static final	PROP_DEBUG_SANJOSE_VOD_CAPTION_LANGUAGE_SELECTION Timed Text Property "sanJoseDebugVODCaptionLanguageSelection": adds info level logging regarding language selection for San Jose Streaming Value: sanJoseDebugVODCaptionLanguageSelection
public static final	PROP_DEBUG_SANJOSE_VOD_CAPTION_PROVIDER_DETERMINATION Timed Text Property "sanJoseVODDebugCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset for San Jose Streaming. Value: sanJoseVODDebugCaptionProviderDetermination
public static final	PROP_DEBUG_SCC_CAPTION_PARSER Timed Text Property "debugSCCCaptionParser": adds info level logging regarding the SCC caption parser Value: debugSCCCaptionParser
public static final	PROP_DEBUG_SCC_CAPTION_PARSER_TIME Timed Text Property "debugSCCCaptionParserTime": adds info level logging regarding how long it took parser to index Value: debugSCCCaptionParserTime
public static final	PROP_DEBUG_SCC_VOD_CAPTION_COMPANION_FILES Timed Text Property "debugSCCVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset for SCC provider Value: debugSCCVODCaptionFileDetermination
public static final	PROP_DEBUG_SRT_CAPTION_PARSER Timed Text Property "debugSRTCaptionParser": adds info level logging regarding the SRT caption parser Value: debugSRTCaptionParser
public static final	PROP_DEBUG_SRT_CAPTION_PARSER_TIME Timed Text Property "debugSRTCaptionParserTime": adds info level logging regarding how long it took parser to index Value: debugSRTCaptionParserTime
public static final	PROP_DEBUG_SRT_VOD_CAPTION_COMPANION_FILES Timed Text Property "debugSRTVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset for SRT provider Value: debugSRTVODCaptionFileDetermination

public static final	PROP_DEBUG_TTML_CAPTION_PARSER Timed Text Property "debugTTMLCaptionParser": adds info level logging regarding the TTML caption parser Value: debugTTMLCaptionParser
public static final	PROP_DEBUG_TTML_CAPTION_PARSER_TIME Timed Text Property "debugTTMLCaptionParserTime": adds info level logging regarding how long it took parser to index Value: debugTTMLCaptionParserTime
public static final	PROP_DEBUG_TTML_VOD_CAPTION_COMPANION_FILES Timed Text Property "debugTTMLVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset for TTML Streaming. Value: debugTTMLVODCaptionFileDetermination
public static final	PROP_DEBUG_VOD_CAPTION_COMPANION_FILES Timed Text Property "debugVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset Value: debugVODCaptionFileDetermination
public static final	PROP_DEBUG_VOD_CAPTION_LANGUAGE_SELECTION Timed Text Property "debugVODCaptionLanguageSelection": adds info level logging regarding language selection Value: debugVODCaptionLanguageSelection
public static final	PROP_DEBUG_VOD_CAPTION_PROVIDER_DETERMINATION Timed Text Property "debugVODCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset Value: debugVODCaptionProviderDetermination
public static final	PROP_DEBUG_WEBVTT_CAPTION_PARSER Timed Text Property "debugWebVTTCaptionParser": adds info level logging regarding the WebVTT caption parser Value: debugWebVTTCaptionParser
public static final	PROP_DEBUG_WEBVTT_CAPTION_PARSER_TIME Timed Text Property "debugWebVTTCaptionParserTime": adds info level logging regarding how long it took parser to index Value: debugWebVTTCaptionParserTime
public static final	PROP_DEBUG_WEBVTT_VOD_CAPTION_COMPANION_FILES Timed Text Property "debugWebVTTVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset for WebVTT provider Value: debugWebVTTVODCaptionFileDetermination
public static final	PROP_LIVE_CAPTION_DEFAULT_LANGUAGES Timed Text Property "captionLiveIngestLanguages": comma separated ISO-639 language codes determining what languages are expected in the live stream Value: captionLiveIngestLanguages
public static final	PROP_LIVE_CAPTION_INGEST_AMF_ID_STRING Timed Text Property "captionLiveIngestAMFIDString": to change AMF identifier from default "onTextData" to something else Value: captionLiveIngestAMFIDString

public static final	PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_ENABLE_FIELD1 Timed Text Property "captionLiveIngestOnCaptionCEA608EnableField1": When ingesting AMF onCaption 708 data events (actually CEA-608), controls whether CEA-608 field 1 is enabled for decoding Value: captionLiveIngestOnCaptionCEA608EnableField1
public static final	PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_ENABLE_FIELD2 Timed Text Property "captionLiveIngestOnCaptionCEA608EnableField2": When ingesting AMF onCaption 708 data events (actually CEA-608), controls whether CEA-608 field 2 is enabled for decoding Value: captionLiveIngestOnCaptionCEA608EnableField2
public static final	PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_IDLE_TIME_TO_FLUSH_DECODER Timed Text Property "captionLiveIngestOnCaptionCEA608IdleTimeToFlushDecoder" Controls allowed amount of idle time when parsing CEA-608 captions when ingested from AMF 708 data events Value: captionLiveIngestOnCaptionCEA608IdleTimeToFlushDecoder
public static final	PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_LANGUAGE_ID Timed Text Property "captionLiveIngestOnCaptionCEA608LanguageID": When ingesting AMF onCaption 708 data events (actually CEA-608), controls the language ID used to add captions as onTextData Value: captionLiveIngestOnCaptionCEA608LanguageID
public static final	PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_MAX_WARN_MESSAGES Timed Text Property "captionLiveIngestOnCaptionCEA608MaxWarnMessages": When ingesting AMF onCaption 708 data events (actually CEA-608), controls the maximum number of warning messages that are logged by the decoder Value: captionLiveIngestOnCaptionCEA608MaxWarnMessages
public static final	PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_TRACK_NUMBER Timed Text Property "captionLiveIngestOnCaptionCEA608TrackNumber": When ingesting AMF onCaption 708 data events (actually CEA-608), controls the track number used to add captions as onTextData Value: captionLiveIngestOnCaptionCEA608TrackNumber
public static final	PROP_LIVE_CAPTION_INGEST_ON_CAPTION_INFO_STRING Timed Text Property "captionLiveIngestOnCaptionInfoString": to change AMF identifier from default "onCaptionInfo" to something else Value: captionLiveIngestOnCaptionInfoString
public static final	PROP_LIVE_CAPTION_INGEST_ON_CAPTION_STRING Timed Text Property "captionLiveIngestOnCaptionString": to change AMF identifier from default "onCaption" to something else Value: captionLiveIngestOnCaptionString
public static final	PROP_LIVE_CAPTION_INGEST_TYPE Timed Text Property "captionLiveIngestType": type of live caption ingestion. Value: captionLiveIngestType
public static final	PROP_LIVE_CAPTION_USE_STREAM_NAME_GROUPS Timed Text Property "captionLiveIngestUseStreamNameGroups": to enable use of smil files to determine available languages and ingest type Value: captionLiveIngestUseStreamNameGroups
public static final	PROP_MAXIMUM_CAPTION_DURATION Timed Text Property "maximumCaptionDuration": used to determine maximum caption duration Value: maximumCaptionDuration

public static final	PROP_MPEGDASH_CAPTION_LANGUAGES Timed Text Property "mpegdashCaptionLanguages": to enabled captionLanguage selection for Cupertino streaming. Value: mpegdashCaptionLanguages
public static final	PROP_MPEGDASH_VOD_CAPTIONS_ENABLED Timed Text Property "mpegdashVODCaptionsEnabled": to enabled VOD captions for Cupertino streaming. Value: mpegdashVODCaptionsEnabled
public static final	PROP_RTMP_CAPTION_LANGUAGES Timed Text Property "rtmpCaptionLanguages": to enabled captionLanguage selection for RTMP Type String. Value: rtmpCaptionLanguages
public static final	PROP_RTMP_VOD_CAPTIONS_ENABLED Timed Text Property "rtmpVODCaptionsEnabled": to enabled VOD captions for RTMP streaming. Value: rtmpVODCaptionsEnabled
public static final	PROP_SANJOSE_CAPTION_LANGUAGES Timed Text Property "sanJoseCaptionLanguages": to enabled captionLanguage selection for San Jose streaming. Value: sanJoseCaptionLanguages
public static final	PROP_SANJOSE_VOD_CAPTIONS_ENABLED Timed Text Property "sanJoseVODCaptionsEnabled": to enabled VOD captions for San Jose streaming. Value: sanJoseVODCaptionsEnabled
public static final	PROP_SRT_CAPTION_CHARACTER_SET Timed Text Property "srtReaderCaptionCharacterSet": used to determine character set when ingesting SRT captions Overrides general property "captionCharacterSet" Value: srtReaderCaptionCharacterSet
public static final	PROP_TTML_CAPTION_CHARACTER_SET Timed Text Property "ttmlReaderCaptionCharacterSet": used to determine character set when ingesting TTML captions Overrides general property "captionCharacterSet" Value: ttmlReaderCaptionCharacterSet
public static final	PROP_TTML_INLINE_TAGS_IN_TEXT Timed Text Property "ttmlInlineTagsInText": TTML parser includes in-line styling and line-break tags in the sample text Value: ttmlInlineTagsInText
public static final	PROP_UNDEFINED_LANG_CODE Timed Text Property "captionUndefinedLanguageId": if incoming caption language is undefined, use this language ID. Value: captionUndefinedLanguageId
public static final	PROP_VOD_CAPTIONS_ENABLED Timed Text Property "vodCaptionsEnabled": to enabled VOD captions for all supported protocols Value: vodCaptionsEnabled
public static final	PROP_WEBVTT_CONVERTER_INSERT_ERASES_IN_GAPS Timed Text Property "webVTTCaptionConverterInsertErases": insert erase captions if gaps between captions are greater than PROP_MAXIMUM_CAPTION_DURATION Value: webVTTCaptionConverterInsertErases

public static final	QUERYSTR_CAPTION_FILENAME Query string used for choosing caption languages. Value: wowzacaptionfile
public static final	QUERYSTR_CAPTIONLANGUAGES Query string used for choosing caption languages. Value: wowzacaptionlanguages
public static final	SMIL_PARAM_IS_WOWZA_CAPTION_STREAM Value: iswowzacaptionstream
public static final	SMIL_PARAM_WOWZA_CAPTION_INGEST_TYPE Value: wowzacaptioningesttype
public static final	SOURCE_TYPE_3GPP Value: 3GPP
public static final	SOURCE_TYPE_AMF Value: AMF
public static final	SOURCE_TYPE_SCC Value: SCC
public static final	SOURCE_TYPE_SRT Value: SRT
public static final	SOURCE_TYPE_TTML Value: TTML
public static final	SOURCE_TYPE_WEBVTT Value: WebVTT
public static final	TIMED_TEXT_TYPE_CAPTION Value: Caption

Fields inherited from interface com.wowza.wms.timedtext.model.ITimedTextPrivateConstants

```
DEFAULT_AMF_CONVERTER_CLASS, DEFAULT_CEA608_CONVERTER_CLASS,
DEFAULT_CEA608_IDENTITY_CONVERTER_CLASS,
DEFAULT_PROPERTY_CUPERTINO_VOD_CAPTIONS_DELEGATE_CLASS,
DEFAULT_PROPERTY_MPEGDASH_VOD_CAPTIONS_DELEGATE_CLASS,
DEFAULT_PROPERTY_RTMP_VOD_CAPTIONS_DELEGATE_CLASS,
DEFAULT_PROPERTY_SANJOSE_VOD_CAPTIONS_DELEGATE_CLASS, DEFAULT_TIMED_TEXT_READER_SCC,
DEFAULT_TIMED_TEXT_READER_SRT, DEFAULT_TIMED_TEXT_READER_TTML,
DEFAULT_TIMED_TEXT_READER_WEBVTT, DEFAULT_WEBVTT_CONVERTER_CLASS,
PROP_AMF_CONVERTER_CLASS, PROP_CEA608_CONVERTER_CLASS,
PROP_CEA608_MAX_COMMANDS_PER_FRAME, PROP_CUPERTINO_VOD_CAPTIONS_DELEGATE_CLASS,
PROP_LIVE_ONCAPTION_TO_AMF_CONVERTER_CLASS,
PROP_LIVE_ONCAPTION_TO_WEBVTT_CONVERTER_CLASS,
PROP_LIVE_ONTEXTDATA_TO_AMF_CONVERTER_CLASS,
PROP_LIVE_ONTEXTDATA_TO_WEBVTT_CONVERTER_CLASS, PROP_MP4_TO_AMF_CONVERTER_CLASS,
PROP_MP4_TO_CEA608_CONVERTER_CLASS, PROP_MP4_TO_WEBVTT_CONVERTER_CLASS,
PROP_MPEGDASH_VOD_CAPTIONS_DELEGATE_CLASS, PROP_RTMP_VOD_CAPTIONS_DELEGATE_CLASS,
PROP_SANJOSE_VOD_CAPTIONS_DELEGATE_CLASS, PROP_SCC_TO_AMF_CONVERTER_CLASS,
PROP_SCC_TO_CEA608_CONVERTER_CLASS, PROP_SCC_TO_WEBVTT_CONVERTER_CLASS,
PROP_SRT_TO_AMF_CONVERTER_CLASS, PROP_SRT_TO_CEA608_CONVERTER_CLASS,
PROP_SRT_TO_WEBVTT_CONVERTER_CLASS, PROP_TTML_TO_AMF_CONVERTER_CLASS,
PROP_TTML_TO_CEA608_CONVERTER_CLASS, PROP_TTML_TO_WEBVTT_CONVERTER_CLASS,
PROP_WEBVTT_CONVERTER_CLASS, PROP_WEBVTT_TO_AMF_CONVERTER_CLASS,
PROP_WEBVTT_TO_CEA608_CONVERTER_CLASS, PROP_WEBVTT_TO_WEBVTT_CONVERTER_CLASS,
PROPERTY_SOURCE_DURATION, PROPERTY_SOURCE_TIME_SCALE, PROPERTY_SOURCE_TRACK_INDEX,
TIMED_TEXT_READER_EXTENSION_SCC, TIMED_TEXT_READER_EXTENSION_SRT,
TIMED_TEXT_READER_EXTENSION_TTML, TIMED_TEXT_READER_EXTENSION_WEBVTT
```

Fields

TIMED_TEXT_TYPE_CAPTION

```
public static final java.lang.String TIMED_TEXT_TYPE_CAPTION
```

Constant value: **Caption**

SOURCE_TYPE_AMF

```
public static final java.lang.String SOURCE_TYPE_AMF
```

Constant value: **AMF**

SOURCE_TYPE_TTML

```
public static final java.lang.String SOURCE_TYPE_TTML
```

Constant value: **TTML**

SOURCE_TYPE_3GPP

```
public static final java.lang.String SOURCE_TYPE_3GPP
```

Constant value: **3GPP**

SOURCE_TYPE_SRT

```
public static final java.lang.String SOURCE_TYPE_SRT
```

Constant value: **SRT**

SOURCE_TYPE_SCC

```
public static final java.lang.String SOURCE_TYPE_SCC
```

Constant value: **SCC**

SOURCE_TYPE_WEBVTT

```
public static final java.lang.String SOURCE_TYPE_WEBVTT
```

Constant value: **WebVTT**

OUTPUT_TYPE_CEA608

```
public static final java.lang.String OUTPUT_TYPE_CEA608
```

Constant value: **CEA608**

OUTPUT_TYPE_AMF

```
public static final java.lang.String OUTPUT_TYPE_AMF
```

Constant value: **AMF**

OUTPUT_TYPE_TTML

```
public static final java.lang.String OUTPUT_TYPE_TTML
```

Constant value: **TTML**

AMF_TEXTTYPE_ON_TEXT_DATA

```
public static final java.lang.String AMF_TEXTTYPE_ON_TEXT_DATA
```

Constant value: **onTextData**

LANGUAGE_LOCALE

```
public static final java.lang.String LANGUAGE_LOCALE
```

Constant value: **locale**

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LANGUAGE_ID_ENGLISH

```
public static final java.lang.String LANGUAGE_ID_ENGLISH
```

Constant value: **eng**

PROP_VOD_CAPTIONS_ENABLED

```
public static final java.lang.String PROP_VOD_CAPTIONS_ENABLED
```

Timed Text Property "vodCaptionsEnabled": to enabled VOD captions for all supported protocols

Type boolean. The default is true.

Add the property to Application/TimedText/Properties in Application.xml

VOD Captions can be enabled on a per protocol basis using [PROP_CUPERTINO_VOD_CAPTIONS_ENABLED](#), [PROP_RTMP_VOD_CAPTIONS_ENABLED](#), [PROP_SANJOSE_VOD_CAPTIONS_ENABLED](#).

Constant value: **vodCaptionsEnabled**

See Also:

[PROP_CUPERTINO_VOD_CAPTIONS_ENABLED](#)

[PROP_RTMP_VOD_CAPTIONS_ENABLED](#)

[PROP_SANJOSE_VOD_CAPTIONS_ENABLED](#)

PROP_CUPERTINO_VOD_CAPTIONS_ENABLED

```
public static final java.lang.String PROP_CUPERTINO_VOD_CAPTIONS_ENABLED
```

Timed Text Property "cupertinoVODCaptionsEnabled": to enabled VOD captions for Cupertino streaming.

Type boolean. The default is true.

Add the property to Application/TimedText/Properties in Application.xml

VOD Captions can be enabled for all protocols using [PROP_VOD_CAPTIONS_ENABLED](#).

Constant value: **cupertinoVODCaptionsEnabled**

See Also:

[PROP_VOD_CAPTIONS_ENABLED](#)

PROP_MPEGDASH_VOD_CAPTIONS_ENABLED

```
public static final java.lang.String PROP_MPEGDASH_VOD_CAPTIONS_ENABLED
```

Timed Text Property "mpegdashVODCaptionsEnabled": to enabled VOD captions for Cupertino streaming.

Type boolean. The default is true.

Add the property to Application/TimedText/Properties in Application.xml

VOD Captions can be enabled for all protocols using [PROP_VOD_CAPTIONS_ENABLED](#).

Constant value: **mpegdashVODCaptionsEnabled**

See Also:

[PROP_VOD_CAPTIONS_ENABLED](#)

PROP_RTMP_VOD_CAPTIONS_ENABLED

```
public static final java.lang.String PROP_RTMP_VOD_CAPTIONS_ENABLED
```

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Timed Text Property "rtmpVODCaptionsEnabled": to enabled VOD captions for RTMP streaming.

Type boolean. The default is true.

Add the property to Application/TimedText/Properties in Application.xml

VOD Captions can be enabled for all protocols using [PROP_VOD_CAPTIONS_ENABLED](#).
Constant value: **rtmpVODCaptionsEnabled**

See Also:

[PROP_VOD_CAPTIONS_ENABLED](#)

PROP_SANJOSE_VOD_CAPTIONS_ENABLED

```
public static final java.lang.String PROP_SANJOSE_VOD_CAPTIONS_ENABLED
```

Timed Text Property "sanJoseVODCaptionsEnabled": to enabled VOD captions for San Jose streaming.

Type boolean. The default is true.

Add the property to Application/TimedText/Properties in Application.xml

VOD Captions can be enabled for all protocols using [PROP_VOD_CAPTIONS_ENABLED](#).
Constant value: **sanJoseVODCaptionsEnabled**

See Also:

[PROP_VOD_CAPTIONS_ENABLED](#)

PROP_CAPTION_LANGUAGES

```
public static final java.lang.String PROP_CAPTION_LANGUAGES
```

Timed Text Property "captionLanguages": used to select presented caption Language.

Type String. The default is [DEFAULT_PROPERTY_CAPTION_LANGUAGES](#)

Add the property to Application/TimedText/Properties in Application.xml

VOD Caption languages can be specified on a per protocol basis using [PROP_CUPERTINO_CAPTION_LANGUAGES](#), [PROP_RTMP_CAPTION_LANGUAGES](#), [PROP_SANJOSE_CAPTION_LANGUAGES](#).
Constant value: **captionLanguages**

See Also:

[PROP_CUPERTINO_CAPTION_LANGUAGES](#)

[PROP_RTMP_CAPTION_LANGUAGES](#)

[PROP_SANJOSE_CAPTION_LANGUAGES](#)

DEFAULT_PROPERTY_CAPTION_LANGUAGES

```
public static final java.lang.String DEFAULT_PROPERTY_CAPTION_LANGUAGES
```

Default value for Timed Text Property "captionLanguages".

Default value is "*", meaning present all found languages.
Constant value: *****

See Also:

[PROP_CAPTION_LANGUAGES](#)

DEFAULT_PROPERTY_CAPION_LANGUAGES

```
public static final java.lang.String DEFAULT_PROPERTY_CAPION_LANGUAGES
```

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Constant value: *

PROP_CUPERTINO_CAPTION_LANGUAGES

```
public static final java.lang.String PROP_CUPERTINO_CAPTION_LANGUAGES
```

Timed Text Property "cupertinoCaptionLanguages": to enabled captionLanguage selection for Cupertino streaming.

Type String. The default is [DEFAULT_PROPERTY_CAPTION_LANGUAGES](#)

Add the property to Application/TimedText/Properties in Application.xml

VOD Captions can be enabled for all protocols using [PROP_CAPTION_LANGUAGES](#).

Constant value: **cupertinoCaptionLanguages**

See Also:

[PROP_CAPTION_LANGUAGES](#)

PROP_MPEGDASH_CAPTION_LANGUAGES

```
public static final java.lang.String PROP_MPEGDASH_CAPTION_LANGUAGES
```

Timed Text Property "mpegdashCaptionLanguages": to enabled captionLanguage selection for Cupertino streaming.

Type String. The default is [DEFAULT_PROPERTY_CAPTION_LANGUAGES](#)

Add the property to Application/TimedText/Properties in Application.xml

VOD Captions can be enabled for all protocols using [PROP_CAPTION_LANGUAGES](#).

Constant value: **mpegdashCaptionLanguages**

See Also:

[PROP_CAPTION_LANGUAGES](#)

PROP_RTMP_CAPTION_LANGUAGES

```
public static final java.lang.String PROP_RTMP_CAPTION_LANGUAGES
```

Timed Text Property "rtmpCaptionLanguages": to enabled captionLanguage selection for RTMP Type String. The default is [DEFAULT_PROPERTY_CAPTION_LANGUAGES](#)

Add the property to Application/TimedText/Properties in Application.xml

VOD Captions can be enabled for all protocols using [PROP_CAPTION_LANGUAGES](#).

Constant value: **rtmpCaptionLanguages**

See Also:

[PROP_CAPTION_LANGUAGES](#)

PROP_SANJOSE_CAPTION_LANGUAGES

```
public static final java.lang.String PROP_SANJOSE_CAPTION_LANGUAGES
```

Timed Text Property "sanJoseCaptionLanguages": to enabled captionLanguage selection for San Jose streaming.

Type String. The default is [DEFAULT_PROPERTY_CAPTION_LANGUAGES](#)

Add the property to Application/TimedText/Properties in Application.xml

VOD Captions can be enabled for all protocols using [PROP_CAPTION_LANGUAGES](#).

Constant value: **sanJoseCaptionLanguages**

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See Also:

[PROP_CAPTION_LANGUAGES](#)

PROP_DEBUG_VOD_CAPTION_LANGUAGE_SELECTION

```
public static final java.lang.String PROP_DEBUG_VOD_CAPTION_LANGUAGE_SELECTION
```

Timed Text Property "debugVODCaptionLanguageSelection": adds info level logging regarding language selection

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Can be enabled on a per protocol basis using [PROP_DEBUG_CUPERTINO_VOD_CAPTION_LANGUAGE_SELECTION](#), [PROP_DEBUG_RTMP_VOD_CAPTION_LANGUAGE_SELECTION](#), [PROP_DEBUG_SANJOSE_VOD_CAPTION_LANGUAGE_SELECTION](#).

Constant value: **debugVODCaptionLanguageSelection**

PROP_DEBUG_CUPERTINO_VOD_CAPTION_LANGUAGE_SELECTION

```
public static final java.lang.String  
PROP_DEBUG_CUPERTINO_VOD_CAPTION_LANGUAGE_SELECTION
```

Timed Text Property "cupertinoDebugVODCaptionLanguageSelection": adds info level logging regarding language selection for Cupertino Streaming

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **cupertinoDebugVODCaptionLanguageSelection**

See Also:

[PROP_DEBUG_VOD_CAPTION_LANGUAGE_SELECTION](#)

PROP_DEBUG_MPEGDASH_VOD_CAPTION_LANGUAGE_SELECTION

```
public static final java.lang.String  
PROP_DEBUG_MPEGDASH_VOD_CAPTION_LANGUAGE_SELECTION
```

Timed Text Property "mpegdashDebugVODCaptionLanguageSelection": adds info level logging regarding language selection for Cupertino Streaming

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **mpegdashDebugVODCaptionLanguageSelection**

See Also:

[PROP_DEBUG_VOD_CAPTION_LANGUAGE_SELECTION](#)

PROP_DEBUG_RTMP_VOD_CAPTION_LANGUAGE_SELECTION

```
public static final java.lang.String PROP_DEBUG_RTMP_VOD_CAPTION_LANGUAGE_SELECTION
```

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Timed Text Property "rtmpDebugVODCaptionLanguageSelection": adds info level logging regarding language selection for RTMP Streaming

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **rtmpDebugVODCaptionLanguageSelection**

See Also:

[PROP_DEBUG_VOD_CAPTION_LANGUAGE_SELECTION](#)

PROP_DEBUG_SANJOSE_VOD_CAPTION_LANGUAGE_SELECTION

```
public static final java.lang.String PROP_DEBUG_SANJOSE_VOD_CAPTION_LANGUAGE_SELECTION
```

Timed Text Property "sanJoseDebugVODCaptionLanguageSelection": adds info level logging regarding language selection for San Jose Streaming

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **sanJoseDebugVODCaptionLanguageSelection**

See Also:

[PROP_DEBUG_VOD_CAPTION_LANGUAGE_SELECTION](#)

PROP_DEBUG_VOD_CAPTION_PROVIDER_DETERMINATION

```
public static final java.lang.String PROP_DEBUG_VOD_CAPTION_PROVIDER_DETERMINATION
```

Timed Text Property "debugVODCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Can be enabled on a per protocol basis using [PROP_DEBUG_CUPERTINO_VOD_CAPTION_PROVIDER_DETERMINATION](#), [PROP_DEBUG_RTMP_VOD_CAPTION_PROVIDER_DETERMINATION](#), [PROP_DEBUG_SANJOSE_VOD_CAPTION_PROVIDER_DETERMINATION](#).

Constant value: **debugVODCaptionProviderDetermination**

PROP_DEBUG_CUPERTINO_VOD_CAPTION_PROVIDER_DETERMINATION

```
public static final java.lang.String  
PROP_DEBUG_CUPERTINO_VOD_CAPTION_PROVIDER_DETERMINATION
```

Timed Text Property "cupertinoDebugVODCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset for Cupertino Streaming.

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **cupertinoDebugVODCaptionProviderDetermination**

See Also:

[PROP_DEBUG_VOD_CAPTION_PROVIDER_DETERMINATION](#)

PROP_DEBUG_MPEGDASH_VOD_CAPTION_PROVIDER_DETERMINATION

```
public static final java.lang.String  
PROP_DEBUG_MPEGDASH_VOD_CAPTION_PROVIDER_DETERMINATION
```

Timed Text Property "mpegdashDebugVODCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset for MPEGDash Streaming.

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **mpegdashDebugVODCaptionProviderDetermination**

See Also:

[PROP_DEBUG_VOD_CAPTION_PROVIDER_DETERMINATION](#)

PROP_DEBUG_RTMP_VOD_CAPTION_PROVIDER_DETERMINATION

```
public static final java.lang.String  
PROP_DEBUG_RTMP_VOD_CAPTION_PROVIDER_DETERMINATION
```

Timed Text Property "rtmpDebugVODCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset for RTMP Streaming.

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **rtmpDebugVODCaptionProviderDetermination**

See Also:

[PROP_DEBUG_VOD_CAPTION_PROVIDER_DETERMINATION](#)

PROP_DEBUG_SANJOSE_VOD_CAPTION_PROVIDER_DETERMINATION

```
public static final java.lang.String  
PROP_DEBUG_SANJOSE_VOD_CAPTION_PROVIDER_DETERMINATION
```

Timed Text Property "sanJoseVODDebugCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset for San Jose Streaming.

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **sanJoseVODDebugCaptionProviderDetermination**

See Also:

[PROP_DEBUG_VOD_CAPTION_PROVIDER_DETERMINATION](#)

PROP_DEBUG_VOD_CAPTION_COMPANION_FILES

```
public static final java.lang.String PROP_DEBUG_VOD_CAPTION_COMPANION_FILES
```

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Timed Text Property "debugVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Can be enabled on a per provider basis as well using [PROP_DEBUG_TTML_VOD_CAPTION_COMPANION_FILES](#)
Constant value: **debugVODCaptionFileDetermination**

PROP_UNDEFINED_LANG_CODE

```
public static final java.lang.String PROP_UNDEFINED_LANG_CODE
```

Timed Text Property "captionUndefinedLanguageId": if incoming caption language is undefined, use this language ID.

Type String. If not defined, the Locale's 3 character language code is used. See `Locale.getDefault().getISO3Language()`

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionUndefinedLanguageId**

PROP_CAPTION_FILE_NAMING_RULE

```
public static final java.lang.String PROP_CAPTION_FILE_NAMING_RULE
```

Timed Text Property "captionFileNamingRule": to change logic determining the caption companion file naming scheme

Type String. The default value is [DEFAULT_PROPERTY_CAPTION_FILE_NAMING_RULE](#).

This string is used to find the caption file for a given VOD asset. It is used in conjunction with [PROP_CAPTION_PATH_NAMING_RULE](#), which determines the file location.

It is comprised of variables preceded by a dollar sign and enclosed in squiggly brackets. For example: "\${var1}.{var2}"

Valid variables include these:

- `${SourceStreamName}` : The baseName of the VOD file
- `${SourceBasePath}` : The base path of the VOD asset
- `${FileExtension}` : Registered file extensions with the Timed Text Provider

and these standard ones:

- `${com.wowza.wms.context.VHost}`
- `${com.wowza.wms.context.VHostConfigHome, appInstance.getVHost().getHomePath()};`
- `${com.wowza.wms.context.Application, appInstance.getApplication().getName()};`
- `${com.wowza.wms.context.ApplicationInstance, appInstance.getName()};`

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionFileNamingRule**

See Also:

[DEFAULT_PROPERTY_CAPTION_FILE_NAMING_RULE](#)

DEFAULT_PROPERTY_CAPTION_FILE_NAMING_RULE

```
public static final java.lang.String DEFAULT_PROPERTY_CAPTION_FILE_NAMING_RULE
```

Default value for Timed Text Property "captionFileNamingRule".

Default value is "\${SourceStreamName}.\${FileExtension}"

Constant value: **`\${SourceStreamName}.\${FileExtension}**

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See Also:[PROP_CAPTION_FILE_NAMING_RULE](#)

PROP_CAPTION_PATH_NAMING_RULE

```
public static final java.lang.String PROP_CAPTION_PATH_NAMING_RULE
```

Timed Text Property "captionPathNamingRule": to change logic determining the caption companion path

Type String. The default value is [DEFAULT_PROPERTY_CAPTION_PATH_NAMING_RULE](#).

This string is used to find the caption file location for a given VOD asset. It is used in conjunction with [PROP_CAPTION_FILE_NAMING_RULE](#), which determines the file name.

It is comprised of variables preceded by a dollar sign and enclosed in squiggly brackets. For example: "\${var1}.{var2}"

Valid variables include these:

- `${SourceStreamName}` : The baseName of the VOD file
- `${SourceBasePath}` : The base path of the VOD asset
- `${FileExtension}` : Registered file extensions with the Timed Text Provider

and these standard ones:

- `${com.wowza.wms.context.VHost}`
- `${com.wowza.wms.context.VHostConfigHome", appInstance.getVHost().getHomePath()};`
- `${com.wowza.wms.context.Application", appInstance.getApplication().getName()};`
- `${com.wowza.wms.context.ApplicationInstance", appInstance.getName()};`

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionPathNamingRule**

See Also:[DEFAULT_PROPERTY_CAPTION_PATH_NAMING_RULE](#)

DEFAULT_PROPERTY_CAPTION_PATH_NAMING_RULE

```
public static final java.lang.String DEFAULT_PROPERTY_CAPTION_PATH_NAMING_RULE
```

Default value for Timed Text Property "captionFileNamingRule". Default value is "\${SourceBasePath}"

Constant value: **SourceBasePath**

See Also:[PROP_CAPTION_PATH_NAMING_RULE](#)

PROP_MAXIMUM_CAPTION_DURATION

```
public static final java.lang.String PROP_MAXIMUM_CAPTION_DURATION
```

Timed Text Property "maximumCaptionDuration": used to determine maximum caption duration

Type Integer. In ms. The default is [DEFAULT_MAXIMUM_CAPTION_DURATION](#)

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **maximumCaptionDuration**

(continued from last page)

DEFAULT_MAXIMUM_CAPTION_DURATION

```
public static final int DEFAULT_MAXIMUM_CAPTION_DURATION
```

Default value for Timed Text Property "maximumCaptionDuration".

Default value is 10000.
Constant value: **5000**

See Also:

[PROP_MAXIMUM_CAPTION_DURATION](#)

PROP_CAPTION_CHARACTER_SET

```
public static final java.lang.String PROP_CAPTION_CHARACTER_SET
```

Timed Text Property "captionCharacterSet": used to determine character set when ingesting captions

Type String. The default is [DEFAULT_CAPTION_CHARACTER_SET](#)

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionCharacterSet**

DEFAULT_CAPTION_CHARACTER_SET

```
public static final java.lang.String DEFAULT_CAPTION_CHARACTER_SET
```

Default value for Timed Text Property "captionCharacterSet".

Default value is "UTF-8"
Constant value: **UTF-8**

See Also:

[PROP_CAPTION_CHARACTER_SET](#)

PROP_SRT_CAPTION_CHARACTER_SET

```
public static final java.lang.String PROP_SRT_CAPTION_CHARACTER_SET
```

Timed Text Property "srtReaderCaptionCharacterSet": used to determine character set when ingesting SRT captions
Overrides general property "captionCharacterSet"

Type String. The default is [DEFAULT_CAPTION_CHARACTER_SET](#)
Constant value: **srtReaderCaptionCharacterSet**

See Also:

Add the property to Application/TimedText/Properties in Application.xml

PROP_TTML_CAPTION_CHARACTER_SET

```
public static final java.lang.String PROP_TTML_CAPTION_CHARACTER_SET
```

Timed Text Property "ttmlReaderCaptionCharacterSet": used to determine character set when ingesting TTML captions
Overrides general property "captionCharacterSet"

Type String. The default is [DEFAULT_CAPTION_CHARACTER_SET](#)

(continued from last page)

Constant value: **ttmlReaderCaptionCharacterSet**

See Also:

Add the property to Application/TimedText/Properties in Application.xml

PROP_3GPP_CAPTION_CHARACTER_SET

```
public static final java.lang.String PROP_3GPP_CAPTION_CHARACTER_SET
```

Timed Text Property "reader3GPPCaptionCharacterSet": used to determine character set when ingesting TTML captions Overrides general property "captionCharacterSet"

Type String. The default is [DEFAULT_CAPTION_CHARACTER_SET](#)

Constant value: **reader3GPPCaptionCharacterSet**

See Also:

Add the property to Application/TimedText/Properties in Application.xml

PROP_CEA608_CONVERTER_COLOR

```
public static final java.lang.String PROP_CEA608_CONVERTER_COLOR
```

Timed Text Property "cea608CaptionConverterColor": color of text in default CEA caption converter.

Type Integer. Default is [ClosedCaptionCEA608Utils.COL0_WHITE](#)

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **cea608CaptionConverterColor**

See Also:

[ClosedCaptionCEA608Utils.COL0_WHITE](#)
[ClosedCaptionCEA608Utils.COL0_GREEN](#)
[ClosedCaptionCEA608Utils.COL0_BLUE](#)
[ClosedCaptionCEA608Utils.COL0_CYAN](#)
[ClosedCaptionCEA608Utils.COL0_RED](#)
[ClosedCaptionCEA608Utils.COL0_YELLOW](#)
[ClosedCaptionCEA608Utils.COL0_MAGENTA](#)

PROP_CEA608_CONVERTER_CHARS_PER_LINE

```
public static final java.lang.String PROP_CEA608_CONVERTER_CHARS_PER_LINE
```

Timed Text Property "cea608CaptionConverterCharsPerLine": max number characters per line in default CEA caption converter.

Type Integer. Default is [ClosedCaptionCEA608Utils.COUNT_COLS](#)

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **cea608CaptionConverterCharsPerLine**

PROP_CEA608_CONVERTER_CHARACTER_SET

```
public static final java.lang.String PROP_CEA608_CONVERTER_CHARACTER_SET
```

(continued from last page)

Timed Text Property "cea608CaptionConverterCharacterSet":character set in default CEA caption converter.

Type String. Default is "UTF-8"

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **cea608CaptionConverterCharacterSet**

PROP_CUPERTINO_VOD_REMOVE_EXISTING_CEA608

```
public static final java.lang.String PROP_CUPERTINO_VOD_REMOVE_EXISTING_CEA608
```

Timed Text Property "cupertinoVODCaptionsRemoveExistingCEA608": if existing VOD has 608, remove them

Type Boolean. Default is false.

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **cupertinoVODCaptionsRemoveExistingCEA608**

PROP_CUPERTINO_VOD_USE_WEBVTT

```
public static final java.lang.String PROP_CUPERTINO_VOD_USE_WEBVTT
```

Timed Text Property "cupertinoVODCaptionsUseWebVTT"

Type Boolean. Default is false.

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **cupertinoVODCaptionsUseWebVTT**

PROP_CUPERTINO_LIVE_USE_WEBVTT

```
public static final java.lang.String PROP_CUPERTINO_LIVE_USE_WEBVTT
```

Timed Text Property "cupertinoLiveCaptionsUseWebVTT"

Type Boolean. Default is false.

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **cupertinoLiveCaptionsUseWebVTT**

PROP_CUPERTINO_LIVE_WEBVTT_ADD_SPECIAL_EMPTY_CAPTION

```
public static final java.lang.String  
PROP_CUPERTINO_LIVE_WEBVTT_ADD_SPECIAL_EMPTY_CAPTION
```

Timed Text Property "cupertinoLiveWebVTTAddSpecialEmptyCaption"

Type Boolean. Default is true.

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **cupertinoLiveWebVTTAddSpecialEmptyCaption**

PROP_AMF_CONVERTER_TEXT_TYPE

```
public static final java.lang.String PROP_AMF_CONVERTER_TEXT_TYPE
```

Timed Text Property "amfCaptionConverterTextType":AMF text type used in conversion

Type String. Default is [AMF_TEXTTYPE_ON_TEXT_DATA](#)

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **amfCaptionConverterTextType**

(continued from last page)

DEFAULT_AMF_CONVERTER_TEXT_TYPE

```
public static final java.lang.String DEFAULT_AMF_CONVERTER_TEXT_TYPE
```

Constant value: **onTextData**

PROP_AMF_CONVERTER_TRACK_INDEX

```
public static final java.lang.String PROP_AMF_CONVERTER_TRACK_INDEX
```

Timed Text Property "amfCaptionConverterTrackIndex": track index used for captions

Type Integer.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **amfCaptionConverterTrackIndex**

DEFAULT_AMF_CONVERTER_TRACK_INDEX

```
public static final int DEFAULT_AMF_CONVERTER_TRACK_INDEX
```

Constant value: **99**

PROP_AMF_CONVERTER_INSERT_ERASES_IN_GAPS

```
public static final java.lang.String PROP_AMF_CONVERTER_INSERT_ERASES_IN_GAPS
```

Timed Text Property "amfCaptionConverterInsertErases": insert erase captions if gaps between captions are greater than PROP_MAXIMUM_CAPTION_DURATION

Type boolean. The default is true.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **amfCaptionConverterInsertErases**

PROP_WEBVTT_CONVERTER_INSERT_ERASES_IN_GAPS

```
public static final java.lang.String PROP_WEBVTT_CONVERTER_INSERT_ERASES_IN_GAPS
```

Timed Text Property "webVTTCaptionConverterInsertErases": insert erase captions if gaps between captions are greater than PROP_MAXIMUM_CAPTION_DURATION

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **webVTTCaptionConverterInsertErases**

PROP_DEBUG_TTML_VOD_CAPTION_COMPANION_FILES

```
public static final java.lang.String PROP_DEBUG_TTML_VOD_CAPTION_COMPANION_FILES
```

(continued from last page)

Timed Text Property "debugTTMLVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset for TTML Streaming.

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugTTMLVODCaptionFileDetermination**

See Also:

[PROP_DEBUG_VOD_CAPTION_COMPANION_FILES](#)

PROP_DEBUG_TTML_CAPTION_PARSER

```
public static final java.lang.String PROP_DEBUG_TTML_CAPTION_PARSER
```

Timed Text Property "debugTTMLCaptionParser": adds info level logging regarding the TTML caption parser

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugTTMLCaptionParser**

PROP_DEBUG_TTML_CAPTION_PARSER_TIME

```
public static final java.lang.String PROP_DEBUG_TTML_CAPTION_PARSER_TIME
```

Timed Text Property "debugTTMLCaptionParserTime": adds info level logging regarding how long it took parser to index

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugTTMLCaptionParserTime**

PROP_TTML_INLINE_TAGS_IN_TEXT

```
public static final java.lang.String PROP_TTML_INLINE_TAGS_IN_TEXT
```

Timed Text Property "ttmlInlineTagsInText": TTML parser includes in-line styling and line-break tags in the sample text

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Example sample: "

I can linebreak

or change fontWeight to bold in the middle of a sample." If ttmlInlineTagsInText=true then the parser provides the sample text as: "I can linebreak

or change fontWeight to bold in the middle of a sample." If ttmlInlineTagsInText=false then the parser provides the sample text as: "I can linebreak or change fontWeight to bold in the middle of a sample."

Constant value: **ttmlInlineTagsInText**

PROP_DEBUG_SRT_VOD_CAPTION_COMPANION_FILES

```
public static final java.lang.String PROP_DEBUG_SRT_VOD_CAPTION_COMPANION_FILES
```

(continued from last page)

Timed Text Property "debugSRTVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset for SRT provider

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugSRTVODCaptionFileDetermination**

See Also:

[PROP_DEBUG_VOD_CAPTION_COMPANION_FILES](#)

PROP_DEBUG_SRT_CAPTION_PARSER

```
public static final java.lang.String PROP_DEBUG_SRT_CAPTION_PARSER
```

Timed Text Property "debugSRTCaptionParser": adds info level logging regarding the SRT caption parser

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugSRTCaptionParser**

PROP_DEBUG_SRT_CAPTION_PARSER_TIME

```
public static final java.lang.String PROP_DEBUG_SRT_CAPTION_PARSER_TIME
```

Timed Text Property "debugSRTCaptionParserTime": adds info level logging regarding how long it took parser to index

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugSRTCaptionParserTime**

PROP_DEBUG_WEBVTT_VOD_CAPTION_COMPANION_FILES

```
public static final java.lang.String PROP_DEBUG_WEBVTT_VOD_CAPTION_COMPANION_FILES
```

Timed Text Property "debugWebVTTVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset for WebVTT provider

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugWebVTTVODCaptionFileDetermination**

See Also:

[PROP_DEBUG_VOD_CAPTION_COMPANION_FILES](#)

PROP_DEBUG_WEBVTT_CAPTION_PARSER

```
public static final java.lang.String PROP_DEBUG_WEBVTT_CAPTION_PARSER
```

(continued from last page)

Timed Text Property "debugWebVTTCaptionParser": adds info level logging regarding the WebVTT caption parser

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugWebVTTCaptionParser**

PROP_DEBUG_WEBVTT_CAPTION_PARSER_TIME

```
public static final java.lang.String PROP_DEBUG_WEBVTT_CAPTION_PARSER_TIME
```

Timed Text Property "debugWebVTTCaptionParserTime": adds info level logging regarding how long it took parser to index

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugWebVTTCaptionParserTime**

PROP_DEBUG_SCC_VOD_CAPTION_COMPANION_FILES

```
public static final java.lang.String PROP_DEBUG_SCC_VOD_CAPTION_COMPANION_FILES
```

Timed Text Property "debugSCCVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset for SCC provider

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugSCCVODCaptionFileDetermination**

See Also:

[PROP_DEBUG_VOD_CAPTION_COMPANION_FILES](#)

PROP_DEBUG_SCC_CAPTION_PARSER

```
public static final java.lang.String PROP_DEBUG_SCC_CAPTION_PARSER
```

Timed Text Property "debugSCCCaptionParser": adds info level logging regarding the SCC caption parser

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugSCCCaptionParser**

PROP_DEBUG_SCC_CAPTION_PARSER_TIME

```
public static final java.lang.String PROP_DEBUG_SCC_CAPTION_PARSER_TIME
```

Timed Text Property "debugSCCCaptionParserTime": adds info level logging regarding how long it took parser to index

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

(continued from last page)

Constant value: **debugSCCCaptionParserTime**

PROP_DEBUG_3GPP_CAPTION_PARSER

```
public static final java.lang.String PROP_DEBUG_3GPP_CAPTION_PARSER
```

Timed Text Property "debug3GPPCaptionParser": adds info level logging regarding the 3GPP parser

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debug3GPPCaptionParser**

PROP_DEBUG_3GPP_CAPTION_PARSER_TIME

```
public static final java.lang.String PROP_DEBUG_3GPP_CAPTION_PARSER_TIME
```

Timed Text Property "debug3GPPCaptionParserTime": adds info level logging regarding how long it took parser to index

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debug3GPPCaptionParserTime**

QUERYSTR_CAPTIONLANGUAGES

```
public static final java.lang.String QUERYSTR_CAPTIONLANGUAGES
```

Query string used for choosing caption languages. Language must be presented using ISO 3 letter language codes.

Constant value: **wowzacaptionlanguages**

PROP_CAPTION_LANGUAGE_QUERY_PARAMETER

```
public static final java.lang.String PROP_CAPTION_LANGUAGE_QUERY_PARAMETER
```

HTTP Streamer Property "captionLanguageQueryParameter": used for changing query string param used for caption language selection. Note: Must go into HTTPStreamers.xml under Properties for each streamer type

Type String. The default is "wowzacaptionlanguages"

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLanguageQueryParameter**

QUERYSTR_CAPTION_FILENAME

```
public static final java.lang.String QUERYSTR_CAPTION_FILENAME
```

Query string used for choosing caption languages. Language must be presented using ISO 3 letter language codes.

Constant value: **wowzacaptionfile**

PROP_CAPTION_FILENAME_QUERY_PARAMETER

```
public static final java.lang.String PROP_CAPTION_FILENAME_QUERY_PARAMETER
```

(continued from last page)

HTTP Streamer Property "captionFilenameQueryParameter": used for changing query string param used for caption file selection. Note: Must go into HTTPStreamers.xml under Properties for each streamer type

Type String. The default is "wowzacaptionfile"

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionFilenameQueryParameter**

PROP_LIVE_CAPTION_INGEST_AMF_ID_STRING

```
public static final java.lang.String PROP_LIVE_CAPTION_INGEST_AMF_ID_STRING
```

Timed Text Property "captionLiveIngestAMFIDString": to change AMF identifier from default "onTextData" to something else

Type String. The default value is "onTextData".

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestAMFIDString**

PROP_LIVE_CAPTION_USE_STREAM_NAME_GROUPS

```
public static final java.lang.String PROP_LIVE_CAPTION_USE_STREAM_NAME_GROUPS
```

Timed Text Property "captionLiveIngestUseStreamNameGroups": to enable use of smil files to determine available languages and ingest type

Type Boolean. The default value is true. Only affects streams started with .smil files using StartupStreams or stream manager.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestUseStreamNameGroups**

PROP_LIVE_CAPTION_DEFAULT_LANGUAGES

```
public static final java.lang.String PROP_LIVE_CAPTION_DEFAULT_LANGUAGES
```

Timed Text Property "captionLiveIngestLanguages": comma separated ISO-639 language codes determining what languages are expected in the live stream

Type String. The default value is the language returned by Locale.getDefault().getISO3Language().

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestLanguages**

PROP_LIVE_CAPTION_INGEST_TYPE

```
public static final java.lang.String PROP_LIVE_CAPTION_INGEST_TYPE
```

Timed Text Property "captionLiveIngestType": type of live caption ingestion.

This corresponds to LiveIngestTypes in TimedTextProviders.

Type String. The default value is "onTextData". "onCaption" is also a valid value. "CEA608" is a valid value since 4.0.4

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestType**

PROP_DEBUG_LIVE_CAPTION_INGEST

```
public static final java.lang.String PROP_DEBUG_LIVE_CAPTION_INGEST
```

(continued from last page)

Timed Text Property "debugCaptionLiveIngest "

Type Boolean. The default value is false.

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **debugCaptionLiveIngest**

PROP_DEBUG_LIVE_CAPTION_ONTEXTDATA_INGEST

```
public static final java.lang.String PROP_DEBUG_LIVE_CAPTION_ONTEXTDATA_INGEST
```

Timed Text Property "debugCaptionLiveOnTextDataIngest "

Type Boolean. The default value is false. Overrides [PROP_LIVE_CAPTION_DEFAULT_LANGUAGES](#)

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **debugCaptionLiveOnTextDataIngest**

PROP_DEBUG_LIVE_CAPTION_ONCAPTION_INGEST

```
public static final java.lang.String PROP_DEBUG_LIVE_CAPTION_ONCAPTION_INGEST
```

Timed Text Property "debugCaptionLiveOnCaptionIngest "

Type Boolean. The default value is false. Overrides [PROP_LIVE_CAPTION_DEFAULT_LANGUAGES](#)

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **debugCaptionLiveOnCaptionIngest**

PROP_LIVE_CAPTION_INGEST_ON_CAPTION_STRING

```
public static final java.lang.String PROP_LIVE_CAPTION_INGEST_ON_CAPTION_STRING
```

Timed Text Property "captionLiveIngestOnCaptionString": to change AMF identifier from default "onCaption" to something else

Type String. The default value is "onCaption".

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **captionLiveIngestOnCaptionString**

PROP_LIVE_CAPTION_INGEST_ON_CAPTION_INFO_STRING

```
public static final java.lang.String PROP_LIVE_CAPTION_INGEST_ON_CAPTION_INFO_STRING
```

Timed Text Property "captionLiveIngestOnCaptionInfoString": to change AMF identifier from default "onCaptionInfo" to something else

Type String. The default value is "onCaptionInfo".

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **captionLiveIngestOnCaptionInfoString**

PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_IDLE_TIME_TO_FLUSH_DECODER

```
public static final java.lang.String  
PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_IDLE_TIME_TO_FLUSH_DECODER
```

(continued from last page)

Timed Text Property "captionLiveIngestOnCaptionCEA608IdleTimeToFlushDecoder" Controls allowed amount of idle time when parsing CEA-608 captions when ingested from AMF 708 data events

Type Integer. The default value is 250 ms.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestOnCaptionCEA608IdleTimeToFlushDecoder**

PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_ENABLE_FIELD1

```
public static final java.lang.String  
PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_ENABLE_FIELD1
```

Timed Text Property "captionLiveIngestOnCaptionCEA608EnableField2": When ingesting AMF onCaption 708 data events (actually CEA-608), controls whether CEA-608 field 1 is enabled for decoding

Type Boolean. Default is true;

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestOnCaptionCEA608EnableField1**

PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_ENABLE_FIELD2

```
public static final java.lang.String  
PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_ENABLE_FIELD2
```

Timed Text Property "captionLiveIngestOnCaptionCEA608EnableField2": When ingesting AMF onCaption 708 data events (actually CEA-608), controls whether CEA-608 field 2 is enabled for decoding

Type Boolean. Default is false;

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestOnCaptionCEA608EnableField2**

PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_MAX_WARN_MESSAGES

```
public static final java.lang.String  
PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_MAX_WARN_MESSAGES
```

Timed Text Property "captionLiveIngestOnCaptionCEA608MaxWarnMessages": When ingesting AMF onCaption 708 data events (actually CEA-608), controls the maximum number of warning messages that are logged by the decoder

Type Integer. Default is 25.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestOnCaptionCEA608MaxWarnMessages**

PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_TRACK_NUMBER

```
public static final java.lang.String  
PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_TRACK_NUMBER
```

Timed Text Property "captionLiveIngestOnCaptionCEA608TrackNumber": When ingesting AMF onCaption 708 data events (actually CEA-608), controls the track number used to add captions as onTextData

Type Integer. Default is 99.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestOnCaptionCEA608TrackNumber**

PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_LANGUAGE_ID

```
public static final java.lang.String  
PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_LANGUAGE_ID
```

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Timed Text Property "captionLiveIngestOnCaptionCEA608LanguageID": When ingesting AMF onCaption 708 data events (actually CEA-608), controls the language ID used to add captions as onTextData

Type String. Default is language code of Java's locale.

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **captionLiveIngestOnCaptionCEA608LanguageID**

PROP_DEBUG_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_VERBOSE

```
public static final java.lang.String  
PROP_DEBUG_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_VERBOSE
```

Timed Text Property "debugCaptionLiveIngestOnCaptionCEA608Verbose" : Adds verbose logging to AMF onCaption events of type "708" (CEA-608)

Type Boolean. The default value is false.

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **debugCaptionLiveIngestOnCaptionCEA608Verbose**

PROP_DEBUG_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_LOG_AS_SCC

```
public static final java.lang.String  
PROP_DEBUG_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_LOG_AS_SCC
```

Timed Text Property "debugCaptionLiveIngestOnCaptionCEA608LogAsSCC" : Adds additional logging of decoding AMF onCaption events of type "708" (CEA-608) such that they are logged in SCC format

Type Boolean. The default value is false.

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **debugCaptionLiveIngestOnCaptionCEA608LogAsSCC**

PROP_DEBUG_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_LOG_AS_RAW

```
public static final java.lang.String  
PROP_DEBUG_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_LOG_AS_RAW
```

Timed Text Property "debugCaptionLiveIngestOnCaptionCEA608LogAsRaw" : Adds additional logging of decoding AMF onCaption events of type "708" (CEA-608) such that they are logged in a raw binary state

Type Boolean. The default value is false.

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **debugCaptionLiveIngestOnCaptionCEA608LogAsRaw**

ON_TEXT_DATA

```
public static final java.lang.String ON_TEXT_DATA
```

Constant value: **onTextData**

ON_CAPTION_INFO

```
public static final java.lang.String ON_CAPTION_INFO
```

Constant value: **onCaptionInfo**

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ON_CAPTION

```
public static final java.lang.String ON_CAPTION
```

Constant value: **onCaption**

CEA608

```
public static final java.lang.String CEA608
```

Constant value: **CEA608**

SMIL_PARAM_WOWZA_CAPTION_INGEST_TYPE

```
public static final java.lang.String SMIL_PARAM_WOWZA_CAPTION_INGEST_TYPE
```

Constant value: **wowzacaptioningesttype**

SMIL_PARAM_IS_WOWZA_CAPTION_STREAM

```
public static final java.lang.String SMIL_PARAM_IS_WOWZA_CAPTION_STREAM
```

Constant value: **iswowzacaptionstream**

Package

com.wowza.wms.transcoder.model

com.wowza.wms.transcoder.model Interface **ILiveStreamTranscoderActionNotify**

All Known Implementing Classes:

[LiveStreamTranscoderActionNotifyBase](#)

public interface **ILiveStreamTranscoderActionNotify**
extends

ILiveStreamTranscoderActionNotify: listener interface for live stream transcoder events.

Method Summary	
void	onCalculateSourceAudioBitrate (LiveStreamTranscoder liveStreamTranscoder, long bitrate) Called when the bitrate of the source audio stream is calculated
void	onCalculateSourceVideoBitrate (LiveStreamTranscoder liveStreamTranscoder, long bitrate) Called when the bitrate of the source video stream is calculated
void	onInitAfterLoadTemplate (LiveStreamTranscoder liveStreamTranscoder) Called just after transcoder template is loaded.
void	onInitBeforeLoadTemplate (LiveStreamTranscoder liveStreamTranscoder) Called just before transcoder template is loaded
void	onInitStart (LiveStreamTranscoder liveStreamTranscoder, String streamName, String transcoderName, IApplicationInstance appInstance, LiveStreamTranscoderItem liveStreamTranscoderItem) Call when live stream transcoder is first created
void	onInitStop (LiveStreamTranscoder liveStreamTranscoder) At the end of the initialization process
void	onRegisterStreamNameGroup (LiveStreamTranscoder liveStreamTranscoder, TranscoderStreamNameGroup streamNameGroup) Called after a stream name group is resolved and registered with MediaStreamMap
void	onResetStream (LiveStreamTranscoder liveStreamTranscoder) Called when the stream feeding the live stream transcoder switches.
void	onSessionAudioDecodeCodecInfo (LiveStreamTranscoder liveStreamTranscoder, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio) Called when audio decoding information is available.
void	onSessionAudioEncodeCodecInfo (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionAudioEncode sessionAudioEncode, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio) Called when audio encoding information is available.
void	onSessionAudioEncodeCreate (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionAudioEncode sessionAudioEncode) Called when audio encoder session is created.

void	onSessionAudioEncodeInit (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionAudioEncode sessionAudioEncode) Called after audio session is initialized.
void	onSessionAudioEncodeSetup (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionAudioEncode sessionAudioEncode) Called after native audio encoder is created and initialized.
void	onSessionDataEncodeCreate (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionDataEncode sessionDataEncode) Called when data encoder session is created.
void	onSessionDataEncodeInit (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionDataEncode sessionDataEncode) Called after data session is initialized.
void	onSessionDestinationCreate (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionDestination sessionDestination) Called when transcoding destination is created
void	onSessionVideoDecodeCodecInfo (LiveStreamTranscoder liveStreamTranscoder, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo) Called when video decoding information is available.
void	onSessionVideoEncodeCodecInfo (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionVideoEncode sessionVideoEncode, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo) Called when video encoding information is available.
void	onSessionVideoEncodeCreate (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionVideoEncode sessionVideoEncode) Called when video encoder session is created.
void	onSessionVideoEncodeInit (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionVideoEncode sessionVideoEncode) Called after video session is initialized.
void	onSessionVideoEncodeSetup (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionVideoEncode sessionVideoEncode) Called after native video encoder is created and initialized.
void	onShutdownStart (LiveStreamTranscoder liveStreamTranscoder) Called when the live stream transcoder starts to shutdown.
void	onShutdownStop (LiveStreamTranscoder liveStreamTranscoder) Called when the live stream transcoder is shutdown.
void	onUnregisterStreamNameGroup (LiveStreamTranscoder liveStreamTranscoder, TranscoderStreamNameGroup streamNameGroup) Called after a stream name group is unregistered with MediaStreamMap

Methods

onInitStart

```
public void onInitStart(LiveStreamTranscoder liveStreamTranscoder,
    String streamName,
    String transcoderName,
    IApplicationInstance appInstance,
    LiveStreamTranscoderItem liveStreamTranscoderItem)
```

(continued from last page)

Call when live stream transcoder is first created

Parameters:

liveStreamTranscoder - live stream transcoder
streamName - stream name
transcoderName - transcoder name
appInstance - application instance
liveStreamTranscoderItem - live stream transcoder definition

onInitBeforeLoadTemplate

```
public void onInitBeforeLoadTemplate(LiveStreamTranscoder liveStreamTranscoder)
```

Called just before transcoder template is loaded

Parameters:

liveStreamTranscoder - live stream transcoder

onInitAfterLoadTemplate

```
public void onInitAfterLoadTemplate(LiveStreamTranscoder liveStreamTranscoder)
```

Called just after transcoder template is loaded. Good place to modify values loaded from template.

Parameters:

liveStreamTranscoder - live stream transcoder

onInitStop

```
public void onInitStop(LiveStreamTranscoder liveStreamTranscoder)
```

At the end of the initialization process

Parameters:

liveStreamTranscoder - live stream transcoder

onCalculateSourceVideoBitrate

```
public void onCalculateSourceVideoBitrate(LiveStreamTranscoder liveStreamTranscoder,  
long bitrate)
```

Called when the bitrate of the source video stream is calculated

Parameters:

liveStreamTranscoder - live stream transcoder
bitrate - source bitrate (bytes per second)

onCalculateSourceAudioBitrate

```
public void onCalculateSourceAudioBitrate(LiveStreamTranscoder liveStreamTranscoder,  
long bitrate)
```

Called when the bitrate of the source audio stream is calculated

Parameters:

liveStreamTranscoder - live stream transcoder
bitrate - source bitrate (bytes per second)

onSessionDestinationCreate

```
public void onSessionDestinationCreate(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionDestination sessionDestination)
```

Called when transcoding destination is created

Parameters:

liveStreamTranscoder - live stream transcoder
sessionDestination - destination

onSessionVideoEncodeCreate

```
public void onSessionVideoEncodeCreate(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionVideoEncode sessionVideoEncode)
```

Called when video encoder session is created.

Parameters:

liveStreamTranscoder - live stream transcoder
sessionVideoEncode - video session

onSessionAudioEncodeCreate

```
public void onSessionAudioEncodeCreate(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionAudioEncode sessionAudioEncode)
```

Called when audio encoder session is created.

Parameters:

liveStreamTranscoder - live stream transcoder
sessionAudioEncode - audio session

onSessionDataEncodeCreate

```
public void onSessionDataEncodeCreate(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionDataEncode sessionDataEncode)
```

Called when data encoder session is created.

Parameters:

liveStreamTranscoder - live stream transcoder
sessionDataEncode - data session

onSessionVideoEncodeInit

```
public void onSessionVideoEncodeInit(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionVideoEncode sessionVideoEncode)
```

Called after video session is initialized.

Parameters:

liveStreamTranscoder - live stream transcoder
sessionVideoEncode - video session

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onSessionAudioEncodeInit

```
public void onSessionAudioEncodeInit(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionAudioEncode sessionAudioEncode)
```

Called after audio session is initialized.

Parameters:

liveStreamTranscoder - live stream transcoder
sessionAudioEncode - audio session

onSessionDataEncodeInit

```
public void onSessionDataEncodeInit(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionDataEncode sessionDataEncode)
```

Called after data session is initialized.

Parameters:

liveStreamTranscoder - live stream transcoder
sessionDataEncode - data session

onSessionVideoEncodeSetup

```
public void onSessionVideoEncodeSetup(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionVideoEncode sessionVideoEncode)
```

Called after native video encoder is created and initialized.

Parameters:

liveStreamTranscoder - live stream transcoder
sessionVideoEncode - video session

onSessionAudioEncodeSetup

```
public void onSessionAudioEncodeSetup(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionAudioEncode sessionAudioEncode)
```

Called after native audio encoder is created and initialized.

Parameters:

liveStreamTranscoder - live stream transcoder
sessionAudioEncode - audio session

onSessionVideoEncodeCodecInfo

```
public void onSessionVideoEncodeCodecInfo(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionVideoEncode sessionVideoEncode,  
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
```

Called when video encoding information is available.

Parameters:

liveStreamTranscoder - live stream transcoder
sessionVideoEncode - video session
codecInfoVideo - encoding info

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onSessionAudioEncodeCodecInfo

```
public void onSessionAudioEncodeCodecInfo(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionAudioEncode sessionAudioEncode,  
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
```

Called when audio encoding information is available.

Parameters:

liveStreamTranscoder - live stream transcoder
sessionAudioEncode - audio session
codecInfoAudio - encoding info

onSessionVideoDecodeCodecInfo

```
public void onSessionVideoDecodeCodecInfo(LiveStreamTranscoder liveStreamTranscoder,  
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
```

Called when video decoding information is available.

Parameters:

liveStreamTranscoder - live stream transcoder
codecInfoVideo - video info

onSessionAudioDecodeCodecInfo

```
public void onSessionAudioDecodeCodecInfo(LiveStreamTranscoder liveStreamTranscoder,  
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
```

Called when audio decoding information is available.

Parameters:

liveStreamTranscoder - live stream transcoder
codecInfoAudio - audio info

onRegisterStreamNameGroup

```
public void onRegisterStreamNameGroup(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderStreamNameGroup streamNameGroup)
```

Called after a stream name group is resolved and registered with MediaStreamMap

Parameters:

liveStreamTranscoder - live stream transcoder
streamNameGroup - stream name group

onUnregisterStreamNameGroup

```
public void onUnregisterStreamNameGroup(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderStreamNameGroup streamNameGroup)
```

Called after a stream name group is unregistered with MediaStreamMap

Parameters:

liveStreamTranscoder - live stream transcoder
streamNameGroup - stream name group

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onShutdownStart

```
public void onShutdownStart(LiveStreamTranscoder liveStreamTranscoder)
```

Called when the live stream transcoder starts to shutdown.

Parameters:

liveStreamTranscoder - live stream transcoder

onShutdownStop

```
public void onShutdownStop(LiveStreamTranscoder liveStreamTranscoder)
```

Called when the live stream transcoder is shutdown.

Parameters:

liveStreamTranscoder - live stream transcoder

onResetStream

```
public void onResetStream(LiveStreamTranscoder liveStreamTranscoder)
```

Called when the stream feeding the live stream transcoder switches.

Parameters:

liveStreamTranscoder - live stream transcoder

com.wowza.wms.transcoder.model Interface ITranscoderFrameGrabProvider

public interface **ITranscoderFrameGrabProvider**
extends

ITranscoderFrameGrabProvider: interface used to grab frames from the live stream transcoder.

Method Summary

java.util.List	getAndClearPendingFrameGrabs() Returns a list of all grab frame requests that are pending and clears the pending list.
void	grabFrame(ITranscoderFrameGrabResult grabResult) Call to grab a frame.
void	grabFrame(ITranscoderFrameGrabResult grabResult, int width, int height) Call to grab a frame.

Methods

grabFrame

public void **grabFrame**([ITranscoderFrameGrabResult](#) grabResult)

Call to grab a frame. The size of the frame will be the full size of the video frame.

Parameters:

grabResult - the class that will be called back when frame is available

grabFrame

public void **grabFrame**([ITranscoderFrameGrabResult](#) grabResult,
int width,
int height)

Call to grab a frame. The size of the frame is controlled by width and height.

Parameters:

grabResult - the class that will be called back when frame is available
width - frame width
height - frame height

getAndClearPendingFrameGrabs

public java.util.List **getAndClearPendingFrameGrabs**()

Returns a list of all grab frame requests that are pending and clears the pending list.

Returns:

list of pending grab frames

com.wowza.wms.transcoder.model Interface ITranscoderFrameGrabResult

public interface **ITranscoderFrameGrabResult**
extends

ITranscoderFrameGrabResult: Implement this interface when using frame grabber interface to grab transcoder video frames.

Method Summary

void	onGrabFrame (TranscoderNativeVideoFrame nativeFrame) Trigger when frame is available.
------	---

Methods

onGrabFrame

public void **onGrabFrame**([TranscoderNativeVideoFrame](#) nativeFrame)

Trigger when frame is available.

Parameters:

nativeFrame - native video frame.

com.wowza.wms.transcoder.model Interface ITranscoderOverlayImages

public interface **ITranscoderOverlayImages**
extends

Method Summary

void	addOverlayImage (int index, TranscoderVideoOverlayFrame overlay)
java.util.Map	getOverlayImages ()

Methods

addOverlayImage

```
public void addOverlayImage(int index,  
    TranscoderVideoOverlayFrame overlay)
```

getOverlayImages

```
public java.util.Map getOverlayImages()
```

com.wowza.wms.transcoder.model Interface ITranscoderOverlayProvider

public interface **ITranscoderOverlayProvider**
extends

ITranscoderOverlayProvider: interface to add and remove video overlays.

Method Summary

void	addOverlay (int index, TranscoderVideoOverlayFrame overlay) Add an overlay to a video stream.
void	clearOverlay (int index) Clear video overlay
java.util.Map	getAndClearPendingOverlays () Get a list of pending overlay requests and clear the pending overlay queue.
boolean	isOverlayAvailable () Returns true if there is a pending overlay request.

Methods

addOverlay

```
public void addOverlay(int index,
    TranscoderVideoOverlayFrame overlay)
```

Add an overlay to a video stream.

Parameters:

index - over lay index (zero is bottom in z-order)
overlay - overlay object

clearOverlay

```
public void clearOverlay(int index)
```

Clear video overlay

Parameters:

index - over lay index (zero is bottom in z-order)

isOverlayAvailable

```
public boolean isOverlayAvailable()
```

Returns true if there is a pending overlay request.

Returns:

true if there is a pending overlay request

getAndClearPendingOverlays

```
public java.util.Map getAndClearPendingOverlays()
```

Get a list of pending overlay requests and clear the pending overlay queue.

Returns:

list of pending overlay requests

com.wowza.wms.transcoder.model Interface ITranscoderSessionNative

public interface ITranscoderSessionNative
extends

Field Summary

public static final	AAC_SAMPLEBUFFER_SIZE Value: 1024
public static final	AC3_SAMPLEBUFFER_SIZE Value: 2048
public static final	CLASS
public static final	CLASSNAME Value: ITranscoderSessionNative
public static final	CODEC_IMPL_DEFAULT Value: 0
public static final	DECODERESULT_ERROR Value: 64
public static final	DECODERESULT_FRAMEDONE Value: 1
public static final	DECODERESULT_FRAMEERROR Value: 16
public static final	DECODERESULT_FRAMEREADY Value: 2
public static final	DECODERESULT_FRAMESKIP Value: 8
public static final	DECODERESULT_FRAMEVALID Value: 4
public static final	DECODERESULT_SEQHEADER Value: 32
public static final	G711_SAMPLEBUFFER_SIZE Value: 2048

public static final	H264_1SEG Value: 16
public static final	H264_3GP Value: 25
public static final	H264_AVCHD Value: 14
public static final	H264_BASELINE Value: 0
public static final	H264_BD Value: 8
public static final	H264_BD_HDMV Value: 9
public static final	H264_CIF Value: 1
public static final	H264_D1 Value: 4
public static final	H264_DIVX Value: 22
public static final	H264_DVD Value: 6
public static final	H264_FLASH_HIGHRES Value: 24
public static final	H264_FLASH_LOWRES Value: 23
public static final	H264_HD_DVD Value: 7
public static final	H264_HD_DVD_BD_MV Value: 64
public static final	H264_HDTV_1080i Value: 12
public static final	H264_HDTV_720p Value: 11

public static final	H264_HIGH Value: 5
public static final	H264_INTRA_CLASS_100 Value: 19
public static final	H264_INTRA_CLASS_50 Value: 18
public static final	H264_INTRA_HIGH_10 Value: 17
public static final	H264_iPOD Value: 13
public static final	H264_iPOD_640x480 Value: 15
public static final	H264_LAST_H264_TYPE Value: 27
public static final	H264_MAIN Value: 2
public static final	H264_PSP Value: 10
public static final	H264_PSP_480x270 Value: 20
public static final	H264_PSP_640x480 Value: 21
public static final	H264_SILVERLIGHT Value: 26
public static final	H264_SVCD Value: 3
public static final	MP3_SAMPLEBUFFER_SIZE Value: 5760
public static final	NATIVELIBPATH_BASEPATH Value: 0
public static final	NATIVELIBPATH_QUICKSYNCPATH Value: 1

public static final	NATIVELIBPATH_VAAPIPATH Value: 2
public static final	OPUS_SAMPLEBUFFER_SIZE Value: 5760
public static final	SPEEX_SAMPLEBUFFER_SIZE Value: 2048
public static final	VORBIS_SAMPLEBUFFER_SIZE Value: 2048

Method Summary

long	audioDecoderApplyParameters (long classPtr)
long	audioDecoderBuffersAllocate (long classPtr, long sampleCount, long channels, long sampleRate)
long	audioDecoderBuffersCreate (long classPtr, long count)
long	audioDecoderCreate (long classPtr, long codec, long implementation)
long	audioDecoderCreate (long classPtr, long codec, long implementation, long format)
long	audioDecoderDecodeCodecConfig (long classPtr, byte[] buffer, long offset, long len)
long	audioDecoderDecodeFirstFrame (long classPtr, byte[] buffer, long offset, long len)
long	audioDecoderDecodeFrame (long classPtr, byte[] buffer, long offset, long len, long timecode, long indexBuffer)
long	audioDecoderGetChannels (long classPtr, TranscoderLongByReference channels)
long	audioDecoderGetParameterValues (long classPtr, TranscoderNativeParameterValue[] values)
long	audioDecoderGetSampleRate (long classPtr, TranscoderLongByReference sampleRate)
long	audioDecoderInitialize (long classPtr)
long	audioDecoderIsFirstFrameDecoded (long classPtr)
long	audioDecoderResetDecodedFrameState (long classPtr)

long	audioDecoderSetParameterValues (long classPtr, TranscoderNativeParameterValue[] values)
long	audioEncoderAdd (long classPtr, long codec, long implementation, TranscoderLongByReference indexEncoder)
long	audioEncoderAddSampleBuffer (long classPtr, long indexEncoder, long indexBuffer, java.util.List frames)
long	audioEncoderApplyParameters (long classPtr, long indexEncoder)
long	audioEncoderGetHeaders (long classPtr, long indexEncoder, java.util.List frames)
long	audioEncoderGetParameterValues (long classPtr, long indexEncoder, TranscoderNativeParameterValue[] values)
long	audioEncoderInitialize (long classPtr, long indexEncoder)
long	audioEncoderSetBitrate (long classPtr, long indexEncoder, long bitrate)
long	audioEncoderSetChannels (long classPtr, long indexEncoder, long channels)
long	audioEncoderSetParameterValues (long classPtr, long indexEncoder, TranscoderNativeParameterValue[] values)
long	audioEncoderSetQuality (long classPtr, long indexEncoder, double quality)
long	audioEncoderSetSampleRate (long classPtr, long indexEncoder, long sampleRate)
long	createInstance ()
long	destroyInstance (long classPtr)
long	getHardwareInfoJSON (TranscoderStringByReference jsonStr)
long	getLicenseChallenge (long classPtr, TranscoderLongByReference challenge)
long	getLogStatements (long classPtr, java.util.List statements)
long	initInstance (long classPtr)
long	nativeInitialize ()
long	setLicenseResponse (long classPtr, long response)
long	setNativeLibPath (long pathIndex, String pathStr)

long	thumbnailerGetVideoFrame (long classPtr, com.wowza.wms.transcoder.thumbnailer.ThumbnailerRequest request, com.wowza.wms.transcoder.thumbnailer.ThumbnailerResponse response)
long	videoDecoderAddFrame (long classPtr, byte[] buffer, long offset, long len, long timecode, long frameType)
long	videoDecoderApplyParameters (long classPtr)
long	videoDecoderBufferGetVideoFrame (long classPtr, long decoderBufferSetIndex, TranscoderNativeVideoFrame nativeVideoFrame)
long	videoDecoderBuffersCreate (long classPtr, long count)
long	videoDecoderBufferSetOverlayVideoFrame (long classPtr, long overlayIndex, TranscoderNativeVideoFrame nativeVideoFrame)
long	videoDecoderCreate (long classPtr, long codec, long codecVersion, long implementation, long fourcc)
long	videoDecoderDecode (long classPtr, long decoderBufferSetIndex, TranscoderLongByReference decodeStatus, TranscoderLongByReference timecode)
long	videoDecoderDecodeCodecConfig (long classPtr, byte[] buffer, long offset, long len)
long	videoDecoderGetFrame (long classPtr, long decoderBufferSetIndex, TranscoderLongByReference timecode)
long	videoDecoderGetParameterValues (long classPtr, TranscoderNativeParameterValue [] values)
long	videoDecoderInitialize (long classPtr)
long	videoDecoderSetFrameSizeLimits (long classPtr, long maxWidth, long maxHeight, long minWidth, long minHeight)
long	videoDecoderSetGPUID (long classPtr, long GPUID)
long	videoDecoderSetParameterValues (long classPtr, TranscoderNativeParameterValue [] values)
long	videoDecoderTransferFrame (long classPtr, long decoderBufferSetIndex, long encoderBufferSetIndex)
long	videoDecoderTransferFrameDone (long classPtr, long decoderBufferSetIndex, long encoderBufferSetIndex)
long	videoDecoderTransferFrameSingle (long classPtr, long decoderBufferSetIndex, long encoderBufferSetIndex, long frameIndex)
long	videoDecoderTransferFrameStart (long classPtr, long decoderBufferSetIndex, long encoderBufferSetIndex)

long	videoEncoderAdd (long classPtr, long codec, long codecVersion, long implementation, TranscoderLongByReference encoderEncoderIndex)
long	videoEncoderAddFrame (long classPtr, long encoderEncoderIndex, long encoderBufferSetIndex, long encoderBufferIndex, long frameType)
long	videoEncoderApplyParameters (long classPtr, long encoderEncoderIndex)
long	videoEncoderBufferAdd (long classPtr, long width, long height, long fitMode, long fourcc, long scaleMode, TranscoderLongByReference encoderBufferIndex)
long	videoEncoderBufferGetVideoFrame (long classPtr, long encoderBufferSetIndex, long encoderBufferIndex, TranscoderNativeVideoFrame nativeVideoFrame)
long	videoEncoderBufferSetCrop (long classPtr, long encoderBufferSetIndex, long[] crop)
long	videoEncoderBufferSetDestinationRect (long classPtr, long encoderBufferSetIndex, long[] rect)
long	videoEncoderBufferSetOverlayVideoFrame (long classPtr, long encoderBufferSetIndex, long overlayIndex, TranscoderNativeVideoFrame nativeVideoFrame)
long	videoEncoderBufferSetPadding (long classPtr, long encoderBufferSetIndex, long[] padding)
long	videoEncoderBufferSetsCreate (long classPtr, long setCount)
long	videoEncoderBufferSetSourceRect (long classPtr, long encoderBufferSetIndex, long[] rect)
long	videoEncoderGetEncodedFrames (long classPtr, long encoderEncoderIndex, java.util.List encodedFrames)
long	videoEncoderGetParameterValues (long classPtr, long encoderEncoderIndex, TranscoderNativeParameterValue [] values)
long	videoEncoderInitialize (long classPtr, long encoderEncoderIndex)
long	videoEncoderPreprocessFrame (long classPtr, long encoderEncoderIndex, long encoderBufferSetIndex, long encoderBufferIndex)
long	videoEncoderSetBitrate (long classPtr, long encoderEncoderIndex, long bitrate)
long	videoEncoderSetDefaults (long classPtr, long encoderEncoderIndex, long video_type, long PAL)
long	videoEncoderSetFrameIndex (long classPtr, long encoderEncoderIndex, long frameIndex)

long	videoEncoderSetFrameRate (long classPtr, long encoderEncoderIndex, double frameRate)
long	videoEncoderSetFrameSize (long classPtr, long encoderEncoderIndex, long width, long height)
long	videoEncoderSetGPUID (long classPtr, long encoderEncoderIndex, long GPUID)
long	videoEncoderSetKeyFrameFollow (long classPtr, long encoderEncoderIndex, long value)
long	videoEncoderSetParameterValues (long classPtr, long encoderEncoderIndex, TranscoderNativeParameterValue[] values)
long	videoPipelineApplyParameters (long classPtr)
long	videoPipelineCreate (long classPtr, long implementation)
long	videoPipelineGetParameterValues (long classPtr, TranscoderNativeParameterValue[] values)
long	videoPipelineInitialize (long classPtr)
long	videoPipelineSetGPUID (long classPtr, long GPUID)
long	videoPipelineSetParameterValues (long classPtr, TranscoderNativeParameterValue[] values)
long	videoScalerCreate (long classPtr)
long	videoScalerInitialize (long classPtr)
long	videoScalerSetImplementation (long classPtr, long implementation, long gpuid)
long	vodEncoderRun (long classPtr)
long	vodTranscoderGetCodecConfig (long classPtr, TranscoderNativeVODTranscoderSettings settings, TranscoderPacket codecConfigFrame)
long	vodTranscoderTranscodeFrames (long classPtr, TranscoderNativeVODTranscoderSettings settings, TranscoderPacket[] decodedFrames, java.util.List encodedFrames)

Fields

CLASS

```
public static final java.lang.Class CLASS
```

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CLASSNAME

```
public static final java.lang.String CLASSNAME
```

Constant value: **ITranscoderSessionNative**

AAC_SAMPLEBUFFER_SIZE

```
public static final long AAC_SAMPLEBUFFER_SIZE
```

Constant value: **1024**

MP3_SAMPLEBUFFER_SIZE

```
public static final long MP3_SAMPLEBUFFER_SIZE
```

Constant value: **5760**

G711_SAMPLEBUFFER_SIZE

```
public static final long G711_SAMPLEBUFFER_SIZE
```

Constant value: **2048**

SPEEX_SAMPLEBUFFER_SIZE

```
public static final long SPEEX_SAMPLEBUFFER_SIZE
```

Constant value: **2048**

AC3_SAMPLEBUFFER_SIZE

```
public static final long AC3_SAMPLEBUFFER_SIZE
```

Constant value: **2048**

VORBIS_SAMPLEBUFFER_SIZE

```
public static final long VORBIS_SAMPLEBUFFER_SIZE
```

Constant value: **2048**

OPUS_SAMPLEBUFFER_SIZE

```
public static final long OPUS_SAMPLEBUFFER_SIZE
```

Constant value: **5760**

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CODEC_IMPL_DEFAULT

```
public static final long CODEC_IMPL_DEFAULT
```

Constant value: **0**

DECODERESULT_FRAMEDONE

```
public static final long DECODERESULT_FRAMEDONE
```

Constant value: **1**

DECODERESULT_FRAMEREADY

```
public static final long DECODERESULT_FRAMEREADY
```

Constant value: **2**

DECODERESULT_FRAMEVALID

```
public static final long DECODERESULT_FRAMEVALID
```

Constant value: **4**

DECODERESULT_FRAMESKIP

```
public static final long DECODERESULT_FRAMESKIP
```

Constant value: **8**

DECODERESULT_FRAMEERROR

```
public static final long DECODERESULT_FRAMEERROR
```

Constant value: **16**

DECODERESULT_SEQHEADER

```
public static final long DECODERESULT_SEQHEADER
```

Constant value: **32**

DECODERESULT_ERROR

```
public static final long DECODERESULT_ERROR
```

Constant value: **64**

H264_BASELINE

```
public static final long H264_BASELINE
```

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Constant value: **0**

H264_CIF

public static final long **H264_CIF**

Constant value: **1**

H264_MAIN

public static final long **H264_MAIN**

Constant value: **2**

H264_SVCD

public static final long **H264_SVCD**

Constant value: **3**

H264_D1

public static final long **H264_D1**

Constant value: **4**

H264_HIGH

public static final long **H264_HIGH**

Constant value: **5**

H264_DVD

public static final long **H264_DVD**

Constant value: **6**

H264_HD_DVD

public static final long **H264_HD_DVD**

Constant value: **7**

H264_BD

public static final long **H264_BD**

Constant value: **8**

H264_BD_HDMV

public static final long **H264_BD_HDMV**

Constant value: **9**

H264_PSP

public static final long **H264_PSP**

Constant value: **10**

H264_HDTV_720p

public static final long **H264_HDTV_720p**

Constant value: **11**

H264_HDTV_1080i

public static final long **H264_HDTV_1080i**

Constant value: **12**

H264_iPOD

public static final long **H264_iPOD**

Constant value: **13**

H264_AVCHD

public static final long **H264_AVCHD**

Constant value: **14**

H264_iPOD_640x480

public static final long **H264_iPOD_640x480**

Constant value: **15**

H264_1SEG

public static final long **H264_1SEG**

Constant value: **16**

(continued from last page)

H264_INTRA_HIGH_10public static final long **H264_INTRA_HIGH_10**Constant value: **17**

H264_INTRA_CLASS_50public static final long **H264_INTRA_CLASS_50**Constant value: **18**

H264_INTRA_CLASS_100public static final long **H264_INTRA_CLASS_100**Constant value: **19**

H264_PSP_480x270public static final long **H264_PSP_480x270**Constant value: **20**

H264_PSP_640x480public static final long **H264_PSP_640x480**Constant value: **21**

H264_DIVXpublic static final long **H264_DIVX**Constant value: **22**

H264_FLASH_LOWRESpublic static final long **H264_FLASH_LOWRES**Constant value: **23**

H264_FLASH_HIGHRESpublic static final long **H264_FLASH_HIGHRES**Constant value: **24**

H264_3GPpublic static final long **H264_3GP**

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Constant value: **25**

H264_SILVERLIGHTpublic static final long **H264_SILVERLIGHT**Constant value: **26**

H264_LAST_H264_TYPEpublic static final long **H264_LAST_H264_TYPE**Constant value: **27**

H264_HD_DVD_BD_MVpublic static final long **H264_HD_DVD_BD_MV**Constant value: **64**

NATIVELIBPATH_BASEPATHpublic static final int **NATIVELIBPATH_BASEPATH**Constant value: **0**

NATIVELIBPATH_QUICKSYNCPATHpublic static final int **NATIVELIBPATH_QUICKSYNCPATH**Constant value: **1**

NATIVELIBPATH_VAAPIPATHpublic static final int **NATIVELIBPATH_VAAPIPATH**Constant value: **2**

Methods**setNativeLibPath**public long **setNativeLibPath**(long pathIndex,
String pathStr)

getHardwareInfoJSONpublic long **getHardwareInfoJSON**(TranscoderStringByReference jsonStr)

nativeInitialize

```
public long nativeInitialize()
```

createInstance

```
public long createInstance()
```

destroyInstance

```
public long destroyInstance(long classPtr)
```

getLicenseChallenge

```
public long getLicenseChallenge(long classPtr,  
    TranscoderLongByReference challenge)
```

setLicenseResponse

```
public long setLicenseResponse(long classPtr,  
    long response)
```

initInstance

```
public long initInstance(long classPtr)
```

vodTranscoderTranscodeFrames

```
public long vodTranscoderTranscodeFrames(long classPtr,  
    TranscoderNativeVODTranscoderSettings settings,  
    TranscoderPacket[] decodedFrames,  
    java.util.List encodedFrames)
```

vodTranscoderGetCodecConfig

```
public long vodTranscoderGetCodecConfig(long classPtr,  
    TranscoderNativeVODTranscoderSettings settings,  
    TranscoderPacket codecConfigFrame)
```

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thumbnailerGetVideoFrame

```
public long thumbnailerGetVideoFrame(long classPtr,  
    com.wowza.wms.transcoder.thumbnailer.ThumbnailerRequest request,  
    com.wowza.wms.transcoder.thumbnailer.ThumbnailerResponse response)
```

vodEncoderRun

```
public long vodEncoderRun(long classPtr)
```

videoPipelineCreate

```
public long videoPipelineCreate(long classPtr,  
    long implementation)
```

videoPipelineSetGPUID

```
public long videoPipelineSetGPUID(long classPtr,  
    long GPUID)
```

videoPipelineSetParameterValues

```
public long videoPipelineSetParameterValues(long classPtr,  
    TranscoderNativeParameterValue[] values)
```

videoPipelineGetParameterValues

```
public long videoPipelineGetParameterValues(long classPtr,  
    TranscoderNativeParameterValue[] values)
```

videoPipelineApplyParameters

```
public long videoPipelineApplyParameters(long classPtr)
```

videoPipelineInitialize

```
public long videoPipelineInitialize(long classPtr)
```

videoScalerCreate

```
public long videoScalerCreate(long classPtr)
```

videoScalerSetImplementation

```
public long videoScalerSetImplementation(long classPtr,  
    long implementation,  
    long gpuid)
```

videoScalerInitialize

```
public long videoScalerInitialize(long classPtr)
```

videoDecoderCreate

```
public long videoDecoderCreate(long classPtr,  
    long codec,  
    long codecVersion,  
    long implementation,  
    long fourcc)
```

videoDecoderBuffersCreate

```
public long videoDecoderBuffersCreate(long classPtr,  
    long count)
```

videoDecoderBufferGetVideoFrame

```
public long videoDecoderBufferGetVideoFrame(long classPtr,  
    long decoderBufferSetIndex,  
    TranscoderNativeVideoFrame nativeVideoFrame)
```

videoDecoderBufferSetOverlayVideoFrame

```
public long videoDecoderBufferSetOverlayVideoFrame(long classPtr,  
    long overlayIndex,  
    TranscoderNativeVideoFrame nativeVideoFrame)
```

videoDecoderSetGPUID

```
public long videoDecoderSetGPUID(long classPtr,  
    long GPUID)
```

videoDecoderApplyParameters

```
public long videoDecoderApplyParameters(long classPtr)
```

videoDecoderSetParameterValues

```
public long videoDecoderSetParameterValues(long classPtr,  
    TranscoderNativeParameterValue[] values)
```

videoDecoderGetParameterValues

```
public long videoDecoderGetParameterValues(long classPtr,  
    TranscoderNativeParameterValue[] values)
```

videoDecoderInitialize

```
public long videoDecoderInitialize(long classPtr)
```

videoDecoderDecodeCodecConfig

```
public long videoDecoderDecodeCodecConfig(long classPtr,  
    byte[] buffer,  
    long offset,  
    long len)
```

videoDecoderAddFrame

```
public long videoDecoderAddFrame(long classPtr,  
    byte[] buffer,  
    long offset,  
    long len,  
    long timecode,  
    long frameType)
```

videoDecoderDecode

```
public long videoDecoderDecode(long classPtr,  
    long decoderBufferSetIndex,  
    TranscoderLongByReference decodeStatus,  
    TranscoderLongByReference timecode)
```

videoDecoderGetFrame

```
public long videoDecoderGetFrame(long classPtr,  
    long decoderBufferSetIndex,  
    TranscoderLongByReference timecode)
```

(continued from last page)

videoDecoderTransferFrame

```
public long videoDecoderTransferFrame(long classPtr,  
    long decoderBufferSetIndex,  
    long encoderBufferSetIndex)
```

videoDecoderTransferFrameStart

```
public long videoDecoderTransferFrameStart(long classPtr,  
    long decoderBufferSetIndex,  
    long encoderBufferSetIndex)
```

videoDecoderTransferFrameSingle

```
public long videoDecoderTransferFrameSingle(long classPtr,  
    long decoderBufferSetIndex,  
    long encoderBufferSetIndex,  
    long frameIndex)
```

videoDecoderTransferFrameDone

```
public long videoDecoderTransferFrameDone(long classPtr,  
    long decoderBufferSetIndex,  
    long encoderBufferSetIndex)
```

videoDecoderSetFrameSizeLimits

```
public long videoDecoderSetFrameSizeLimits(long classPtr,  
    long maxWidth,  
    long maxHeight,  
    long minWidth,  
    long minHeight)
```

videoEncoderBufferSetsCreate

```
public long videoEncoderBufferSetsCreate(long classPtr,  
    long setCount)
```

videoEncoderBufferAdd

```
public long videoEncoderBufferAdd(long classPtr,  
    long width,  
    long height,  
    long fitMode,  
    long fourcc,  
    long scaleMode,  
    TranscoderLongByReference encoderBufferIndex)
```

videoEncoderBufferGetVideoFrame

```
public long videoEncoderBufferGetVideoFrame(long classPtr,  
    long encoderBufferSetIndex,  
    long encoderBufferIndex,  
    TranscoderNativeVideoFrame nativeVideoFrame)
```

videoEncoderBufferSetOverlayVideoFrame

```
public long videoEncoderBufferSetOverlayVideoFrame(long classPtr,  
    long encoderBufferSetIndex,  
    long overlayIndex,  
    TranscoderNativeVideoFrame nativeVideoFrame)
```

videoEncoderBufferSetCrop

```
public long videoEncoderBufferSetCrop(long classPtr,  
    long encoderBufferSetIndex,  
    long[] crop)
```

videoEncoderBufferSetSourceRect

```
public long videoEncoderBufferSetSourceRect(long classPtr,  
    long encoderBufferSetIndex,  
    long[] rect)
```

videoEncoderBufferSetPadding

```
public long videoEncoderBufferSetPadding(long classPtr,  
    long encoderBufferSetIndex,  
    long[] padding)
```

videoEncoderBufferSetDestinationRect

```
public long videoEncoderBufferSetDestinationRect(long classPtr,  
    long encoderBufferSetIndex,  
    long[] rect)
```

videoEncoderAdd

```
public long videoEncoderAdd(long classPtr,  
    long codec,  
    long codecVersion,  
    long implementation,  
    TranscoderLongByReference encoderEncoderIndex)
```

videoEncoderSetDefaults

```
public long videoEncoderSetDefaults(long classPtr,  
    long encoderEncoderIndex,  
    long video_type,  
    long PAL)
```

videoEncoderSetBitrate

```
public long videoEncoderSetBitrate(long classPtr,  
    long encoderEncoderIndex,  
    long bitrate)
```

videoEncoderSetFrameSize

```
public long videoEncoderSetFrameSize(long classPtr,  
    long encoderEncoderIndex,  
    long width,  
    long height)
```

videoEncoderSetFrameIndex

```
public long videoEncoderSetFrameIndex(long classPtr,  
    long encoderEncoderIndex,  
    long frameIndex)
```

videoEncoderSetKeyFrameFollow

```
public long videoEncoderSetKeyFrameFollow(long classPtr,  
    long encoderEncoderIndex,  
    long value)
```

videoEncoderSetFrameRate

```
public long videoEncoderSetFrameRate(long classPtr,  
    long encoderEncoderIndex,  
    double frameRate)
```

videoEncoderSetGPUID

```
public long videoEncoderSetGPUID(long classPtr,  
    long encoderEncoderIndex,  
    long GPUID)
```

(continued from last page)

videoEncoderApplyParameters

```
public long videoEncoderApplyParameters(long classPtr,  
    long encoderEncoderIndex)
```

videoEncoderGetParameterValues

```
public long videoEncoderGetParameterValues(long classPtr,  
    long encoderEncoderIndex,  
    TranscoderNativeParameterValue[] values)
```

videoEncoderSetParameterValues

```
public long videoEncoderSetParameterValues(long classPtr,  
    long encoderEncoderIndex,  
    TranscoderNativeParameterValue[] values)
```

videoEncoderInitialize

```
public long videoEncoderInitialize(long classPtr,  
    long encoderEncoderIndex)
```

videoEncoderPreprocessFrame

```
public long videoEncoderPreprocessFrame(long classPtr,  
    long encoderEncoderIndex,  
    long encoderBufferSetIndex,  
    long encoderBufferIndex)
```

videoEncoderAddFrame

```
public long videoEncoderAddFrame(long classPtr,  
    long encoderEncoderIndex,  
    long encoderBufferSetIndex,  
    long encoderBufferIndex,  
    long frameType)
```

videoEncoderGetEncodedFrames

```
public long videoEncoderGetEncodedFrames(long classPtr,  
    long encoderEncoderIndex,  
    java.util.List encodedFrames)
```

(continued from last page)

audioDecoderCreate

```
public long audioDecoderCreate(long classPtr,  
    long codec,  
    long implementation,  
    long format)
```

audioDecoderCreate

```
public long audioDecoderCreate(long classPtr,  
    long codec,  
    long implementation)
```

audioDecoderApplyParameters

```
public long audioDecoderApplyParameters(long classPtr)
```

audioDecoderSetParameterValues

```
public long audioDecoderSetParameterValues(long classPtr,  
    TranscoderNativeParameterValue[] values)
```

audioDecoderGetParameterValues

```
public long audioDecoderGetParameterValues(long classPtr,  
    TranscoderNativeParameterValue[] values)
```

audioDecoderInitialize

```
public long audioDecoderInitialize(long classPtr)
```

audioDecoderDecodeCodecConfig

```
public long audioDecoderDecodeCodecConfig(long classPtr,  
    byte[] buffer,  
    long offset,  
    long len)
```

audioDecoderIsFirstFrameDecoded

```
public long audioDecoderIsFirstFrameDecoded(long classPtr)
```

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audioDecoderDecodeFirstFrame

```
public long audioDecoderDecodeFirstFrame(long classPtr,  
    byte[] buffer,  
    long offset,  
    long len)
```

audioDecoderDecodeFrame

```
public long audioDecoderDecodeFrame(long classPtr,  
    byte[] buffer,  
    long offset,  
    long len,  
    long timecode,  
    long indexBuffer)
```

audioDecoderResetDecodedFrameState

```
public long audioDecoderResetDecodedFrameState(long classPtr)
```

audioDecoderGetSampleRate

```
public long audioDecoderGetSampleRate(long classPtr,  
    TranscoderLongByReference sampleRate)
```

audioDecoderGetChannels

```
public long audioDecoderGetChannels(long classPtr,  
    TranscoderLongByReference channels)
```

audioDecoderBuffersCreate

```
public long audioDecoderBuffersCreate(long classPtr,  
    long count)
```

audioDecoderBuffersAllocate

```
public long audioDecoderBuffersAllocate(long classPtr,  
    long sampleCount,  
    long channels,  
    long sampleRate)
```

(continued from last page)

audioEncoderAdd

```
public long audioEncoderAdd(long classPtr,  
    long codec,  
    long implementation,  
    TranscoderLongByReference indexEncoder)
```

audioEncoderSetSampleRate

```
public long audioEncoderSetSampleRate(long classPtr,  
    long indexEncoder,  
    long sampleRate)
```

audioEncoderSetChannels

```
public long audioEncoderSetChannels(long classPtr,  
    long indexEncoder,  
    long channels)
```

audioEncoderSetQuality

```
public long audioEncoderSetQuality(long classPtr,  
    long indexEncoder,  
    double quality)
```

audioEncoderSetBitrate

```
public long audioEncoderSetBitrate(long classPtr,  
    long indexEncoder,  
    long bitrate)
```

audioEncoderApplyParameters

```
public long audioEncoderApplyParameters(long classPtr,  
    long indexEncoder)
```

audioEncoderSetParameterValues

```
public long audioEncoderSetParameterValues(long classPtr,  
    long indexEncoder,  
    TranscoderNativeParameterValue[] values)
```

(continued from last page)

audioEncoderGetParameterValues

```
public long audioEncoderGetParameterValues(long classPtr,  
      long indexEncoder,  
      TranscoderNativeParameterValue[] values)
```

audioEncoderInitialize

```
public long audioEncoderInitialize(long classPtr,  
      long indexEncoder)
```

audioEncoderGetHeaders

```
public long audioEncoderGetHeaders(long classPtr,  
      long indexEncoder,  
      java.util.List frames)
```

audioEncoderAddSampleBuffer

```
public long audioEncoderAddSampleBuffer(long classPtr,  
      long indexEncoder,  
      long indexBuffer,  
      java.util.List frames)
```

getLogStatements

```
public long getLogStatements(long classPtr,  
      java.util.List statements)
```

com.wowza.wms.transcoder.model Interface ITranscoderVideoDecoderNotify

public interface ITranscoderVideoDecoderNotify
extends

Method Summary

void	onAfterDecodeFrame (TranscoderSessionVideo sessionVideo, TranscoderStreamSourceVideo sourceVideo, long frameCount)
void	onAfterScaleFrame (TranscoderSessionVideo sessionVideo, TranscoderStreamSourceVideo sourceVideo, long frameCount)
void	onBeforeDecodeFrame (TranscoderSessionVideo sessionVideo, TranscoderStreamSourceVideo sourceVideo, long frameCount)
void	onBeforeScaleFrame (TranscoderSessionVideo sessionVideo, TranscoderStreamSourceVideo sourceVideo, long frameCount)

Methods

onBeforeDecodeFrame

```
public void onBeforeDecodeFrame(TranscoderSessionVideo sessionVideo,  
    TranscoderStreamSourceVideo sourceVideo,  
    long frameCount)
```

onAfterDecodeFrame

```
public void onAfterDecodeFrame(TranscoderSessionVideo sessionVideo,  
    TranscoderStreamSourceVideo sourceVideo,  
    long frameCount)
```

onBeforeScaleFrame

```
public void onBeforeScaleFrame(TranscoderSessionVideo sessionVideo,  
    TranscoderStreamSourceVideo sourceVideo,  
    long frameCount)
```

onAfterScaleFrame

```
public void onAfterScaleFrame(TranscoderSessionVideo sessionVideo,  
    TranscoderStreamSourceVideo sourceVideo,  
    long frameCount)
```

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com.wowza.wms.transcoder.model Interface ITranscoderVideoEncoderNotify

public interface **ITranscoderVideoEncoderNotify**
extends

Method Summary

void	onAfterEncodeFrame (TranscoderSessionVideoEncode sessionVideoEncode, TranscoderStreamDestinationVideo destinationVideo, long frameCount)
void	onBeforeEncodeFrame (TranscoderSessionVideoEncode sessionVideoEncode, TranscoderStreamDestinationVideo destinationVideo, long frameCount)

Methods

onBeforeEncodeFrame

```
public void onBeforeEncodeFrame(TranscoderSessionVideoEncode sessionVideoEncode,  
    TranscoderStreamDestinationVideo destinationVideo,  
    long frameCount)
```

onAfterEncodeFrame

```
public void onAfterEncodeFrame(TranscoderSessionVideoEncode sessionVideoEncode,  
    TranscoderStreamDestinationVideo destinationVideo,  
    long frameCount)
```

com.wowza.wms.transcoder.model Interface ITranscoderVideoEncoderNotify2

public interface **ITranscoderVideoEncoderNotify2**
extends

Method Summary

void	onAfterEncodeFrame (TranscoderSessionVideoEncode sessionVideoEncode, TranscoderStreamDestinationVideo destinationVideo, TranscoderVideoEncodeFrameContext frameContext)
void	onBeforeEncodeFrame (TranscoderSessionVideoEncode sessionVideoEncode, TranscoderStreamDestinationVideo destinationVideo, TranscoderVideoEncodeFrameContext frameContext)

Methods

onBeforeEncodeFrame

```
public void onBeforeEncodeFrame(TranscoderSessionVideoEncode sessionVideoEncode,  
    TranscoderStreamDestinationVideo destinationVideo,  
    TranscoderVideoEncodeFrameContext frameContext)
```

onAfterEncodeFrame

```
public void onAfterEncodeFrame(TranscoderSessionVideoEncode sessionVideoEncode,  
    TranscoderStreamDestinationVideo destinationVideo,  
    TranscoderVideoEncodeFrameContext frameContext)
```

com.wowza.wms.transcoder.model Interface ITranscoderVideoLoadBalancer

public interface **ITranscoderVideoLoadBalancer**
extends

Method Summary

void	init (IServer server, TranscoderContextServer transcoderContextServer)
void	onHardwareInspection (TranscoderContextServer transcoderContextServer)
void	onTranscoderSessionCreate (LiveStreamTranscoder liveStreamTranscoder)
void	onTranscoderSessionDestroy (LiveStreamTranscoder liveStreamTranscoder)
void	onTranscoderSessionInit (LiveStreamTranscoder liveStreamTranscoder)
void	onTranscoderSessionLoadBalance (LiveStreamTranscoder liveStreamTranscoder)
void	onTranscoderSessionVODEncodeStart (LiveStreamTranscoder liveStreamTranscoder, TranscoderNativeVODTranscoderSettings videoEncodeSettings)
void	onTranscoderSessionVODEncodeStop (LiveStreamTranscoder liveStreamTranscoder)

Methods

init

```
public void init(IServer server,
    TranscoderContextServer transcoderContextServer)
```

onHardwareInspection

```
public void onHardwareInspection(TranscoderContextServer transcoderContextServer)
```

onTranscoderSessionCreate

```
public void onTranscoderSessionCreate(LiveStreamTranscoder liveStreamTranscoder)
```

onTranscoderSessionInit

```
public void onTranscoderSessionInit(LiveStreamTranscoder liveStreamTranscoder)
```

onTranscoderSessionDestroy

```
public void onTranscoderSessionDestroy(LiveStreamTranscoder liveStreamTranscoder)
```

onTranscoderSessionLoadBalance

```
public void onTranscoderSessionLoadBalance(LiveStreamTranscoder liveStreamTranscoder)
```

onTranscoderSessionVODEncodeStart

```
public void onTranscoderSessionVODEncodeStart(LiveStreamTranscoder  
liveStreamTranscoder,  
        TranscoderNativeVODTranscoderSettings videoEncodeSettings)
```

onTranscoderSessionVODEncodeStop

```
public void onTranscoderSessionVODEncodeStop(LiveStreamTranscoder  
liveStreamTranscoder)
```

com.wowza.wms.transcoder.model Interface ITranscoderWorker

public interface **ITranscoderWorker**
extends

For internal use.

Method Summary

void	destroy()
String	getContextStr()
long	getFrameCount()
boolean	isEncoderInUse()
boolean	isRunning() Returns true if transcoder worker is running (internal use)
void	setFrameCount(long frameCount)

Methods

isRunning

public boolean **isRunning()**

Returns true if transcoder worker is running (internal use)

Returns:

true if transcoder worker is running (internal use)

getFrameCount

public long **getFrameCount()**

setFrameCount

public void **setFrameCount(long frameCount)**

isEncoderInUse

public boolean **isEncoderInUse()**

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getContextStr

```
public String getContextStr()
```

destroy

```
public void destroy()
```

com.wowza.wms.transcoder.model Interface ITranscoderWorkerSorterSender

public interface **ITranscoderWorkerSorterSender**
extends

For internal use.

Method Summary

void	addSorterPacket (TranscoderPacketSorterHolder sorterHolder) For internal use.
------	--

Methods

addSorterPacket

public void **addSorterPacket**(TranscoderPacketSorterHolder sorterHolder)

For internal use.

Parameters:

sorterHolder - sorter holder

com.wowza.wms.transcoder.model Class LiveStreamTranscoderActionNotifyBase

java.lang.Object

└-com.wowza.wms.transcoder.model.LiveStreamTranscoderActionNotifyBase

All Implemented Interfaces:

[ILiveStreamTranscoderActionNotify](#)

```
public class LiveStreamTranscoderActionNotifyBase
extends Object
implements ILiveStreamTranscoderActionNotify
```

Constructor Summary

public	LiveStreamTranscoderActionNotifyBase()
--------	--

Method Summary

void	onCalculateSourceAudioBitrate (LiveStreamTranscoder liveStreamTranscoder, long bitrate)
void	onCalculateSourceVideoBitrate (LiveStreamTranscoder liveStreamTranscoder, long bitrate)
void	onInitAfterLoadTemplate (LiveStreamTranscoder liveStreamTranscoder)
void	onInitBeforeLoadTemplate (LiveStreamTranscoder liveStreamTranscoder)
void	onInitStart (LiveStreamTranscoder liveStreamTranscoder, String streamName, String transcoderName, IApplicationInstance appInstance, LiveStreamTranscoderItem liveStreamTranscoderItem)
void	onInitStop (LiveStreamTranscoder liveStreamTranscoder)
void	onRegisterStreamNameGroup (LiveStreamTranscoder liveStreamTranscoder, TranscoderStreamNameGroup streamNameGroup)
void	onResetStream (LiveStreamTranscoder liveStreamTranscoder)
void	onSessionAudioDecodeCodecInfo (LiveStreamTranscoder liveStreamTranscoder, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	onSessionAudioEncodeCodecInfo (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionAudioEncode sessionAudioEncode, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	onSessionAudioEncodeCreate (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionAudioEncode sessionAudioEncode)

void	onSessionAudioEncodeInit (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionAudioEncode sessionAudioEncode)
void	onSessionAudioEncodeSetup (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionAudioEncode sessionAudioEncode)
void	onSessionDataEncodeCreate (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionDataEncode sessionDataEncode)
void	onSessionDataEncodeInit (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionDataEncode sessionDataEncode)
void	onSessionDestinationCreate (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionDestination sessionDestination)
void	onSessionVideoDecodeCodecInfo (LiveStreamTranscoder liveStreamTranscoder, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	onSessionVideoEncodeCodecInfo (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionVideoEncode sessionVideoEncode, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	onSessionVideoEncodeCreate (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionVideoEncode sessionVideoEncode)
void	onSessionVideoEncodeInit (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionVideoEncode sessionVideoEncode)
void	onSessionVideoEncodeSetup (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionVideoEncode sessionVideoEncode)
void	onShutdownStart (LiveStreamTranscoder liveStreamTranscoder)
void	onShutdownStop (LiveStreamTranscoder liveStreamTranscoder)
void	onUnregisterStreamNameGroup (LiveStreamTranscoder liveStreamTranscoder, TranscoderStreamNameGroup streamNameGroup)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transcoder.model.ILiveStreamTranscoderActionNotify](#)

[onCalculateSourceAudioBitrate](#), [onCalculateSourceVideoBitrate](#), [onInitAfterLoadTemplate](#), [onInitBeforeLoadTemplate](#), [onInitStart](#), [onInitStop](#), [onRegisterStreamNameGroup](#), [onResetStream](#), [onSessionAudioDecodeCodecInfo](#), [onSessionAudioEncodeCodecInfo](#), [onSessionAudioEncodeCreate](#), [onSessionAudioEncodeInit](#), [onSessionAudioEncodeSetup](#), [onSessionDataEncodeCreate](#), [onSessionDataEncodeInit](#), [onSessionDestinationCreate](#), [onSessionVideoDecodeCodecInfo](#), [onSessionVideoEncodeCodecInfo](#), [onSessionVideoEncodeCreate](#), [onSessionVideoEncodeInit](#), [onSessionVideoEncodeSetup](#), [onShutdownStart](#), [onShutdownStop](#), [onUnregisterStreamNameGroup](#)

Constructors

LiveStreamTranscoderActionNotifyBase

```
public LiveStreamTranscoderActionNotifyBase()
```

Methods

onInitStart

```
public void onInitStart(LiveStreamTranscoder liveStreamTranscoder,  
    String streamName,  
    String transcoderName,  
    IApplicationInstance appInstance,  
    LiveStreamTranscoderItem liveStreamTranscoderItem)
```

onInitBeforeLoadTemplate

```
public void onInitBeforeLoadTemplate(LiveStreamTranscoder liveStreamTranscoder)
```

onInitAfterLoadTemplate

```
public void onInitAfterLoadTemplate(LiveStreamTranscoder liveStreamTranscoder)
```

onInitStop

```
public void onInitStop(LiveStreamTranscoder liveStreamTranscoder)
```

onCalculateSourceVideoBitrate

```
public void onCalculateSourceVideoBitrate(LiveStreamTranscoder liveStreamTranscoder,  
    long bitrate)
```

onCalculateSourceAudioBitrate

```
public void onCalculateSourceAudioBitrate(LiveStreamTranscoder liveStreamTranscoder,  
    long bitrate)
```

onSessionDestinationCreate

```
public void onSessionDestinationCreate(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionDestination sessionDestination)
```

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onSessionVideoEncodeCreate

```
public void onSessionVideoEncodeCreate(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionVideoEncode sessionVideoEncode)
```

onSessionAudioEncodeCreate

```
public void onSessionAudioEncodeCreate(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionAudioEncode sessionAudioEncode)
```

onSessionDataEncodeCreate

```
public void onSessionDataEncodeCreate(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionDataEncode sessionDataEncode)
```

onSessionVideoEncodeInit

```
public void onSessionVideoEncodeInit(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionVideoEncode sessionVideoEncode)
```

onSessionAudioEncodeInit

```
public void onSessionAudioEncodeInit(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionAudioEncode sessionAudioEncode)
```

onSessionDataEncodeInit

```
public void onSessionDataEncodeInit(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionDataEncode sessionDataEncode)
```

onSessionVideoEncodeSetup

```
public void onSessionVideoEncodeSetup(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionVideoEncode sessionVideoEncode)
```

onSessionAudioEncodeSetup

```
public void onSessionAudioEncodeSetup(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionAudioEncode sessionAudioEncode)
```

(continued from last page)

onSessionVideoEncodeCodecInfo

```
public void onSessionVideoEncodeCodecInfo(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionVideoEncode sessionVideoEncode,  
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
```

onSessionAudioEncodeCodecInfo

```
public void onSessionAudioEncodeCodecInfo(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionAudioEncode sessionAudioEncode,  
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
```

onSessionVideoDecodeCodecInfo

```
public void onSessionVideoDecodeCodecInfo(LiveStreamTranscoder liveStreamTranscoder,  
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
```

onSessionAudioDecodeCodecInfo

```
public void onSessionAudioDecodeCodecInfo(LiveStreamTranscoder liveStreamTranscoder,  
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
```

onShutdownStart

```
public void onShutdownStart(LiveStreamTranscoder liveStreamTranscoder)
```

onShutdownStop

```
public void onShutdownStop(LiveStreamTranscoder liveStreamTranscoder)
```

onResetStream

```
public void onResetStream(LiveStreamTranscoder liveStreamTranscoder)
```

onRegisterStreamNameGroup

```
public void onRegisterStreamNameGroup(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderStreamNameGroup streamNameGroup)
```

onUnregisterStreamNameGroup

```
public void onUnregisterStreamNameGroup(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderStreamNameGroup streamNameGroup)
```

(continued from last page)

com.wowza.wms.transcoder.model Class TranscoderNativeVideoFrame

java.lang.Object

└-com.wowza.wms.transcoder.model.TranscoderNativeVideoFrame

public class **TranscoderNativeVideoFrame**
extends Object

Native video frame.

Field Summary

public	bytes
public static final	DESTINATION_ALIGN_BOTTOM Value: 64
public static final	DESTINATION_ALIGN_HCENTER Value: 2
public static final	DESTINATION_ALIGN_LEFT Value: 1
public static final	DESTINATION_ALIGN_RIGHT Value: 4
public static final	DESTINATION_ALIGN_TOP Value: 16
public static final	DESTINATION_ALIGN_VCENTER Value: 32
public	dstAlign
public	dstHeight
public	dstWidth
public	dstX
public	dstY
public	fourcc
public	frameStartOffset

public	height
public	stride
public	timecode
public	width

Constructor Summary

public	TranscoderNativeVideoFrame()
--------	--

Method Summary

static int	deserialize (TranscoderNativeVideoFrame obj, byte[] buffer, int pos, boolean includeByteArray)
byte[]	getBytes() Get the raw image bytes.
int	getDstAlign() Get destination origin align (see DESTINATION_ALIGN_*)
int	getDstHeight() Get destination height
int	getDstWidth() Get destination width
int	getDstX() Get the destination x offset
int	getDstY() Get the destination y offset
long	getFourcc() Get the FOURCC format for this image (always BGRA)
long	getFrameStartOffset() Get the offset to first image row byte.
int	getHeight() Get image height
int	getSerializationSize (boolean includeByteArray)
long	getStride() Get the number of bytes in each image row.
long	getTimecode() Get timecode (milliseconds) of this frame if it is a frame grab.
int	getWidth() Get image width

int	serialize (byte[] buffer, int pos, boolean includeByteArray)
void	setBytes (byte[] bytes) Set raw image bytes.
void	setDstAlign (int dstAlign) Set destination origin align (see DESTINATION_ALIGN_*)
void	setDstHeight (int dstHeight) Set destination height
void	setDstWidth (int dstWidth) Set destination width
void	setDstX (int dstX) Set the destination x offset
void	setDstY (int dstY) Set the destination y offset
void	setFourcc (long fourcc) Set the FOURCC format for this image (always BGRA)
void	setFrameStartOffset (long frameStartOffset) Set the offset to first image row byte.
void	setHeight (int height) Set image height
void	setStride (long stride) Set the number of bytes in each image row.
void	setTimecode (long timecode) Set timecode (milliseconds) of this frame if it is a frame grab.
void	setWidth (int width) Set image width

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

DESTINATION_ALIGN_LEFT

```
public static final int DESTINATION_ALIGN_LEFT
```

Constant value: **1**

DESTINATION_ALIGN_HCENTER

```
public static final int DESTINATION_ALIGN_HCENTER
```

(continued from last page)

Constant value: **2**

DESTINATION_ALIGN_RIGHT

```
public static final int DESTINATION_ALIGN_RIGHT
```

Constant value: **4**

DESTINATION_ALIGN_TOP

```
public static final int DESTINATION_ALIGN_TOP
```

Constant value: **16**

DESTINATION_ALIGN_VCENTER

```
public static final int DESTINATION_ALIGN_VCENTER
```

Constant value: **32**

DESTINATION_ALIGN_BOTTOM

```
public static final int DESTINATION_ALIGN_BOTTOM
```

Constant value: **64**

fourcc

```
public long fourcc
```

bytes

```
public byte bytes
```

stride

```
public long stride
```

frameStartOffset

```
public long frameStartOffset
```

width

```
public int width
```

height

```
public int height
```

timecode

```
public long timecode
```

dstX

```
public int dstX
```

dstY

```
public int dstY
```

dstWidth

```
public int dstWidth
```

dstHeight

```
public int dstHeight
```

dstAlign

```
public int dstAlign
```

Constructors

TranscoderNativeVideoFrame

```
public TranscoderNativeVideoFrame()
```

Methods

getSerializationSize

```
public int getSerializationSize(boolean includeByteArray)
```

serialize

```
public int serialize(byte[] buffer,  
                    int pos,  
                    boolean includeByteArray)
```

deserialize

```
public static int deserialize(TranscoderNativeVideoFrame obj,  
                             byte[] buffer,  
                             int pos,  
                             boolean includeByteArray)
```

getFourcc

```
public long getFourcc()
```

Get the FOURCC format for this image (always BGRA)

Returns:

FOURCC format

setFourcc

```
public void setFourcc(long fourcc)
```

Set the FOURCC format for this image (always BGRA)

Parameters:

fourcc - FOURCC format

getBytes

```
public byte[] getBytes()
```

Get the raw image bytes.

Returns:

raw image bytes

setBytes

```
public void setBytes(byte[] bytes)
```

Set raw image bytes.

Parameters:

bytes - raw image bytes

getStride

```
public long getStride()
```

Get the number of bytes in each image row.

(continued from last page)

Returns:

number of bytes in each image row

setStride

```
public void setStride(long stride)
```

Set the number of bytes in each image row.

Parameters:

stride - number of bytes in each image row

getFrameStartOffset

```
public long getFrameStartOffset()
```

Get the offset to first image row byte.

Returns:

offset to first image row byte

setFrameStartOffset

```
public void setFrameStartOffset(long frameStartOffset)
```

Set the offset to first image row byte.

Parameters:

frameStartOffset - offset to first image row byte

getWidth

```
public int getWidth()
```

Get image width

Returns:

image width

setWidth

```
public void setWidth(int width)
```

Set image width

Parameters:

width - image width

getHeight

```
public int getHeight()
```

Get image height

Returns:

image height

setHeight

```
public void setHeight(int height)
```

Set image height

Parameters:

height - image height

getDstX

```
public int getDstX()
```

Get the destination x offset

Returns:

destination x offset

setDstX

```
public void setDstX(int dstX)
```

Set the destination x offset

Parameters:

dstX - destination x offset

getDstY

```
public int getDstY()
```

Get the destination y offset

Returns:

destination y offset

setDstY

```
public void setDstY(int dstY)
```

Set the destination y offset

Parameters:

dstY - destination y offset

getDstWidth

```
public int getDstWidth()
```

Get destination width

Returns:

destination width

setDstWidth

```
public void setDstWidth(int dstWidth)
```

(continued from last page)

Set destination width

Parameters:

dstWidth - destination width

getDstHeight

```
public int getDstHeight()
```

Get destination height

Returns:

destination height

setDstHeight

```
public void setDstHeight(int dstHeight)
```

Set destination height

Parameters:

dstHeight - destination height

getDstAlign

```
public int getDstAlign()
```

Get destination origin align (see DESTINATION_ALIGN_*)

Returns:

destination origin align

setDstAlign

```
public void setDstAlign(int dstAlign)
```

Set destination origin align (see DESTINATION_ALIGN_*)

Parameters:

dstAlign - destination origin align

getTimecode

```
public long getTimecode()
```

Get timecode (milliseconds) of this frame if it is a frame grab.

Returns:

timecode (milliseconds)

setTimecode

```
public void setTimecode(long timecode)
```

Set timecode (milliseconds) of this frame if it is a frame grab.

Parameters:

timecode - timecode (milliseconds)

com.wowza.wms.transcoder.model Class TranscoderVideoOverlayFrame

java.lang.Object

└-com.wowza.wms.transcoder.model.TranscoderVideoOverlayFrame

```
public class TranscoderVideoOverlayFrame
extends Object
```

TranscoderVideoOverlayFrame: Video overlay frame.

Field Summary

public	enabled
public	imagePath
public	index
public	lastModDate
public static final	LOADSTATE_FAILURE Value: 2
public static final	LOADSTATE_INIT Value: 0
public static final	LOADSTATE_SUCCESS Value: 1
public	opacity
public	videoFrame

Constructor Summary

public	TranscoderVideoOverlayFrame()
public	TranscoderVideoOverlayFrame(String imagePath)
public	TranscoderVideoOverlayFrame(String imagePath, int opacity)
public	TranscoderVideoOverlayFrame(int width, int height, byte[] buffer)

Method Summary

int	getDstAlign()
int	getDstHeight()
int	getDstWidth()
int	getDstX()
int	getDstY()
String	getImagePath() Get the path to the overlay image.
int	getIndex() Get overlay index (z-order)
long	getLastModDate()
int	getOpacity()
TranscoderNativeVideoFrame	getVideoFrame() Get the video frame.
boolean	isCheckForUpdates()
boolean	isEnabled() Is this overlay enabled.
boolean	isGood()
boolean	isImageFileUpdated(IApplicationInstance appInstance)
boolean	isTransparent()
boolean	loadImage(IApplicationInstance appInstance, boolean reload) If you set a path to an image file (JPG, PNG, BMP...) this will load the image into this object.
void	setCheckForUpdates(boolean checkForUpdates)
void	setDstAlign(int align)
void	setDstHeight(int height)
void	setDstWidth(int width)
void	setDstX(int x)
void	setDstY(int y)
void	setEnabled(boolean enabled) Set is this overlay enabled.

void	setImagePath (String imagePath) Set the path to the overlay image.
void	setIndex (int index) Set overlay index (z-order)
void	setLastModDate (long lastModDate)
void	setOpacity (int opacity)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

LOADSTATE_INIT

```
public static final int LOADSTATE_INIT
```

Constant value: **0**

LOADSTATE_SUCCESS

```
public static final int LOADSTATE_SUCCESS
```

Constant value: **1**

LOADSTATE_FAILURE

```
public static final int LOADSTATE_FAILURE
```

Constant value: **2**

videoFrame

```
public com.wowza.wms.transcoder.model.TranscoderNativeVideoFrame videoFrame
```

enabled

```
public boolean enabled
```

index

```
public int index
```

imagePath

```
public java.lang.String imagePath
```

opacity

```
public int opacity
```

lastModDate

```
public long lastModDate
```

Constructors

TranscoderVideoOverlayFrame

```
public TranscoderVideoOverlayFrame()
```

TranscoderVideoOverlayFrame

```
public TranscoderVideoOverlayFrame(String imagePath)
```

TranscoderVideoOverlayFrame

```
public TranscoderVideoOverlayFrame(String imagePath,  
                                     int opacity)
```

TranscoderVideoOverlayFrame

```
public TranscoderVideoOverlayFrame(int width,  
                                     int height,  
                                     byte[] buffer)
```

Methods

isGood

```
public boolean isGood()
```

(continued from last page)

isImageFileUpdated

```
public boolean isImageFileUpdated(IApplicationInstance appInstance)
```

loadImage

```
public boolean loadImage(IApplicationInstance appInstance,  
    boolean reload)
```

If you set a path to an image file (JPG, PNG, BMP...) this will load the image into this object.

Parameters:

appInstance - application instance
reload - is it an image reload

Returns:

true if successful

isEnabled

```
public boolean isEnabled()
```

Is this overlay enabled.

Returns:

overlay enabled

setEnabled

```
public void setEnabled(boolean enabled)
```

Set is this overlay enabled.

Parameters:

enabled - overlay enabled

getVideoFrame

```
public TranscoderNativeVideoFrame getVideoFrame()
```

Get the video frame.

Returns:

video frame

getIndex

```
public int getIndex()
```

Get overlay index (z-order)

Returns:

overlay index (z-order)

(continued from last page)

setIndex

```
public void setIndex(int index)
```

Set overlay index (z-order)

Parameters:

index - overlay index (z-order)

getImagePath

```
public String getImagePath()
```

Get the path to the overlay image.

Returns:

path to the overlay image

setImagePath

```
public void setImagePath(String imagePath)
```

Set the path to the overlay image.

Parameters:

imagePath - path to the overlay image

getOpacity

```
public int getOpacity()
```

setOpacity

```
public void setOpacity(int opacity)
```

getDstX

```
public int getDstX()
```

setDstX

```
public void setDstX(int x)
```

getDstY

```
public int getDstY()
```

(continued from last page)

setDstY

```
public void setDstY(int y)
```

getDstWidth

```
public int getDstWidth()
```

setDstWidth

```
public void setDstWidth(int width)
```

getDstHeight

```
public int getDstHeight()
```

setDstHeight

```
public void setDstHeight(int height)
```

getDstAlign

```
public int getDstAlign()
```

setDstAlign

```
public void setDstAlign(int align)
```

getLastModDate

```
public long getLastModDate()
```

setLastModDate

```
public void setLastModDate(long lastModDate)
```

isCheckForUpdates

```
public boolean isCheckForUpdates()
```

(continued from last page)

setCheckForUpdates

```
public void setCheckForUpdates(boolean checkForUpdates)
```

isTransparent

```
public boolean isTransparent()
```

Package

com.wowza.wms.transport.media

com.wowza.wms.transport.media Interface IMediaTransport

public interface **IMediaTransport**
extends

MediaTransport sub system. It manages transport providers and how objects are passed to each provider.

Method Summary

void	addTransportDataObject (IMediaTransportDataObject transportDataObject)	Adds a data object to the MediaTransport system which is then pushed to the transport providers configured.
void	addTransportListener (IMediaTransportListener listener)	This adds a transport listener which has the following calls onTransportProviderAdd onTransportProviderRemove These are triggered when a transport provider is added or removed.
boolean	addTransportProvider (IMediaTransportProvider transportProvider)	This adds a transport provider to the list of providers to use for any data objects passed into the MediaTransport system.
boolean	getDebug ()	Get the state of the debugging flag.
java.util.List	getTransportListeners ()	Returns a list of transport listeners available to the MediaTransport system.
java.util.List	getTransportProviders ()	Returns a list of transport providers available to the MediaTransport system.
void	init ()	Initialises the MediaTransport sub system.
boolean	isReady ()	Return if the MediaTransport system is ready.
boolean	removeTransportProvider (IMediaTransportProvider transportProvider)	This removes a transport provider from the list of providers in use.
void	removeTransportProviderListener (IMediaTransportListener listener)	This removes a transport listener.
void	setDebug (boolean debug)	Set the debug flag, by default it should be false.
void	setIsReady (boolean ready)	This should be set to true if the MediaTransport object initialised correctly.

Methods

(continued from last page)

init

```
public void init()
```

Initialises the MediaTransport sub system. This should be called prior immediately and instantiation.

setDebug

```
public void setDebug(boolean debug)
```

Set the debug flag, by default it should be false.

Parameters:

debug - boolean

getDebug

```
public boolean getDebug()
```

Get the state of the debugging flag.

Returns:

boolean

isReady

```
public boolean isReady()
```

Return if the MediaTransport system is ready. It should only return true if at least one(1) transport provider has been added and it initialised correctly.

Returns:

boolean

setIsReady

```
public void setIsReady(boolean ready)
```

This should be set to true if the MediaTransport object initialised correctly. Even when this is set to true `isReady()` should only return true if at least one(1) transport provider has been added.

Parameters:

ready

addTransportProvider

```
public boolean addTransportProvider(IMediaTransportProvider transportProvider)
```

This adds a transport provider to the list of providers to use for any data objects passed into the MediaTransport system. The transport provider should be fully configured and initialised before being added. If the MediaTransport system allows the provider to be added it returns true. You can not add the same MediaTransport provider more than once, if you want to send objects to similar type destinations you MUST create two providers. When adding a provider it can ONLY return true if the MediaTransport object has been initialised.

Parameters:

transportProvider

Returns:

removeTransportProvider

```
public boolean removeTransportProvider(IMediaTransportProvider transportProvider)
```

This removes a transport provider from the list of providers in use. If the transport provider specified is not found as active then false is returned, otherwise it is true. Removing a transport provider should not interrupt any transport in progress.

Parameters:

transportProvider

Returns:

getTransportProviders

```
public java.util.List getTransportProviders()
```

Returns a list of transport providers available to the MediaTransport system.

Returns:

List

addTransportListener

```
public void addTransportListener(IMediaTransportListener listener)
```

This adds a transport listener which has the following calls onTransportProviderAdd onTransportProviderRemove These are triggered when a transport provider is added or removed.

Parameters:

IMediaTransportListener

removeTransportProviderListener

```
public void removeTransportProviderListener(IMediaTransportListener listener)
```

This removes a transport listener.

Parameters:

IMediaTransportListener

getTransportListeners

```
public java.util.List getTransportListeners()
```

Returns a list of transport listeners available to the MediaTransport system.

Returns:

List

addTransportDataObject

```
public void addTransportDataObject(IMediaTransportDataObject transportDataObject)
```

Adds a data object to the MediaTransport system which is then pushed to the transport providers configured.

Parameters:

IMediaTransportDataObject

com.wowza.wms.transport.media Interface IMediaTransportDataObject

public interface **IMediaTransportDataObject**
extends

IMediaTransportDataObject This object is used by the MediaTransport sub system and should contain a command (used by the appropriate transport provider), content-type, path and a byte[] array of the data to transport.

Method Summary	
String	getCommand() Get the command set
String	getContentType() Get the content type set.
byte[]	getData() Get the data body set
String	getHeader(String name)
java.util.HashMap	getHeaders()
String	getOption(String name) Get an option for this object.
java.util.HashMap	getOptions() Get the map of options set for this object.
String	getPath() Get the path set
String	getUUID() Return the UUID created when the object was initialised.
void	init() This initialises the object.
void	setCommand(String command) This is the command the object needs to use to execute transport within the transport provider.
void	setContentType(String contentType) Set the content type of the object.
void	setData(byte[] data) This sets the data body of the object and must be a byte array.
void	setHeader(String name, String value)
void	setOption(String name, String value) Set an option for this object.

void

[setPath](#)(String path)

This sets the destination path of the object.

Methods

init

```
public void init()
```

This initialises the object. IT **MUST** create a UUID for the object upon initialisation and **MUST** be a string. It is up to the individual implementation to determine the format however **MUST** have a low chance of conflict for the period of use of the specific object.

getUUID

```
public String getUUID()
```

Return the UUID created when the object was initialised.

Returns:

String

setContenttype

```
public void setContenttype(String contentType)
```

Set the content type of the object. This should be a known MIME type that can be understood by the destination for the transport provider being used.

Parameters:

String

setCommand

```
public void setCommand(String command)
```

This is the command the object needs to use to execute transport within the transport provider. A default provider available is a HTTP provider so common commands would be GET, PUT, POST, DELETE This is implementation independent so can be anything the provider can understand.

Parameters:

String

setData

```
public void setData(byte[] data)
```

This sets the data body of the object and must be a byte array.

Parameters:

byte[]

setPath

```
public void setPath(String path)
```

(continued from last page)

This sets the destination path of the object. This will be used by the transport provider. A common path could be /sample.mp4 which would indicate the data set should be stored as sample.mp4 in the root of the transport provider destination.

Parameters:

String

getData

```
public byte[] getData()
```

Get the data body set

Returns:

byte[]

getPath

```
public String getPath()
```

Get the path set

Returns:

String

getContentType

```
public String getContentType()
```

Get the content type set.

Returns:

String

getCommand

```
public String getCommand()
```

Get the command set

Returns:

String

setOption

```
public void setOption(String name,  
String value)
```

Set an option for this object. The option name set would be used by a transport provider when transporting this object.

Parameters:

String

String

getOption

```
public String getOption(String name)
```

Get an option for this object. If the option named does not exist it should return null.

(continued from last page)

Parameters:

String

Returns:

String

getOptions

```
public java.util.HashMap getOptions()
```

Get the map of options set for this object.

Returns:

HashMap

setHeader

```
public void setHeader(String name,  
String value)
```

getHeader

```
public String getHeader(String name)
```

getHeaders

```
public java.util.HashMap getHeaders()
```

com.wowza.wms.transport.media Interface IMediaTransportListener

public interface **IMediaTransportListener**
extends

IMediaTransportListener provides call backs when a transport provider is added or removed from the MediaTransport system.

Method Summary

void	onTransportProviderAdd (IMediaTransportProvider thisProvider) When a transport provider is added this call back is triggered.
void	onTransportProviderRemove (IMediaTransportProvider thisProvider) When a transport provider is removed this call back is triggered.

Methods

onTransportProviderAdd

public void **onTransportProviderAdd**([IMediaTransportProvider](#) thisProvider)

When a transport provider is added this call back is triggered.

Parameters:

[IMediaTransportProvider](#)

onTransportProviderRemove

public void **onTransportProviderRemove**([IMediaTransportProvider](#) thisProvider)

When a transport provider is removed this call back is triggered.

Parameters:

[IMediaTransportProvider](#)

com.wowza.wms.transport.media Interface IMediaTransportObject

public interface **IMediaTransportObject**
extends

IMediaTransportObject This object is used by a transport provider to manage data delivery. This is used by the MediaTransportProviderBase class and is an internal object only.

Method Summary

IMediaTransportDataObject	getDataObject() Gets the IMediaTransportDataObject from this transport object.
int	getMaxAttempts() Gets the max attempts for this object.
long	getRetryTime() Gets the retry time for this object.
void	setDataObject(IMediaTransportDataObject dataObject) Sets the IMediaTransportDataObject object for this transport object
void	setMaxAttempts(int attempts) Sets the max attempts for this object.
void	setRetryTime(long retrytime) Sets the retry time for this object.

Methods

setDataObject

public void **setDataObject**([IMediaTransportDataObject](#) dataObject)

Sets the IMediaTransportDataObject object for this transport object

Parameters:

[IMediaTransportDataObject](#)

getDataObject

public [IMediaTransportDataObject](#) **getDataObject**()

Gets the IMediaTransportDataObject from this transport object.

Returns:

[IMediaTransportDataObject](#)

setRetryTime

public void **setRetryTime**(long retrytime)

(continued from last page)

Sets the retry time for this object.

Parameters:

long

getRetryTime

```
public long getRetryTime()
```

Gets the retry time for this object.

Returns:

long

setMaxAttempts

```
public void setMaxAttempts(int attempts)
```

Sets the max attempts for this object.

Parameters:

int

getMaxAttempts

```
public int getMaxAttempts()
```

Gets the max attempts for this object.

Returns:

int

com.wowza.wms.transport.media Interface IMediaTransportProvider

public interface **IMediaTransportProvider**
extends

IMediaTransportProvider enables data objects to be transported to the defined destination.

Field Summary

public static final	TRANSPORT_PROVIDER_DEFAULT_PROCESS Value: 2
public static final	TRANSPORT_PROVIDER_PROCESS_ASYNC Value: 2
public static final	TRANSPORT_PROVIDER_PROCESS_SYNC Value: 1

Method Summary

void	addProviderListener (IMediaTransportProviderListener providerlistener) This adds a transport provider listener which has the following calls onTransportObjectStatus This is triggered when a transport provider attempts to transport an object.
boolean	addTransportObject (IMediaTransportDataObject transportDataObject) This method gets called by the IMediaTransport object when a data object is added for transport.
boolean	getDebug () Get the debug flag set.
int	getTransportProcessType () Get the transport type used by this provider.
IMediaTransportProviderConfiguration	getTransportProviderConfiguration () Get the configuration for this transport provider
String	getTransportProviderName () Get the transport provider name.
void	init () Initialise this transport provider.
boolean	isReady () This should return true if the transport provider is ready to use.
void	removeProviderListener (IMediaTransportProviderListener providerlistener) This removes a transport provider listener.
void	setDebug (boolean debug) Set the debug flag.

void	setIsReady (boolean ready) Set the state of the transport provider.
void	setThreadPoolSize (int threadpoolsize) If you have configured the transport provider to use ASYNC processing then you should also define a thread pool size.
void	setTransportProcessType (int type) Set the processing type for this provider.
void	setTransportProviderConfiguration (IMediaTransportProviderConfiguration configuration) Set the configuration for this transport provider
void	setTransportProviderName (String methodName) Set the name of this transport provider.
IMediaTransportResponse	transportObject (IMediaTransportObject transportObject) This is called when the provider attempts to transport the object.

Fields

TRANSPORT_PROVIDER_PROCESS_SYNC

```
public static final int TRANSPORT_PROVIDER_PROCESS_SYNC
```

Constant value: **1**

TRANSPORT_PROVIDER_PROCESS_ASYNC

```
public static final int TRANSPORT_PROVIDER_PROCESS_ASYNC
```

Constant value: **2**

TRANSPORT_PROVIDER_DEFAULT_PROCESS

```
public static final int TRANSPORT_PROVIDER_DEFAULT_PROCESS
```

Constant value: **2**

Methods

setTransportProviderConfiguration

```
public void setTransportProviderConfiguration(IMediaTransportProviderConfiguration configuration)
```

Set the configuration for this transport provider

Parameters:

[IMediaTransportProviderConfiguration](#)

(continued from last page)

getTransportProviderConfiguration

```
public IMediaTransportProviderConfiguration getTransportProviderConfiguration()
```

Get the configuration for this transport provider

Returns:

[IMediaTransportProviderConfiguration](#)

init

```
public void init()
```

Initialise this transport provider. This should ONLY be called AFTER the configuration has been added so to allow any custom initialisation from the configuration provided.

setDebug

```
public void setDebug(boolean debug)
```

Set the debug flag. By default it should be false

Parameters:

boolean

getDebug

```
public boolean getDebug()
```

Get the debug flag set.

Returns:

boolean

setTransportProcessType

```
public void setTransportProcessType(int type)
```

Set the processing type for this provider. It should be set as `MediaTransportProviderBase.TRANSPORT_PROVIDER_PROCESS_SYNC` or `MediaTransportProviderBase.TRANSPORT_PROVIDER_PROCESS_ASYNC` The provider MUST provide both synchronous and asynchronous delivery types.

Parameters:

type

getTransportProcessType

```
public int getTransportProcessType()
```

Get the transport type used by this provider.

Returns:

int

setTransportProviderName

```
public void setTransportProviderName(String methodName)
```

(continued from last page)

Set the name of this transport provider. This name is passed to the IMediaTransportProviderListener if implemented when objects have been processed.

Parameters:

String

getTransportProviderName

```
public String getTransportProviderName()
```

Get the transport provider name.

Returns:

String

setThreadPoolSize

```
public void setThreadPoolSize(int threadpoolsize)
```

If you have configured the transport provider to use ASYNC processing then you should also define a thread pool size.

Parameters:

int

addTransportObject

```
public boolean addTransportObject(IMediaTransportDataObject transportDataObject)
```

This method gets called by the IMediaTransport object when a data object is added for transport. If this transport provider does not want to handle this object it should return false. If you have configured the transport provider to use ASYNC processing then you need to add this to your pool of executors to process.

Parameters:[IMediaTransportDataObject](#)**Returns:**

boolean

transportObject

```
public IMediaTransportResponse transportObject(IMediaTransportObject transportObject)
```

This is called when the provider attempts to transport the object. It MUST return an IMediaTransportResponse object.

Parameters:[IMediaTransportObject](#)**Returns:**[IMediaTransportResponse](#)

addProviderListener

```
public void addProviderListener(IMediaTransportProviderListener providerlistener)
```

This adds a transport provider listener which has the following calls on TransportObjectStatus. This is triggered when a transport provider attempts to transport an object.

Parameters:[IMediaTransportProviderListener](#)

removeProviderListener

```
public void removeProviderListener(IMediaTransportProviderListener providerlistener)
```

This removes a transport provider listener.

Parameters:

`IMediaTransportProviderListener`

isReady

```
public boolean isReady()
```

This should return true if the transport provider is ready to use.

Returns:

setIsReady

```
public void setIsReady(boolean ready)
```

Set the state of the transport provider.

Parameters:

`ready`

com.wowza.wms.transport.media Interface IMediaTransportProviderConfiguration

public interface **IMediaTransportProviderConfiguration**
extends

IMediaTransportProviderConfiguration This object provides a mechanism to configure a media transport provider. *

Method Summary

void	addCustomHeader (String name, String value) Add a custom output header for this configuration item.
boolean	getAttributeBoolean (String name) Attempt to get a boolean attribute with the name specified.
int	getAttributeInt (String name) Attempt to get an int attribute with the name specified.
long	getAttributeLong (String name) Attempt to get a long attribute with the name specified.
java.util.Set	getAttributeNames () Get a list of all the attribute names set.
String	getAttributeString (String name) Attempt to get a string attribute with the name specified.
String	getConfigurationName () Get the name of this configuration item.
java.util.HashMap	getCustomHeaders () Get all the custom headers set.
boolean	getDebug () Get the debug flag for this configuration object.
WMSProperties	getProperties () Get the WMSProperties holder.
java.util.HashMap	getTransportHeaderOutput (java.util.HashMap dynamictransportinformation, IMediaTransportObject transportObject) This should be called by the transport provider using this configuration item.
void	init () Initialise the provider configuration.
boolean	isReady () Get the ready flag for this configuration object.
void	removeCustomHeader (String name) Remove a custom output header
void	setAttributeBoolean (String name, boolean value) Set an attribute with a boolean type

void	<u>setAttributeInt</u> (String name, int value) Set an attribute with an int type
void	<u>setAttributeLong</u> (String name, long value) Set an attribute with a long type
void	<u>setAttributeString</u> (String name, String value) Set an attribute with a string type
void	<u>setConfigurationName</u> (String name) Set the name of this configuration object.
void	<u>setDebug</u> (boolean debug) Set the debug flag for this configuration object.
void	<u>setIsReady</u> (boolean ready) Set if this configuration object is ready.
void	<u>setProperties</u> (<u>WMSProperties</u> props) When the object is created a WMSProperties holder is created.

Methods

init

```
public void init()
```

Initialise the provider configuration. This should only be called when all appropriate attributes have been set.

setConfigurationName

```
public void setConfigurationName(String name)
```

Set the name of this configuration object.

Parameters:

String

getConfigurationName

```
public String getConfigurationName()
```

Get the name of this configuration item.

Returns:

String

addCustomHeader

```
public void addCustomHeader(String name,  
String value)
```

Add a custom output header for this configuration item. This is more geared towards HTTP transport providers but can be used by any transport provider.

Parameters:

String

(continued from last page)

String

removeCustomHeader

```
public void removeCustomHeader(String name)
```

Remove a custom output header

Parameters:

String

getCustomHeaders

```
public java.util.HashMap getCustomHeaders()
```

Get all the custom headers set.

Returns:

HashMap

setAttributeString

```
public void setAttributeString(String name,  
    String value)
```

Set an attribute with a string type

Parameters:

name

value

setAttributeBoolean

```
public void setAttributeBoolean(String name,  
    boolean value)
```

Set an attribute with a boolean type

Parameters:

name

boolean

setAttributeLong

```
public void setAttributeLong(String name,  
    long value)
```

Set an attribute with a long type

Parameters:

name

long

setAttributeInt

```
public void setAttributeInt(String name,  
    int value)
```

Set an attribute with an int type

(continued from last page)

Parameters:name
int

getAttributeString

```
public String getAttributeString(String name)
```

Attempt to get a string attribute with the name specified. If the attribute is not found a null should be returned.

Parameters:

name

Returns:

String

getAttributeBoolean

```
public boolean getAttributeBoolean(String name)
```

Attempt to get a boolean attribute with the name specified. If the attribute is not found false should be returned.

Parameters:

name

Returns:

boolean

getAttributeLong

```
public long getAttributeLong(String name)
```

Attempt to get a long attribute with the name specified. If the attribute is not found -1 should be returned.

Parameters:

name

Returns:

long

getAttributeInt

```
public int getAttributeInt(String name)
```

Attempt to get an int attribute with the name specified. If the attribute is not found -1 should be returned.

Parameters:

name

Returns:

int

getAttributeNames

```
public java.util.Set getAttributeNames()
```

Get a list of all the attribute names set.

(continued from last page)

Returns:
Set

getTransportHeaderOutput

```
public java.util.HashMap getTransportHeaderOutput( java.util.HashMap  
dynamictransportinformation,  
IMediaTransportObject transportObject)
```

This should be called by the transport provider using this configuration item. You can pass in two objects, one is a HashMap and the other is a IMediaTransportObject The result should be a HashMap that the transport provider can then use to process the data block being transported.

Parameters:
HashMap
IMediaTransportObject

Returns:
HashMap

setProperty

```
public void setProperty(WMSProperties props)
```

When the object is created a WMSProperties holder is created. This can be changed by setting it with this call. All attributes should be stored within a WMSProperties object

Parameters:
WMSProperties

getProperty

```
public WMSProperties getProperty()
```

Get the WMSProperties holder.

Returns:
WMSProperties

setIsReady

```
public void setIsReady(boolean ready)
```

Set if this configuration object is ready. It should be set after init() is called and therefore after any attributes have been set.

Parameters:
boolean

isReady

```
public boolean isReady()
```

Get the ready flag for this configuration object.

Returns:
boolean

(continued from last page)

setDebug

```
public void setDebug(boolean debug)
```

Set the debug flag for this configuration object.

Parameters:

boolean

getDebug

```
public boolean getDebug()
```

Get the debug flag for this configuration object.

Returns:

boolean

com.wowza.wms.transport.media Interface IMediaTransportProviderListener

public interface **IMediaTransportProviderListener**
extends

IMediaTransportProviderListener This listener provides a callback for the status of the transport object status

Method Summary

void	onTransportObjectStatus (int count, IMediaTransportResponse responseObject, String transportProviderName) This is called when an object has been attempted to be transported by a transport provider.
------	--

Methods

onTransportObjectStatus

```
public void onTransportObjectStatus(int count,  
    IMediaTransportResponse responseObject,  
    String transportProviderName)
```

This is called when an object has been attempted to be transported by a transport provider. The attempt number is provided
The responseObject should contain the status of the transport attempt The transport provider used for this attempt

Parameters:

- int
- [IMediaTransportResponse](#)
- String

com.wowza.wms.transport.media Interface IMediaTransportResponse

public interface **IMediaTransportResponse**
extends

IMediaTransportResponse This object is provided as part of the IMediaTransportProviderListener callback. This is an internal object/class.

Field Summary

public static final	RESPONSE_DATA Value: responseData
public static final	RESPONSE_HEADERS Value: responseHeaders
public static final	RESPONSE_INDICATOR Value: responseIndicator

Method Summary

void	addSuccessData (String key, byte[] data) In order to provide as much flexibility as possible it is possible to add 'success' data to the response object in the form of a key and a byte array.
String	getBasicMessage () Get the basic message for the response object.
String	getCommand () Get the command for the response object.
String	getContentType () Get the content type for the response object.
String	getPath () Get the path for the response object.
boolean	getSuccess () Get the success flag from the response object.
byte[]	getSuccessData (String key) Get the success data available
java.util.List	getSuccessKeyList () Get the list of keys that the success data contains.
String	getUUID () Get the UUID of the object.
void	setbasicMessage (String basicMessage) Set a basic message for the response object.

void	setCommand (String command) Set the command type for the response object.
void	setContentType (String contenttype) Set the content type for the response object.
void	setPath (String path) Set the path for the response object.
void	setSuccess (boolean success) Set the success flag for the response object.
void	setUUID (String id) Sets the UUID of the response object.

Fields

RESPONSE_HEADERS

```
public static final java.lang.String RESPONSE_HEADERS
```

Constant value: **responseHeaders**

RESPONSE_INDICATOR

```
public static final java.lang.String RESPONSE_INDICATOR
```

Constant value: **responseIndicator**

RESPONSE_DATA

```
public static final java.lang.String RESPONSE_DATA
```

Constant value: **responseData**

Methods

setUUID

```
public void setUUID(String id)
```

Sets the UUID of the response object. This should match the IMediaTransportDataObject UUID created when it was initialised.

Parameters:
String

getUUID

```
public String getUUID()
```

Get the UUID of the object.

Returns:

(continued from last page)

String

setPath

```
public void setPath(String path)
```

Set the path for the response object. This should match the IMediaTransportDataObject path setting.

Parameters:

String

getPath

```
public String getPath()
```

Get the path for the response object.

Returns:

String

setContenttype

```
public void setContenttype(String contenttype)
```

Set the content type for the response object. This should match the IMediaTransportDataObject content type setting.

Parameters:

String

getContenttype

```
public String getContenttype()
```

Get the content type for the response object.

Returns:

String

setCommand

```
public void setCommand(String command)
```

Set the command type for the response object. This should match the IMediaTransportDataObject command setting.

Parameters:

String

getCommand

```
public String getCommand()
```

Get the command for the response object.

Returns:

String

(continued from last page)

setbasicMessage

```
public void setbasicMessage(String basicMessage)
```

Set a basic message for the response object. This allows basic string messages for state to be available in the `IMediaTransportProviderListener` callback. A common message would be SUCCESS or FAILED.

Parameters:

String

getBasicMessage

```
public String getBasicMessage()
```

Get the basic message for the response object.

Returns:

String

setSuccess

```
public void setSuccess(boolean success)
```

Set the success flag for the response object. If the transport was successful then it should be set to true.

Parameters:

boolean

getSuccess

```
public boolean getSuccess()
```

Get the success flag from the response object.

Returns:

boolean

addSuccessData

```
public void addSuccessData(String key,  
    byte[] data)
```

In order to provide as much flexibility as possible it is possible to add 'success' data to the response object in the form of a key and a byte array. An example would be as follows `MediaTransportConfigurationHTTP.RESPONSE_INDICATOR, String.valueOf("200").getBytes()`; This is done within the `MediaTransportProviderhHTTP` and allows the response code 200 to be added into the success data. There are 3 defined responses, although you can add any you wish

- `IMediaTransportProviderConfiguration.RESPONSE_INDICATOR`
- `IMediaTransportProviderConfiguration.RESPONSE_HEADERS`
- `IMediaTransportProviderConfiguration.RESPONSE_DATA`

Parameters:

key

data

getSuccessData

```
public byte[] getSuccessData(String key)
```

Get the success data available

(continued from last page)

Parameters:

String

Returns:byte[]

getSuccessKeyList

```
public java.util.List getSuccessKeyList()
```

Get the list of keys that the success data contains.

Returns:

List

com.wowza.wms.transport.media Class **MediaTransportConfigurationAmazonS3**

java.lang.Object

└-com.wowza.wms.transport.media.MediaTransportConfigurationBase

└-com.wowza.wms.transport.media.**MediaTransportConfigurationAmazonS3**

All Implemented Interfaces:

[IMediaTransportProviderConfiguration](#)

```
public class MediaTransportConfigurationAmazonS3  
extends MediaTransportConfigurationBase
```

This is a base configuration object for AmazonS3 for the MediaTransport System //Example use

```
//Create a main transport object

MediaTransport transport = new MediaTransport();

//Create an Amazon Transport Provider
MediaTransportProviderAmazonS3 amazonTransport = new MediaTransportProviderAmazonS3();

//Create an Amazon Configuration Object
MediaTransportConfigurationAmazonS3 amazonConfig = new MediaTransportConfigurationAmazonS3();

//Configure the Amazon object with the required parameters
amazonConfig.setAttributeString(MediaTransportConfigurationAmazonS3.AMZ_CONFIG_BUCKET,
"mybucketName");
amazonConfig.setAttributeString(MediaTransportConfigurationAmazonS3.AMZ_CONFIG_REGION,
"bucketRegionName");
amazonConfig.setAttributeBoolean(MediaTransportConfigurationAmazonS3.AMZ_CONFIG_REGION_ENABLE
D, true);
amazonConfig.setAttributeString(MediaTransportConfigurationAmazonS3.AMZ_CONFIG_ACCESSID,
"myAmazonAccessKey");
amazonConfig.setAttributeString(MediaTransportConfigurationAmazonS3.AMZ_CONFIG_SECRETACCESSKE
Y, "myAmazonSecretKey");

//Add the configuration item to the provider
amazonTransport.setTransportProviderConfiguration(amazonConfig);

//Set the type of processing to occur, the default is ASYNC, set to SYNC
//Async will use a thread pool to handle transports, SYNC will block and do them in the order
//they are provided
amazonTransport.setTransportProcessType(IMediaTransportProvider.TRANSPORT_PROVIDER_PROCESS_SY
NC);

//Initialize the provider
amazonTransport.init();

//Add the transport provided to the media transport system
transport.addTransportProvider(amazonTransport);

//You can add multiple transport providers

//To push a data block into the transport system the following example should be followed

//Lets assume you have a byte array, say from loading a file into this array.
byte[] fileBytes = getBytesFromFile(uploadFile);

//Create a data object and set up various settings.
MediaTransportDataObject transportDataObject = new MediaTransportDataObject();
transportDataObject.setPath("/"+filename);
transportDataObject.setContentType("video/mp4");
transportDataObject.setData(fileBytes);
transportDataObject.setCommand("PUT");
```

```
//Put the object into the transport system
transport.addTransportDataObject(transportDataObject);

// There are several listeners you can use to determine if the transport provider was added
// and the return status of the object presented to the system.
```

Field Summary

public static final	AMZ_CONFIG_ACCESSID Value: accessID
public static final	AMZ_CONFIG_BUCKET Value: bucketName
public static final	AMZ_CONFIG_DOMAIN_SUFFIX Value: domainSuffix
public static final	AMZ_CONFIG_FULLPATH Value: fullPathURI
public static final	AMZ_CONFIG_PREFIX Value: prefixType
public static final	AMZ_CONFIG_REGION Value: region
public static final	AMZ_CONFIG_REGION_ENABLED Value: regionEnabled
public static final	AMZ_CONFIG_REQUEST_TYPE Value: requestType
public static final	AMZ_CONFIG_SECRETACCESSKEY Value: secretAccessKey
public static final	AMZ_CONFIG_SERVICETYPE Value: serviceType
public static final	AMZ_OBJECT_HEADER_ACCESS_LIST Value: x-amz-acl
public static final	AMZ_OBJECT_HEADER_COPY_SOURCE Value: x-amz-copy-source

public static final	AMZ_OBJECT_HEADER_COPY_SOURCE_IF_MATCH Value: x-amz-copy-source-if-match
public static final	AMZ_OBJECT_HEADER_COPY_SOURCE_IF_MODIFIED_SINCE Value: x-amz-copy-source-if-modified-since
public static final	AMZ_OBJECT_HEADER_COPY_SOURCE_IF_NONE_MATCH Value: x-amz-copy-source-if-none-match
public static final	AMZ_OBJECT_HEADER_COPY_SOURCE_IF_UNMODIFIED_SINCE Value: x-amz-copy-source-if-unmodified-since
public static final	AMZ_OBJECT_HEADER_GRANT_FULL_CONTROL Value: x-amz-grant-full-control
public static final	AMZ_OBJECT_HEADER_GRANT_READ Value: x-amz-grant-read
public static final	AMZ_OBJECT_HEADER_GRANT_READ_ACP Value: x-amz-grant-read-acp
public static final	AMZ_OBJECT_HEADER_GRANT_WRITE Value: x-amz-grant-write
public static final	AMZ_OBJECT_HEADER_GRANT_WRITE_ACP Value: x-amz-grant-write-acp
public static final	AMZ_OBJECT_HEADER_META_DIRECTIVE Value: x-amz-metadata-directive
public static final	AMZ_OBJECT_HEADER_SECURITY_TOKEN Value: x-amz-security-token
public static final	AMZ_OBJECT_HEADER_SERVER_ENCRYPT Value: x-amz-server-side-encryption
public static final	AMZ_OBJECT_HEADER_SERVER_ENCRYPT_CONTEXT Value: x-amz-server-side-encryption-context
public static final	AMZ_OBJECT_HEADER_SERVER_ENCRYPT_KEY_ID Value: x-amz-server-side-encryption-aws-kms-key-id
public static final	AMZ_OBJECT_HEADER_STORAGE_CLASS Value: x-amz-storage-class
public static final	AMZ_OBJECT_OPTION_BUCKET Value: bucketName

public static final	AMZ_OBJECT_OPTION_REGION Value: region
public static final	AMZ_OBJECT_OPTION_REGION_ENABLED Value: regionEnabled
public static	AMZ_SIGNATURE_EXPIRE_TIME

Fields inherited from class com.wowza.wms.transport.media.MediaTransportConfigurationBase

BASE_AUTHENTICATION, BASE_HOST, BASE_MAX_ATTEMPTS, BASE_METHOD, BASE_PATH, BASE_PORT, BASE_RETRY_TIME, BASE_TIMEOUT_CONNECTION, BASE_TIMEOUT_READ, BASE_TIMEOUT_WRITE, BASE_USER_AGENT

Constructor Summary

public	MediaTransportConfigurationAmazonS3()
--------	---

Method Summary

java.util.HashMap	getTransportHeaderOutput (java.util.HashMap dynamictransportinformation, IMediaTransportObject transportObject)
void	init ()

Methods inherited from class com.wowza.wms.transport.media.MediaTransportConfigurationBase

addCustomHeader, getAttributeBoolean, getAttributeInt, getAttributeLong, getAttributeNames, getAttributeString, getConfigurationName, getCustomHeaders, getDebug, getProperties, getTransportHeaderOutput, httpDateHeader, init, isReady, removeCustomHeader, setAttributeBoolean, setAttributeInt, setAttributeLong, setAttributeString, setConfigurationName, setDebug, setIsReady, setProperties

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface

[com.wowza.wms.transport.media.IMediaTransportProviderConfiguration](#)

[addCustomHeader](#), [getAttributeBoolean](#), [getAttributeInt](#), [getAttributeLong](#), [getAttributeNames](#), [getAttributeString](#), [getConfigurationName](#), [getCustomHeaders](#), [getDebug](#), [getProperties](#), [getTransportHeaderOutput](#), [init](#), [isReady](#), [removeCustomHeader](#), [setAttributeBoolean](#), [setAttributeInt](#), [setAttributeLong](#), [setAttributeString](#), [setConfigurationName](#), [setDebug](#), [setIsReady](#), [setProperties](#)

Fields

(continued from last page)

AMZ_OBJECT_HEADER_STORAGE_CLASS

```
public static final java.lang.String AMZ_OBJECT_HEADER_STORAGE_CLASS
```

Constant value: **x-amz-storage-class**

AMZ_OBJECT_HEADER_ACCESS_LIST

```
public static final java.lang.String AMZ_OBJECT_HEADER_ACCESS_LIST
```

Constant value: **x-amz-acl**

AMZ_OBJECT_HEADER_SECURITY_TOKEN

```
public static final java.lang.String AMZ_OBJECT_HEADER_SECURITY_TOKEN
```

Constant value: **x-amz-security-token**

AMZ_OBJECT_HEADER_COPY_SOURCE

```
public static final java.lang.String AMZ_OBJECT_HEADER_COPY_SOURCE
```

Constant value: **x-amz-copy-source**

AMZ_OBJECT_HEADER_META_DIRECTIVE

```
public static final java.lang.String AMZ_OBJECT_HEADER_META_DIRECTIVE
```

Constant value: **x-amz-metadata-directive**

AMZ_OBJECT_HEADER_COPY_SOURCE_IF_MATCH

```
public static final java.lang.String AMZ_OBJECT_HEADER_COPY_SOURCE_IF_MATCH
```

Constant value: **x-amz-copy-source-if-match**

AMZ_OBJECT_HEADER_COPY_SOURCE_IF_NONE_MATCH

```
public static final java.lang.String AMZ_OBJECT_HEADER_COPY_SOURCE_IF_NONE_MATCH
```

Constant value: **x-amz-copy-source-if-none-match**

AMZ_OBJECT_HEADER_COPY_SOURCE_IF_UNMODIFIED_SINCE

```
public static final java.lang.String AMZ_OBJECT_HEADER_COPY_SOURCE_IF_UNMODIFIED_SINCE
```

Constant value: **x-amz-copy-source-if-unmodified-since**

(continued from last page)

AMZ_OBJECT_HEADER_COPY_SOURCE_IF_MODIFIED_SINCE

```
public static final java.lang.String AMZ_OBJECT_HEADER_COPY_SOURCE_IF_MODIFIED_SINCE
```

Constant value: **x-amz-copy-source-if-modified-since**

AMZ_OBJECT_HEADER_GRANT_READ

```
public static final java.lang.String AMZ_OBJECT_HEADER_GRANT_READ
```

Constant value: **x-amz-grant-read**

AMZ_OBJECT_HEADER_GRANT_WRITE

```
public static final java.lang.String AMZ_OBJECT_HEADER_GRANT_WRITE
```

Constant value: **x-amz-grant-write**

AMZ_OBJECT_HEADER_GRANT_READ_ACP

```
public static final java.lang.String AMZ_OBJECT_HEADER_GRANT_READ_ACP
```

Constant value: **x-amz-grant-read-acp**

AMZ_OBJECT_HEADER_GRANT_WRITE_ACP

```
public static final java.lang.String AMZ_OBJECT_HEADER_GRANT_WRITE_ACP
```

Constant value: **x-amz-grant-write-acp**

AMZ_OBJECT_HEADER_GRANT_FULL_CONTROL

```
public static final java.lang.String AMZ_OBJECT_HEADER_GRANT_FULL_CONTROL
```

Constant value: **x-amz-grant-full-control**

AMZ_OBJECT_HEADER_SERVER_ENCRYPT

```
public static final java.lang.String AMZ_OBJECT_HEADER_SERVER_ENCRYPT
```

Constant value: **x-amz-server-side-encryption**

AMZ_OBJECT_HEADER_SERVER_ENCRYPT_KEY_ID

```
public static final java.lang.String AMZ_OBJECT_HEADER_SERVER_ENCRYPT_KEY_ID
```

Constant value: **x-amz-server-side-encryption-aws-kms-key-id**

AMZ_OBJECT_HEADER_SERVER_ENCRYPT_CONTEXT

```
public static final java.lang.String AMZ_OBJECT_HEADER_SERVER_ENCRYPT_CONTEXT
```

(continued from last page)

Constant value: **x-amz-server-side-encryption-context**

AMZ_OBJECT_OPTION_BUCKET

```
public static final java.lang.String AMZ_OBJECT_OPTION_BUCKET
```

Constant value: **bucketName**

AMZ_OBJECT_OPTION_REGION

```
public static final java.lang.String AMZ_OBJECT_OPTION_REGION
```

Constant value: **region**

AMZ_OBJECT_OPTION_REGION_ENABLED

```
public static final java.lang.String AMZ_OBJECT_OPTION_REGION_ENABLED
```

Constant value: **regionEnabled**

AMZ_CONFIG_FULLPATH

```
public static final java.lang.String AMZ_CONFIG_FULLPATH
```

Constant value: **fullPathURI**

AMZ_CONFIG_BUCKET

```
public static final java.lang.String AMZ_CONFIG_BUCKET
```

Constant value: **bucketName**

AMZ_CONFIG_REGION

```
public static final java.lang.String AMZ_CONFIG_REGION
```

Constant value: **region**

AMZ_CONFIG_REGION_ENABLED

```
public static final java.lang.String AMZ_CONFIG_REGION_ENABLED
```

Constant value: **regionEnabled**

AMZ_CONFIG_SECRETACCESSKEY

```
public static final java.lang.String AMZ_CONFIG_SECRETACCESSKEY
```

Constant value: **secretAccessKey**

AMZ_CONFIG_ACCESSID

```
public static final java.lang.String AMZ_CONFIG_ACCESSID
```

Constant value: **accessID**

AMZ_CONFIG_SERVICETYPE

```
public static final java.lang.String AMZ_CONFIG_SERVICETYPE
```

Constant value: **serviceType**

AMZ_CONFIG_DOMAIN_SUFFIX

```
public static final java.lang.String AMZ_CONFIG_DOMAIN_SUFFIX
```

Constant value: **domainSuffix**

AMZ_CONFIG_REQUEST_TYPE

```
public static final java.lang.String AMZ_CONFIG_REQUEST_TYPE
```

Constant value: **requestType**

AMZ_CONFIG_PREFIX

```
public static final java.lang.String AMZ_CONFIG_PREFIX
```

Constant value: **prefixType**

AMZ_SIGNATURE_EXPIRE_TIME

```
public static long AMZ_SIGNATURE_EXPIRE_TIME
```

Constructors

MediaTransportConfigurationAmazonS3

```
public MediaTransportConfigurationAmazonS3()
```

Methods

init

```
public void init()
```

(continued from last page)

getTransportHeaderOutput

```
public java.util.HashMap getTransportHeaderOutput( java.util.HashMap  
dynamictransportinformation,  
IMediaTransportObject transportObject)
```

com.wowza.wms.transport.media Class MediaTransportConfigurationGoogleCloud

java.lang.Object

└-com.wowza.wms.transport.media.MediaTransportConfigurationBase

└-com.wowza.wms.transport.media.MediaTransportConfigurationGoogleCloud

All Implemented Interfaces:

[IMediaTransportProviderConfiguration](#)

```
public class MediaTransportConfigurationGoogleCloud  
extends MediaTransportConfigurationBase
```

This is a base configuration object for Google Cloud Storage for the MediaTransport System //Example use


```
//Create a main transport object

MediaTransport transport = new MediaTransport();

//Create an Amazon Transport Provider
MediaTransportProviderGoogleCloud googleTransport = new MediaTransportProviderGoogleCloud();

//Create an Amazon Configuration Object
MediaTransportConfigurationGoogleCloud googleConfig = new
MediaTransportConfigurationGoogleCloud();

//Configure the Amazon object with the required parameters
googleConfig.setAttributeString(MediaTransportConfigurationGoogleCloud.GC_CONFIG_BUCKET,
this.bucketName);
googleConfig.setAttributeString(MediaTransportConfigurationGoogleCloud.GC_CONFIG_SECRETACCESS
KEY, this.secretKey);
googleConfig.setAttributeString(MediaTransportConfigurationGoogleCloud.GC_CONFIG_SERVICEID,
this.serviceID);
googleConfig.setAttributeString(MediaTransportConfigurationGoogleCloud.GC_CONFIG_PROJECT_ID,
this.projectID);

//Add the configuration item to the provider
googleTransport.setTransportProviderConfiguration(googleConfig);

//Set the type of processing to occur, the default is ASYNC, set to SYNC
//Async will use a thread pool to handle transports, SYNC will block and do them in the order
//they are provided
googleTransport.setTransportProcessType(IMediaTransportProvider.TRANSPORT_PROVIDER_PROCESS_SY
NC);

//Initialize the provider
googleTransport.init();

//Add the transport provided to the media transport system
transport.addTransportProvider(googleTransport);

//You can add multiple transport providers

//To push a data block into the transport system the following example should be followed

//Lets assume you have a byte array, say from loading a file into this array.
byte[] fileBytes = getBytesFromFile(uploadFile);

//Create a data object and set up various settings.
MediaTransportDataObject transportDataObject = new MediaTransportDataObject();
transportDataObject.setPath("/"+filename);
transportDataObject.setContentType("video/mp4");
transportDataObject.setData(fileBytes);
transportDataObject.setCommand("PUT");
```

```
//Put the object into the transport system
transport.addTransportDataObject(transportDataObject);

// There are several listeners you can use to determine if the transport provider was added
// and the return status of the object presented to the system.
```

Field Summary

public static final	GC_CONFIG_AUTHENTICATION_TYPE Value: authenticationType
public static final	GC_CONFIG_BUCKET Value: bucketName
public static final	GC_CONFIG_DOMAIN_SUFFIX Value: domainSuffix
public static final	GC_CONFIG_FULLPATH Value: fullPathURI
public static final	GC_CONFIG_MD5_ENABLE Value: md5Enable
public static final	GC_CONFIG_PROJECT_ID Value: projectID
public static final	GC_CONFIG_SCOPE Value: scope
public static final	GC_CONFIG_SECRETACCESS_FILE Value: authenticationFile
public static final	GC_CONFIG_SECRETACCESSKEY Value: secretAccessKey
public static final	GC_CONFIG_SERVICEID Value: serviceID
public static final	GC_MD5_ENABLED_FALSE Value: false
public static final	GC_MD5_ENABLED_TRUE Value: true
public static final	GC_OBJECT_HEADER_ACCESS_LIST Value: x-goog-acl

public static final	GC_OBJECT_HEADER_COPY_SOURCE Value: x-goog-copy-source
public static final	GC_OBJECT_HEADER_COPY_SOURCE_IF_MATCH Value: x-goog-copy-source-if-match
public static final	GC_OBJECT_HEADER_COPY_SOURCE_IF_MODIFIED_SINCE Value: x-goog-copy-source-if-modified-since
public static final	GC_OBJECT_HEADER_COPY_SOURCE_IF_NONE_MATCH Value: x-goog-copy-source-if-none-match
public static final	GC_OBJECT_HEADER_COPY_SOURCE_IF_UNMODIFIED_SINCE Value: x-goog-copy-source-if-unmodified-since
public static final	GC_OBJECT_HEADER_META_DIRECTIVE Value: x-goog-metadata-directive
public static final	GC_OBJECT_HEADER_SERVER_ENCRYPT Value: x-goog-encryption-algorithm
public static final	GC_OBJECT_HEADER_SERVER_ENCRYPT_KEY_SHA256 Value: x-goog-encryption-key-sha256
public static final	GC_OBJECT_HEADER_STORAGE_CLASS Value: x-goog-storage-class
public static final	GC_OBJECT_OPTION_BUCKET Value: bucketName
public static final	GC_OBJECT_OPTION_MD5_ENABLE Value: md5Enable
public static final	GC_OBJECT_OPTION_PROJECT_ID Value: projectID
public static final	GC_OBJECT_OPTION_SCOPE Value: scope
public static final	GC_OBJECT_SERVICE_ACL_AUTHENTICATED_READ Value: authenticated-read
public static final	GC_OBJECT_SERVICE_ACL_BUCKET_OWNER_FULL_CONTROL Value: bucket-owner-full-control
public static final	GC_OBJECT_SERVICE_ACL_BUCKET_OWNER_READ Value: bucket-owner-read

public static final	GC_OBJECT_SERVICE_ACL_PRIVATE Value: private
public static final	GC_OBJECT_SERVICE_ACL_PROJECT_PRIVATE Value: project-private
public static final	GC_OBJECT_SERVICE_ACL_PUBLIC_READ Value: public-read
public static final	GC_OBJECT_SERVICE_ACL_PUBLIC_READ_WRITE Value: public-read-write
public static final	GC_OBJECT_SERVICE_STORAGE_CLASS_COLDLINE Value: COLDLINE
public static final	GC_OBJECT_SERVICE_STORAGE_CLASS_MULTIREGIONAL Value: MULTI_REGIONAL
public static final	GC_OBJECT_SERVICE_STORAGE_CLASS_NEARLINE Value: NEARLINE
public static final	GC_OBJECT_SERVICE_STORAGE_CLASS_REGIONAL Value: REGIONAL
public static final	GC_SERVICE_AUTHENTICATION_JSON_SECRET Value: JSON
public static final	GC_SERVICE_AUTHENTICATION_PKCS12 Value: PKCS12
public static final	GC_SERVICE_SCOPE_FULL_CONTROL Value: full_control
public static final	GC_SERVICE_SCOPE_READ_ONLY Value: read_only
public static final	GC_SERVICE_SCOPE_READ_WRITE Value: read_write

Fields inherited from class com.wowza.wms.transport.media.MediaTransportConfigurationBase

BASE_AUTHENTICATION, BASE_HOST, BASE_MAX_ATTEMPTS, BASE_METHOD, BASE_PATH, BASE_PORT, BASE_RETRY_TIME, BASE_TIMEOUT_CONNECTION, BASE_TIMEOUT_READ, BASE_TIMEOUT_WRITE, BASE_USER_AGENT

Constructor Summary

public	MediaTransportConfigurationGoogleCloud()
--------	--

Method Summary

void	getAuthToken (String scope)
String	getGoogleCloudToken (String type)
java.util.HashMap	getTransportHeaderOutput (java.util.HashMap dynamictransportinformation, IMediaTransportObject transportObject)
void	init ()

Methods inherited from class `com.wowza.wms.transport.media.MediaTransportConfigurationBase`

`addCustomHeader`, `getAttributeBoolean`, `getAttributeInt`, `getAttributeLong`, `getAttributeNames`, `getAttributeString`, `getConfigurationName`, `getCustomHeaders`, `getDebug`, `getProperties`, `getTransportHeaderOutput`, `httpDateHeader`, `init`, `isReady`, `removeCustomHeader`, `setAttributeBoolean`, `setAttributeInt`, `setAttributeLong`, `setAttributeString`, `setConfigurationName`, `setDebug`, `setIsReady`, `setProperties`

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface

[com.wowza.wms.transport.media.IMediaTransportProviderConfiguration](#)

[addCustomHeader](#), [getAttributeBoolean](#), [getAttributeInt](#), [getAttributeLong](#), [getAttributeNames](#), [getAttributeString](#), [getConfigurationName](#), [getCustomHeaders](#), [getDebug](#), [getProperties](#), [getTransportHeaderOutput](#), [init](#), [isReady](#), [removeCustomHeader](#), [setAttributeBoolean](#), [setAttributeInt](#), [setAttributeLong](#), [setAttributeString](#), [setConfigurationName](#), [setDebug](#), [setIsReady](#), [setProperties](#)

Fields

GC_SERVICE_SCOPE_READ_ONLY

public static final java.lang.String **GC_SERVICE_SCOPE_READ_ONLY**

Constant value: **read_only**

GC_SERVICE_SCOPE_READ_WRITE

public static final java.lang.String **GC_SERVICE_SCOPE_READ_WRITE**

Constant value: **read_write**

GC_SERVICE_SCOPE_FULL_CONTROL

public static final java.lang.String **GC_SERVICE_SCOPE_FULL_CONTROL**

Constant value: **full_control**

GC_OBJECT_SERVICE_STORAGE_CLASS_MULTIREGIONAL

```
public static final java.lang.String GC_OBJECT_SERVICE_STORAGE_CLASS_MULTIREGIONAL
```

Constant value: **MULTI_REGIONAL**

GC_OBJECT_SERVICE_STORAGE_CLASS_REGIONAL

```
public static final java.lang.String GC_OBJECT_SERVICE_STORAGE_CLASS_REGIONAL
```

Constant value: **REGIONAL**

GC_OBJECT_SERVICE_STORAGE_CLASS_NEARLINE

```
public static final java.lang.String GC_OBJECT_SERVICE_STORAGE_CLASS_NEARLINE
```

Constant value: **NEARLINE**

GC_OBJECT_SERVICE_STORAGE_CLASS_COLDLINE

```
public static final java.lang.String GC_OBJECT_SERVICE_STORAGE_CLASS_COLDLINE
```

Constant value: **COLDLINE**

GC_SERVICE_AUTHENTICATION_JSON_SECRET

```
public static final java.lang.String GC_SERVICE_AUTHENTICATION_JSON_SECRET
```

Constant value: **JSON**

GC_SERVICE_AUTHENTICATION_PKCS12

```
public static final java.lang.String GC_SERVICE_AUTHENTICATION_PKCS12
```

Constant value: **PKCS12**

GC_OBJECT_SERVICE_ACL_PRIVATE

```
public static final java.lang.String GC_OBJECT_SERVICE_ACL_PRIVATE
```

Constant value: **private**

GC_OBJECT_SERVICE_ACL_BUCKET_OWNER_READ

```
public static final java.lang.String GC_OBJECT_SERVICE_ACL_BUCKET_OWNER_READ
```

Constant value: **bucket-owner-read**

(continued from last page)

GC_OBJECT_SERVICE_ACL_BUCKET_OWNER_FULL_CONTROL

```
public static final java.lang.String GC_OBJECT_SERVICE_ACL_BUCKET_OWNER_FULL_CONTROL
```

Constant value: **bucket-owner-full-control**

GC_OBJECT_SERVICE_ACL_PROJECT_PRIVATE

```
public static final java.lang.String GC_OBJECT_SERVICE_ACL_PROJECT_PRIVATE
```

Constant value: **project-private**

GC_OBJECT_SERVICE_ACL_AUTHENTICATED_READ

```
public static final java.lang.String GC_OBJECT_SERVICE_ACL_AUTHENTICATED_READ
```

Constant value: **authenticated-read**

GC_OBJECT_SERVICE_ACL_PUBLIC_READ

```
public static final java.lang.String GC_OBJECT_SERVICE_ACL_PUBLIC_READ
```

Constant value: **public-read**

GC_OBJECT_SERVICE_ACL_PUBLIC_READ_WRITE

```
public static final java.lang.String GC_OBJECT_SERVICE_ACL_PUBLIC_READ_WRITE
```

Constant value: **public-read-write**

GC_MD5_ENABLED_TRUE

```
public static final java.lang.String GC_MD5_ENABLED_TRUE
```

Constant value: **true**

GC_MD5_ENABLED_FALSE

```
public static final java.lang.String GC_MD5_ENABLED_FALSE
```

Constant value: **false**

GC_OBJECT_HEADER_STORAGE_CLASS

```
public static final java.lang.String GC_OBJECT_HEADER_STORAGE_CLASS
```

Constant value: **x-goog-storage-class**

GC_OBJECT_HEADER_ACCESS_LIST

```
public static final java.lang.String GC_OBJECT_HEADER_ACCESS_LIST
```

(continued from last page)

Constant value: **x-goog-acl**

GC_OBJECT_HEADER_COPY_SOURCE

```
public static final java.lang.String GC_OBJECT_HEADER_COPY_SOURCE
```

Constant value: **x-goog-copy-source**

GC_OBJECT_HEADER_META_DIRECTIVE

```
public static final java.lang.String GC_OBJECT_HEADER_META_DIRECTIVE
```

Constant value: **x-goog-metadata-directive**

GC_OBJECT_HEADER_COPY_SOURCE_IF_MATCH

```
public static final java.lang.String GC_OBJECT_HEADER_COPY_SOURCE_IF_MATCH
```

Constant value: **x-goog-copy-source-if-match**

GC_OBJECT_HEADER_COPY_SOURCE_IF_NONE_MATCH

```
public static final java.lang.String GC_OBJECT_HEADER_COPY_SOURCE_IF_NONE_MATCH
```

Constant value: **x-goog-copy-source-if-none-match**

GC_OBJECT_HEADER_COPY_SOURCE_IF_UNMODIFIED_SINCE

```
public static final java.lang.String GC_OBJECT_HEADER_COPY_SOURCE_IF_UNMODIFIED_SINCE
```

Constant value: **x-goog-copy-source-if-unmodified-since**

GC_OBJECT_HEADER_COPY_SOURCE_IF_MODIFIED_SINCE

```
public static final java.lang.String GC_OBJECT_HEADER_COPY_SOURCE_IF_MODIFIED_SINCE
```

Constant value: **x-goog-copy-source-if-modified-since**

GC_OBJECT_HEADER_SERVER_ENCRYPT

```
public static final java.lang.String GC_OBJECT_HEADER_SERVER_ENCRYPT
```

Constant value: **x-goog-encryption-algorithm**

GC_OBJECT_HEADER_SERVER_ENCRYPT_KEY_SHA256

```
public static final java.lang.String GC_OBJECT_HEADER_SERVER_ENCRYPT_KEY_SHA256
```

Constant value: **x-goog-encryption-key-sha256**

GC_OBJECT_OPTION_PROJECT_ID

```
public static final java.lang.String GC_OBJECT_OPTION_PROJECT_ID
```

Constant value: **projectID**

GC_OBJECT_OPTION_SCOPE

```
public static final java.lang.String GC_OBJECT_OPTION_SCOPE
```

Constant value: **scope**

GC_OBJECT_OPTION_BUCKET

```
public static final java.lang.String GC_OBJECT_OPTION_BUCKET
```

Constant value: **bucketName**

GC_OBJECT_OPTION_MD5_ENABLE

```
public static final java.lang.String GC_OBJECT_OPTION_MD5_ENABLE
```

Constant value: **md5Enable**

GC_CONFIG_FULLPATH

```
public static final java.lang.String GC_CONFIG_FULLPATH
```

Constant value: **fullPathURI**

GC_CONFIG_DOMAIN_SUFFIX

```
public static final java.lang.String GC_CONFIG_DOMAIN_SUFFIX
```

Constant value: **domainSuffix**

GC_CONFIG_BUCKET

```
public static final java.lang.String GC_CONFIG_BUCKET
```

Constant value: **bucketName**

GC_CONFIG_SECRETACCESSKEY

```
public static final java.lang.String GC_CONFIG_SECRETACCESSKEY
```

Constant value: **secretAccessKey**

(continued from last page)

GC_CONFIG_SERVICEID

```
public static final java.lang.String GC_CONFIG_SERVICEID
```

Constant value: **serviceID**

GC_CONFIG_PROJECT_ID

```
public static final java.lang.String GC_CONFIG_PROJECT_ID
```

Constant value: **projectID**

GC_CONFIG_AUTHENTICATION_TYPE

```
public static final java.lang.String GC_CONFIG_AUTHENTICATION_TYPE
```

Constant value: **authenticationType**

GC_CONFIG_SECRETACCESS_FILE

```
public static final java.lang.String GC_CONFIG_SECRETACCESS_FILE
```

Constant value: **authenticationFile**

GC_CONFIG_MD5_ENABLE

```
public static final java.lang.String GC_CONFIG_MD5_ENABLE
```

Constant value: **md5Enable**

GC_CONFIG_SCOPE

```
public static final java.lang.String GC_CONFIG_SCOPE
```

Constant value: **scope**

Constructors

MediaTransportConfigurationGoogleCloud

```
public MediaTransportConfigurationGoogleCloud()
```

Methods

init

```
public void init()
```

(continued from last page)

getTransportHeaderOutput

```
public java.util.HashMap getTransportHeaderOutput( java.util.HashMap  
dynamictransportinformation,  
IMediaTransportObject transportObject)
```

getAuthToken

```
public void getAuthToken(String scope)
```

getGoogleCloudToken

```
public String getGoogleCloudToken(String type)
```

Package

com.wowza.wms.transport.mpeg2

com.wowza.wms.transport.mpeg2 Class AACDVBDescrptor

java.lang.Object



```

public class AACDVBDescrptor
extends Descriptor
  
```

Field Summary

public	AACType
public	AACTypeFlag
public	additionalData
public	profileAndLevel

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	AACDVBDescrptor()
public	AACDVBDescrptor (java.nio.ByteBuffer descriptorData)

Method Summary

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
------	---

String	toString()
--------	----------------------------

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#),
[getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#),
[wait](#)

Fields

profileAndLevel

```
public int profileAndLevel
```

AACTypeFlag

```
public boolean AACTypeFlag
```

AACType

```
public int AACType
```

additionalData

```
public byte additionalData
```

Constructors

AACDVBDescrptor

```
public AACDVBDescrptor()
```

AACDVBDescrptor

```
public AACDVBDescrptor(java.nio.ByteBuffer descriptorData)
```

Methods

(continued from last page)

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

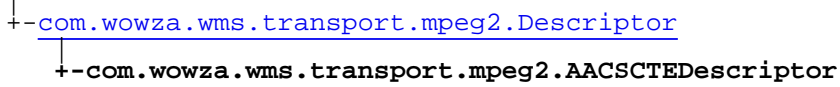
Decode descriptor data.

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class AACSCTEDescriptor

java.lang.Object



```

public class AACSCTEDescriptor
extends Descriptor
  
```

Field Summary

public	aacExtensionDataConfig
public	aacExtensionFlag
public	aacServiceType
public	ascvFlag
public	asvc
public	channelConfig
public	channelServiceFlag
public	componentNameFlag
public	componentNameTextChars
public	hasExtendedData
public	language
public	languageFlag
public	level
public	mainId
public	mainIdFlag
public	mixInfoExists
public	profile

public static final	PROFILE_HE_ADTS Value: 1
public static final	PROFILE_HE_V2 Value: 2
public static final	PROFILE_LC_ADTS Value: 0
public	receiverMixRequired

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	AACSCTEDescriptor() Instantiates a new AAC descriptor.
public	AACSCTEDescriptor(java.nio.ByteBuffer descriptorData) Instantiates a new AAC descriptor.

Method Summary

void	decodeDescriptorData(java.nio.ByteBuffer descriptorData)
String	toString()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#), [getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Fields

profile

```
public int profile
```

level

```
public int level
```

hasExtendedData

```
public boolean hasExtendedData
```

channelServiceFlag

```
public boolean channelServiceFlag
```

mainIdFlag

```
public boolean mainIdFlag
```

ascvFlag

```
public boolean ascvFlag
```

languageFlag

```
public boolean languageFlag
```

componentNameFlag

```
public boolean componentNameFlag
```

aacExtensionFlag

```
public boolean aacExtensionFlag
```

mixInfoExists

public boolean **mixInfoExists**

channelConfig

public int **channelConfig**

aacServiceType

public int **aacServiceType**

receiverMixRequired

public boolean **receiverMixRequired**

mainId

public int **mainId**

asvc

public int **asvc**

language

public byte **language**

componentNameTextChars

public char **componentNameTextChars**

aacExtensionDataConfig

public byte **aacExtensionDataConfig**

PROFILE_LC_ADTS

public static final int **PROFILE_LC_ADTS**

(continued from last page)

Constant value: **0**

PROFILE_HE_ADTS

```
public static final int PROFILE_HE_ADTS
```

Constant value: **1**

PROFILE_HE_V2

```
public static final int PROFILE_HE_V2
```

Constant value: **2**

Constructors

AACSCTEDescriptor

```
public AACSCTEDescriptor()
```

Instantiates a new AAC descriptor.

AACSCTEDescriptor

```
public AACSCTEDescriptor(java.nio.ByteBuffer descriptorData)
```

Instantiates a new AAC descriptor.

Parameters:

descriptorData - the descriptor data

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class AC3Descriptor

java.lang.Object



Direct Known Subclasses:

[EnhancedAC3Descriptor](#)

```

public class AC3Descriptor
extends Descriptor
  
```

Field Summary

public	asvc
public	asvcFlag
public	bsid
public	bsidFlag
public	componentType
public	componentTypeFlag
public	mainId
public	mainIdFlag

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#),
[DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#),
[DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#),
[DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#),
[DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#),
[DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#),
[DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#),
[DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#),
[DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#),
[DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#),
[DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#),
[DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#),
[DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#),
[DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#),
[length](#), [tag](#)

Constructor Summary

public	AC3Descriptor() Instantiates a new AC3 descriptor.
public	AC3Descriptor(java.nio.ByteBuffer descriptorData) Instantiates a new AC3 descriptor.

Method Summary

void	decodeDescriptorData(java.nio.ByteBuffer descriptorData)
int	readData(java.nio.ByteBuffer descriptorData)
byte	readFlags(java.nio.ByteBuffer descriptorData)
String	toString()
void	toStringAddData(StringBuilder sb)
void	toStringAddFlags(StringBuilder sb)

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#),
[getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#),
[wait](#)

Fields

componentTypeFlag

public boolean **componentTypeFlag**

bsidFlag

public boolean **bsidFlag**

mainIdFlag

public boolean **mainIdFlag**

asvcFlag

```
public boolean asvcFlag
```

componentType

```
public int componentType
```

bsid

```
public int bsid
```

mainId

```
public int mainId
```

asvc

```
public int asvc
```

Constructors

AC3Descriptor

```
public AC3Descriptor()
```

Instantiates a new AC3 descriptor.

AC3Descriptor

```
public AC3Descriptor(java.nio.ByteBuffer descriptorData)
```

Instantiates a new AC3 descriptor.

Parameters:

descriptorData - the descriptor data

Methods

readFlags

```
protected byte readFlags(java.nio.ByteBuffer descriptorData)
```

(continued from last page)

readData

```
protected int readData(java.nio.ByteBuffer descriptorData)
```

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toStringAddFlags

```
protected void toStringAddFlags(StringBuilder sb)
```

toStringAddData

```
protected void toStringAddData(StringBuilder sb)
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class AdaptationField

java.lang.Object

└-com.wowza.wms.transport.mpeg2.AdaptationField

```
public class AdaptationField
extends Object
```

The Class AdaptationField.

Field Summary

public	discontinuity The discontinuity.
public	dtsNextAU The DTS next au.
public	extension The extension.
public	ltwFlag The ltw flag.
public	ltwOffset The ltw offset.
public	ltwValidFlag The ltw valid flag.
public	opcrClock27 The OPCR clock27.
public	opcrClock90 The OPCR clock90.
public	opcrFlag The OPCR flag.
public	pcrClock27 The PCR clock27.
public	pcrClock90 The PCR clock90.
public	pcrFlag The PCR flag.
public	piecewiseRate The piecewise rate.
public	piecewiseRateFlag The piecewise rate flag.

public	privateData The private data.
public	privateDataFlag The private data flag.
public	privateDataLength The private data length.
public	randomAccess The random access.
public	seemlessSpliceFlag The seamless splice flag.
public	spliceCountdown The splice countdown.
public	spliceType The splice type.
public	splicingPoint The splicing point.
public	streamPriority The stream priority.

Constructor Summary

public	AdaptationField()
--------	-----------------------------------

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

discontinuity

public boolean **discontinuity**

The discontinuity.

randomAccess

public boolean **randomAccess**

The random access.

streamPriority

public boolean **streamPriority**

The stream priority.

pcrFlag

```
public boolean pcrFlag
```

The PCR flag.

opcrFlag

```
public boolean opcrFlag
```

The OPCR flag.

splicingPoint

```
public boolean splicingPoint
```

The splicing point.

privateDataFlag

```
public boolean privateDataFlag
```

The private data flag.

extension

```
public boolean extension
```

The extension.

pcrClock90

```
public long pcrClock90
```

The PCR clock90.

pcrClock27

```
public long pcrClock27
```

The PCR clock27.

opcrClock90

```
public long opcrClock90
```

The OPCR clock90.

opcrClock27

```
public long opcrClock27
```

The OPCR clock27.

splicCountdown

```
public int splicCountdown
```

(continued from last page)

The splic countdown.

privateDataLength

public int **privateDataLength**

The private data length.

privateData

public byte **privateData**

The private data.

ltwFlag

public boolean **ltwFlag**

The ltw flag.

piecewiseRateFlag

public boolean **piecewiseRateFlag**

The piecewise rate flag.

seemlessSpliceFlag

public boolean **seemlessSpliceFlag**

The seamless splice flag.

ltwValidFlag

public boolean **ltwValidFlag**

The ltw valid flag.

ltwOffset

public int **ltwOffset**

The ltw offset.

piecewiseRate

public int **piecewiseRate**

The piecewise rate.

spliceType

public int **spliceType**

The splice type.

(continued from last page)

dtsNextAU

```
public long dtsNextAU
```

The DTS next au.

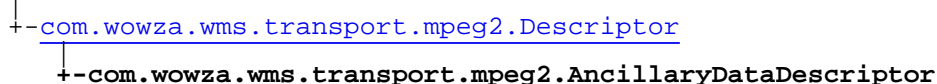
Constructors

AdaptationField

```
public AdaptationField()
```

com.wowza.wms.transport.mpeg2 Class AncillaryDataDescriptor

java.lang.Object



```

public class AncillaryDataDescriptor
extends Descriptor
  
```

Field Summary

public	AnnouncementSwitchingData
public	DABAncillaryData
public	DVDVideoAncillaryData
public	ExtendedAncillaryData
public	MPEG4ancillarydata
public	RDSviaUECP
public	rfu
public	ScaleFactorErrorCheck

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#),
[DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#),
[DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#),
[DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#),
[DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#),
[DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUF_SIZE](#),
[DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#),
[DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#),
[DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#),
[DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#),
[DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#),
[DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#),
[DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#),
[DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#),
[length](#), [tag](#)

Constructor Summary

public	AncillaryDataDescriptor()
public	AncillaryDataDescriptor (java.nio.ByteBuffer descriptorData)

Method Summary

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
String	toString()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#), [getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Fields

DVDVideoAncillaryData

public boolean **DVDVideoAncillaryData**

ExtendedAncillaryData

public boolean **ExtendedAncillaryData**

AnnouncementSwitchingData

public boolean **AnnouncementSwitchingData**

DABAncillaryData

public boolean **DABAncillaryData**

ScaleFactorErrorCheck

public boolean **ScaleFactorErrorCheck**

(continued from last page)

MPEG4ancillarydata

```
public boolean MPEG4ancillarydata
```

RDSviaUECP

```
public boolean RDSviaUECP
```

rfu

```
public boolean rfu
```

Constructors

AncillaryDataDescriptor

```
public AncillaryDataDescriptor()
```

AncillaryDataDescriptor

```
public AncillaryDataDescriptor(java.nio.ByteBuffer descriptorData)
```

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

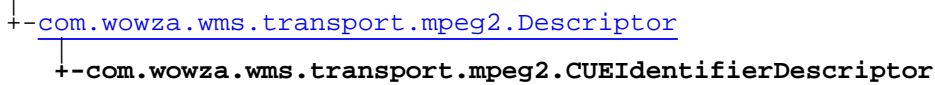
Decode descriptor data.

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class CUEIdentifierDescriptor

java.lang.Object



public class **CUEIdentifierDescriptor**
extends [Descriptor](#)

The Class CUEIdentifierDescriptor. The cue_identifier_descriptor may be used in the PMT to label PIDs that carry splice commands so that they can be differentiated as to the type or level of splice commands they carry. The cue_identifier_descriptor, when present, shall be located in the elementary descriptor loop. If the cue_identifier_descriptor is not utilized, the stream may carry any valid command in this specification.

Field Summary

public static final	CUE_STREAM_TYPE_ALL_COMMANDS The Constant CUE_STREAM_TYPE_ALL_COMMANDS. Value: 1
public static final	CUE_STREAM_TYPE_INSERT_NULL_SCHEDULE The Constant CUE_STREAM_TYPE_INSERT_NULL_SCHEDULE. Value: 0
public static final	CUE_STREAM_TYPE_SEGMENTATION The Constant CUE_STREAM_TYPE_SEGMENTATION. Value: 2
public static final	CUE_STREAM_TYPE_TIERED_SEGMENTATION The Constant CUE_STREAM_TYPE_TIERED_SEGMENTATION. Value: 4
public static final	CUE_STREAM_TYPE_TIERED_SPLICING The Constant CUE_STREAM_TYPE_TIERED_SPLICING. Value: 3
public	cueStreamType The CUE stream type.

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	CUEIdentifierDescriptor () Instantiates a new CUE identifier descriptor
public	CUEIdentifierDescriptor (java.nio.ByteBuffer descriptorData) Instantiates a new CUE identifier descriptor.

Method Summary

int	binarySize () How big is the descriptor in binary
void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toBin (java.nio.ByteBuffer buffer) Encodes the descriptor into binary format for us in transport
String	toString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#), [getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Fields

CUE_STREAM_TYPE_INSERT_NULL_SCHEDULE

public static final int **CUE_STREAM_TYPE_INSERT_NULL_SCHEDULE**

The Constant CUE_STREAM_TYPE_INSERT_NULL_SCHEDULE.
Constant value: **0**

CUE_STREAM_TYPE_ALL_COMMANDS

```
public static final int CUE_STREAM_TYPE_ALL_COMMANDS
```

The Constant CUE_STREAM_TYPE_ALL_COMMANDS.
Constant value: **1**

CUE_STREAM_TYPE_SEGMENTATION

```
public static final int CUE_STREAM_TYPE_SEGMENTATION
```

The Constant CUE_STREAM_TYPE_SEGMENTATION.
Constant value: **2**

CUE_STREAM_TYPE_TIERED_SPLICING

```
public static final int CUE_STREAM_TYPE_TIERED_SPLICING
```

The Constant CUE_STREAM_TYPE_TIERED_SPLICING.
Constant value: **3**

CUE_STREAM_TYPE_TIERED_SEGMENTATION

```
public static final int CUE_STREAM_TYPE_TIERED_SEGMENTATION
```

The Constant CUE_STREAM_TYPE_TIERED_SEGMENTATION.
Constant value: **4**

cueStreamType

```
public int cueStreamType
```

The CUE stream type.

Constructors

CUEIdentifierDescriptor

```
public CUEIdentifierDescriptor()
```

Instantiates a new CUE identifier descriptor

CUEIdentifierDescriptor

```
public CUEIdentifierDescriptor(java.nio.ByteBuffer descriptorData)
```

Instantiates a new CUE identifier descriptor.

Parameters:

descriptorData - the descriptor data

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

Encodes the descriptor into binary format for us in transport

Parameters:

buffer - a ByteBuffer to put the descriptor binary data into

binarySize

```
public int binarySize()
```

How big is the descriptor in binary

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class Descriptor

java.lang.Object

└-com.wowza.wms.transport.mpeg2.Descriptor

Direct Known Subclasses:

[SpliceSegmentationDescriptor](#), [SpliceDTMFDescriptor](#), [SpliceAvailDescriptor](#), [VideoStreamDescriptor](#), [StreamIdentifierDescriptor](#), [RegistrationDescriptor](#), [MetadataSTDDescriptor](#), [MetadataDescriptor](#), [MetaDataPointerDescriptor](#), [LanguageDescriptor](#), [ExtensionDVBDescriptor](#), [CUEIdentifierDescriptor](#), [AncillaryDataDescriptor](#), [AC3Descriptor](#), [AACSCTEDescriptor](#), [AACDVBDescriptor](#)

```
public class Descriptor
extends Object
```

The Class Descriptor.

Field Summary	
public	data The data.
public static final	DESCRIPTOR_TAG_AAC_DVB The Constant DESCRIPTOR_TAG_AAC_DVB. Value: 124
public static final	DESCRIPTOR_TAG_AAC_SCTE The Constant DESCRIPTOR_TAG_AAC_SCTE. Value: 234
public static final	DESCRIPTOR_TAG_AC3 The Constant DESCRIPTOR_TAG_AC3. Value: 106
public static final	DESCRIPTOR_TAG_ANCILLARY The Constant DESCRIPTOR_TAG_ANCILLARY. Value: 107
public static final	DESCRIPTOR_TAG_AUDIO The Constant DESCRIPTOR_TAG_AUDIO. Value: 3
public static final	DESCRIPTOR_TAG_CA The Constant DESCRIPTOR_TAG_CA. Value: 9
public static final	DESCRIPTOR_TAG_COPYRIGHT The Constant DESCRIPTOR_TAG_COPYRIGHT. Value: 13
public static final	DESCRIPTOR_TAG_CUE_IDENTIFIER The Constant DESCRIPTOR_TAG_CUE_IDENTIFIER. Value: 138

public static final	DESCRIPTOR_TAG_DATA_STREAM_ALIGN The Constant DESCRIPTOR_TAG_DATA_STREAM_ALIGN. Value: 6
public static final	DESCRIPTOR_TAG_DVBTELETEXT The Constant DESCRIPTOR_TAG_DVBTELETEXT. Value: 86
public static final	DESCRIPTOR_TAG_ENHANCED_AC3 The Constant DESCRIPTOR_TAG_ENHANCED_AC3. Value: 122
public static final	DESCRIPTOR_TAG_EXT_ES_ID The Constant DESCRIPTOR_TAG_EXT_ES_ID. Value: 32
public static final	DESCRIPTOR_TAG_EXTENSION_DVB The Constant DESCRIPTOR_TAG_EXTENSION_DVB Value: 127
public static final	DESCRIPTOR_TAG_FLEX_MUX_TIMING The Constant DESCRIPTOR_TAG_FLEX_MUX_TIMING. Value: 36
public static final	DESCRIPTOR_TAG_FMC The Constant DESCRIPTOR_TAG_FMC. Value: 31
public static final	DESCRIPTOR_TAG_FMX_BUFSIZE The Constant DESCRIPTOR_TAG_FMX_BUFSIZE. Value: 34
public static final	DESCRIPTOR_TAG_HIERARCHY The Constant DESCRIPTOR_TAG_HIERARCHY. Value: 4
public static final	DESCRIPTOR_TAG_IBP The Constant DESCRIPTOR_TAG_IBP. Value: 18
public static final	DESCRIPTOR_TAG_IOD The Constant DESCRIPTOR_TAG_IOD. Value: 29
public static final	DESCRIPTOR_TAG_ISO_639_LANG The Constant DESCRIPTOR_TAG_ISO_639_LANG. Value: 10
public static final	DESCRIPTOR_TAG_MAX_BITRATE The Constant DESCRIPTOR_TAG_MAX_BITRATE. Value: 14
public static final	DESCRIPTOR_TAG_METADATA The Constant DESCRIPTOR_TAG_METADATA. Value: 38

public static final	DESCRIPTOR_TAG_METADATA_POINTER The Constant DESCRIPTOR_TAG_METADATA_POINTER_DESCRIPTOR Value: 37
public static final	DESCRIPTOR_TAG_METADATA_STD The Constant DESCRIPTOR_TAG_METADATA_STD. Value: 39
public static final	DESCRIPTOR_TAG_MP4_AUDIO The Constant DESCRIPTOR_TAG_MP4_AUDIO. Value: 28
public static final	DESCRIPTOR_TAG_MP4_VIDEO The Constant DESCRIPTOR_TAG_MP4_VIDEO. Value: 27
public static final	DESCRIPTOR_TAG_MULTIPLE_BUF The Constant DESCRIPTOR_TAG_MULTIPLE_BUF. Value: 35
public static final	DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL The Constant DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL. Value: 12
public static final	DESCRIPTOR_TAG_MUXCODE The Constant DESCRIPTOR_TAG_MUXCODE. Value: 33
public static final	DESCRIPTOR_TAG_PRIVATE_DATA The Constant DESCRIPTOR_TAG_PRIVATE_DATA. Value: 15
public static final	DESCRIPTOR_TAG_REGISTRATION The Constant DESCRIPTOR_TAG_REGISTRATION. Value: 5
public static final	DESCRIPTOR_TAG_SL The Constant DESCRIPTOR_TAG_SL. Value: 30
public static final	DESCRIPTOR_TAG_SMOOTHING_BUF The Constant DESCRIPTOR_TAG_SMOOTHING_BUF. Value: 16
public static final	DESCRIPTOR_TAG_STD The Constant DESCRIPTOR_TAG_STD. Value: 17
public static final	DESCRIPTOR_TAG_STREAM_IDENTIFIER The Constant DESCRIPTOR_TAG_STREAM_IDENTIFIER. Value: 82
public static final	DESCRIPTOR_TAG_SYSTEM_CLOCK The Constant DESCRIPTOR_TAG_SYSTEM_CLOCK. Value: 11

public static final	DESCRIPTOR_TAG_TGT_BACKGRD_GRID The Constant DESCRIPTOR_TAG_TGT_BACKGRD_GRID. Value: 7
public static final	DESCRIPTOR_TAG_VIDEO The Constant DESCRIPTOR_TAG_VIDEO. Value: 2
public static final	DESCRIPTOR_TAG_VIDEO_WINDOWS The Constant DESCRIPTOR_TAG_VIDEO_WINDOWS. Value: 8
public	length The length.
public	tag The tag.

Constructor Summary

public	Descriptor () Instantiates a new descriptor.
public	Descriptor (java.nio.ByteBuffer descriptorData) Instantiates a new descriptor.

Method Summary

int	binarySize () How big is the descriptor in binary.
static Descriptor	decodeDescriptor (java.nio.ByteBuffer descriptorData) Decode descriptor.
void	decodeDescriptorData (java.nio.ByteBuffer descriptorData) Decode descriptor data.
String	getDataAsBase64 ()
static String	getDescriptorName (int tag)
String	getShortClassName () getShortClassName returns just the class name instead of the com.wms.xxx.xx.className
AMFDataObj	serializeAMF (SpliceInformationTableSerializeAMFContext context)
void	toBin (java.nio.ByteBuffer buffer) Encodes the descriptor into binary format for use in a transport
String	toDebugString ()
String	toString ()

Methods inherited from class java.lang.Object


```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Fields

DESCRIPTOR_TAG_VIDEO

```
public static final int DESCRIPTOR_TAG_VIDEO
```

The Constant DESCRIPTOR_TAG_VIDEO.
Constant value: **2**

DESCRIPTOR_TAG_AUDIO

```
public static final int DESCRIPTOR_TAG_AUDIO
```

The Constant DESCRIPTOR_TAG_AUDIO.
Constant value: **3**

DESCRIPTOR_TAG_HIERARCHY

```
public static final int DESCRIPTOR_TAG_HIERARCHY
```

The Constant DESCRIPTOR_TAG_HIERARCHY.
Constant value: **4**

DESCRIPTOR_TAG_REGISTRATION

```
public static final int DESCRIPTOR_TAG_REGISTRATION
```

The Constant DESCRIPTOR_TAG_REGISTRATION.
Constant value: **5**

DESCRIPTOR_TAG_DATA_STREAM_ALIGN

```
public static final int DESCRIPTOR_TAG_DATA_STREAM_ALIGN
```

The Constant DESCRIPTOR_TAG_DATA_STREAM_ALIGN.
Constant value: **6**

DESCRIPTOR_TAG_TGT_BACKGRD_GRID

```
public static final int DESCRIPTOR_TAG_TGT_BACKGRD_GRID
```

The Constant DESCRIPTOR_TAG_TGT_BACKGRD_GRID.
Constant value: **7**

DESCRIPTOR_TAG_VIDEO_WINDOWS

```
public static final int DESCRIPTOR_TAG_VIDEO_WINDOWS
```

The Constant DESCRIPTOR_TAG_VIDEO_WINDOWS.
Constant value: **8**

(continued from last page)

DESCRIPTOR_TAG_CA

```
public static final int DESCRIPTOR_TAG_CA
```

The Constant `DESCRIPTOR_TAG_CA`.
Constant value: **9**

DESCRIPTOR_TAG_ISO_639_LANG

```
public static final int DESCRIPTOR_TAG_ISO_639_LANG
```

The Constant `DESCRIPTOR_TAG_ISO_639_LANG`.
Constant value: **10**

DESCRIPTOR_TAG_SYSTEM_CLOCK

```
public static final int DESCRIPTOR_TAG_SYSTEM_CLOCK
```

The Constant `DESCRIPTOR_TAG_SYSTEM_CLOCK`.
Constant value: **11**

DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL

```
public static final int DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL
```

The Constant `DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL`.
Constant value: **12**

DESCRIPTOR_TAG_COPYRIGHT

```
public static final int DESCRIPTOR_TAG_COPYRIGHT
```

The Constant `DESCRIPTOR_TAG_COPYRIGHT`.
Constant value: **13**

DESCRIPTOR_TAG_MAX_BITRATE

```
public static final int DESCRIPTOR_TAG_MAX_BITRATE
```

The Constant `DESCRIPTOR_TAG_MAX_BITRATE`.
Constant value: **14**

DESCRIPTOR_TAG_PRIVATE_DATA

```
public static final int DESCRIPTOR_TAG_PRIVATE_DATA
```

The Constant `DESCRIPTOR_TAG_PRIVATE_DATA`.
Constant value: **15**

DESCRIPTOR_TAG_SMOOTHING_BUF

```
public static final int DESCRIPTOR_TAG_SMOOTHING_BUF
```

The Constant `DESCRIPTOR_TAG_SMOOTHING_BUF`.
Constant value: **16**

DESCRIPTOR_TAG_STD

```
public static final int DESCRIPTOR_TAG_STD
```

(continued from last page)

The Constant `DESCRIPTOR_TAG_STD`.
Constant value: **17**

DESCRIPTOR_TAG_IBP

```
public static final int DESCRIPTOR_TAG_IBP
```

The Constant `DESCRIPTOR_TAG_IBP`.
Constant value: **18**

DESCRIPTOR_TAG_MP4_VIDEO

```
public static final int DESCRIPTOR_TAG_MP4_VIDEO
```

The Constant `DESCRIPTOR_TAG_MP4_VIDEO`.
Constant value: **27**

DESCRIPTOR_TAG_MP4_AUDIO

```
public static final int DESCRIPTOR_TAG_MP4_AUDIO
```

The Constant `DESCRIPTOR_TAG_MP4_AUDIO`.
Constant value: **28**

DESCRIPTOR_TAG_IOD

```
public static final int DESCRIPTOR_TAG_IOD
```

The Constant `DESCRIPTOR_TAG_IOD`.
Constant value: **29**

DESCRIPTOR_TAG_SL

```
public static final int DESCRIPTOR_TAG_SL
```

The Constant `DESCRIPTOR_TAG_SL`.
Constant value: **30**

DESCRIPTOR_TAG_FMC

```
public static final int DESCRIPTOR_TAG_FMC
```

The Constant `DESCRIPTOR_TAG_FMC`.
Constant value: **31**

DESCRIPTOR_TAG_EXT_ES_ID

```
public static final int DESCRIPTOR_TAG_EXT_ES_ID
```

The Constant `DESCRIPTOR_TAG_EXT_ES_ID`.
Constant value: **32**

DESCRIPTOR_TAG_MUXCODE

```
public static final int DESCRIPTOR_TAG_MUXCODE
```

The Constant `DESCRIPTOR_TAG_MUXCODE`.
Constant value: **33**

DESCRIPTOR_TAG_FMX_BUFSIZE

```
public static final int DESCRIPTOR_TAG_FMX_BUFSIZE
```

The Constant DESCRIPTOR_TAG_FMX_BUFSIZE.
Constant value: **34**

DESCRIPTOR_TAG_MULTIPLE_BUF

```
public static final int DESCRIPTOR_TAG_MULTIPLE_BUF
```

The Constant DESCRIPTOR_TAG_MULTIPLE_BUF.
Constant value: **35**

DESCRIPTOR_TAG_FLEX_MUX_TIMING

```
public static final int DESCRIPTOR_TAG_FLEX_MUX_TIMING
```

The Constant DESCRIPTOR_TAG_FLEX_MUX_TIMING.
Constant value: **36**

DESCRIPTOR_TAG_METADATA_POINTER

```
public static final int DESCRIPTOR_TAG_METADATA_POINTER
```

The Constant DESCRIPTOR_TAG_METADATA_POINTER_DESCRIPTOR.
Constant value: **37**

DESCRIPTOR_TAG_METADATA

```
public static final int DESCRIPTOR_TAG_METADATA
```

The Constant DESCRIPTOR_TAG_METADATA.
Constant value: **38**

DESCRIPTOR_TAG_METADATA_STD

```
public static final int DESCRIPTOR_TAG_METADATA_STD
```

The Constant DESCRIPTOR_TAG_METADATA_STD.
Constant value: **39**

DESCRIPTOR_TAG_STREAM_IDENTIFIER

```
public static final int DESCRIPTOR_TAG_STREAM_IDENTIFIER
```

The Constant DESCRIPTOR_TAG_STREAM_IDENTIFIER.
Constant value: **82**

DESCRIPTOR_TAG_DVBTELETEXT

```
public static final int DESCRIPTOR_TAG_DVBTELETEXT
```

The Constant DESCRIPTOR_TAG_DVBTELETEXT.
Constant value: **86**

(continued from last page)

DESCRIPTOR_TAG_AC3

```
public static final int DESCRIPTOR_TAG_AC3
```

The Constant DESCRIPTOR_TAG_AC3.
Constant value: **106**

DESCRIPTOR_TAG Ancillary

```
public static final int DESCRIPTOR_TAG Ancillary
```

The Constant DESCRIPTOR_TAG Ancillary
Constant value: **107**

DESCRIPTOR_TAG Enhanced AC3

```
public static final int DESCRIPTOR_TAG Enhanced AC3
```

The Constant DESCRIPTOR_TAG Enhanced AC3.
Constant value: **122**

DESCRIPTOR_TAG AAC DVB

```
public static final int DESCRIPTOR_TAG AAC DVB
```

The Constant DESCRIPTOR_TAG AAC DVB
Constant value: **124**

DESCRIPTOR_TAG Extension DVB

```
public static final int DESCRIPTOR_TAG Extension DVB
```

The Constant DESCRIPTOR_TAG Extension DVB
Constant value: **127**

DESCRIPTOR_TAG CUE Identifier

```
public static final int DESCRIPTOR_TAG CUE Identifier
```

The Constant DESCRIPTOR_TAG CUE Identifier.
Constant value: **138**

DESCRIPTOR_TAG AAC SCTE

```
public static final int DESCRIPTOR_TAG AAC SCTE
```

The Constant DESCRIPTOR_TAG AAC SCTE.
Constant value: **234**

tag

```
public int tag
```

The tag.

length

```
public int length
```

(continued from last page)

The length.

data

public byte **data**

The data.

Constructors

Descriptor

public **Descriptor**()

Instantiates a new descriptor.

Descriptor

public **Descriptor**(java.nio.ByteBuffer descriptorData)

Instantiates a new descriptor.

Parameters:

descriptorData - the descriptor data

Methods

decodeDescriptorData

public void **decodeDescriptorData**(java.nio.ByteBuffer descriptorData)

Decode descriptor data.

Parameters:

descriptorData - the descriptor data

toBin

public void **toBin**(java.nio.ByteBuffer buffer)

Encodes the descriptor into binary format for use in a transport

Parameters:

buffer - a ByteBuffer to put the descriptor binary data into

binarySize

public int **binarySize**()

How big is the descriptor in binary.

Returns:

the total size of the descriptor in binary form, includes tag and length fields

decodeDescriptor

public static [Descriptor](#) **decodeDescriptor**(java.nio.ByteBuffer descriptorData)

(continued from last page)

Decode descriptor.

Parameters:

descriptorData - the descriptor data

Returns:

the descriptor

getShortClassName

```
public String getShortClassName()
```

getShortClassName returns just the class name instead of the com.wms.xxx.xx.className

getDescriptorName

```
public static String getDescriptorName(int tag)
```

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

getDataAsBase64

```
public String getDataAsBase64()
```

toDebugString

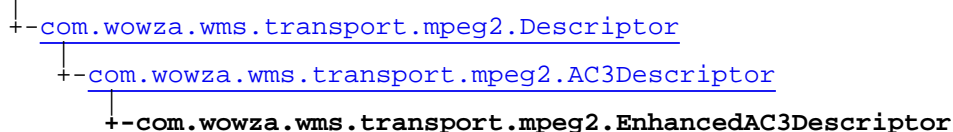
```
public String toDebugString()
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class EnhancedAC3Descriptor

java.lang.Object



public class **EnhancedAC3Descriptor**
extends [AC3Descriptor](#)

Field Summary

public	mixInfoExistsFlag
public	subStream1
public	substream1Flag
public	subStream2
public	substream2Flag
public	subStream3
public	substream3Flag

Fields inherited from class [com.wowza.wms.transport.mpeg2.AC3Descriptor](#)

[asvc](#), [asvcFlag](#), [bsid](#), [bsidFlag](#), [componentType](#), [componentTypeFlag](#), [mainId](#), [mainIdFlag](#)

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIMPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	EnhancedAC3Descriptor()
public	EnhancedAC3Descriptor (java.nio.ByteBuffer descriptorData)

Method Summary

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
int	readData (java.nio.ByteBuffer descriptorData)
byte	readFlags (java.nio.ByteBuffer descriptorData)
String	toString ()
void	toStringAddData (StringBuilder sb)
void	toStringAddFlags (StringBuilder sb)

Methods inherited from class [com.wowza.wms.transport.mpeg2.AC3Descriptor](#)

[decodeDescriptorData](#), [readData](#), [readFlags](#), [toString](#), [toStringAddData](#), [toStringAddFlags](#)

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#), [getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

mixInfoExistsFlag

public boolean **mixInfoExistsFlag**

substream1Flag

public boolean **substream1Flag**

(continued from last page)

substream2Flagpublic boolean **substream2Flag**

substream3Flagpublic boolean **substream3Flag**

subStream1public int **subStream1**

subStream2public int **subStream2**

subStream3public int **subStream3**

Constructors

EnhancedAC3Descriptorpublic **EnhancedAC3Descriptor**()

EnhancedAC3Descriptorpublic **EnhancedAC3Descriptor**(java.nio.ByteBuffer descriptorData)

Methods

readFlagsprotected byte **readFlags**(java.nio.ByteBuffer descriptorData)

readDataprotected int **readData**(java.nio.ByteBuffer descriptorData)

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toStringAddFlags

```
protected void toStringAddFlags(StringBuilder sb)
```

toStringAddData

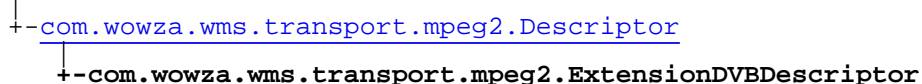
```
protected void toStringAddData(StringBuilder sb)
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class ExtensionDVBDescrptor

java.lang.Object



```

public class ExtensionDVBDescrptor
extends Descriptor
  
```

Nested Class Summary

class	ExtensionDVBDescrptor.CPEExtendedDescriptor ExtensionDVBDescrptor.CPEExtendedDescriptor
class	ExtensionDVBDescrptor.DefaultExtendedDescriptor ExtensionDVBDescrptor.DefaultExtendedDescriptor
class	ExtensionDVBDescrptor.ExtendedDescriptor ExtensionDVBDescrptor.ExtendedDescriptor
class	ExtensionDVBDescrptor.SupplementalAudioExtendedDescriptor ExtensionDVBDescrptor.SupplementalAudioExtendedDescriptor
class	ExtensionDVBDescrptor.T2MIExtendedDescriptor ExtensionDVBDescrptor.T2MIExtendedDescriptor
class	ExtensionDVBDescrptor.URILinkageExtendedDescriptor ExtensionDVBDescrptor.URILinkageExtendedDescriptor

Field Summary

public	extendedDescriptor
public	extensionTag
public static final	TAG_EXTENSION_CP_DESCRIPTOR Value: 2
public static final	TAG_EXTENSION_DTS_HD_AUDIO_STREAM_DESCRIPTOR Value: 14
public static final	TAG_EXTENSION_DTS_NEURAL_DESCRIPTOR Value: 15
public static final	TAG_EXTENSION_SUPPLEMENTAL_AUDIO_DESCRIPTOR Value: 6

public static final	TAG_EXTENSION_T2MI_DESCRIPTOR Value: 17
public static final	TAG_EXTENSION_URI_LINKAGE_DESCRIPTOR Value: 19

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	ExtensionDVBDescrptor ()
public	ExtensionDVBDescrptor (java.nio.ByteBuffer descriptorData)

Method Summary

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
String	toString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#), [getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Fields

TAG_EXTENSION_CP_DESCRIPTOR

public static final int **TAG_EXTENSION_CP_DESCRIPTOR**

(continued from last page)

Constant value: **2**

TAG_EXTENSION_SUPPLEMENTAL_AUDIO_DESCRIPTORpublic static final int **TAG_EXTENSION_SUPPLEMENTAL_AUDIO_DESCRIPTOR**Constant value: **6**

TAG_EXTENSION_DTS_HD_AUDIO_STREAM_DESCRIPTORpublic static final int **TAG_EXTENSION_DTS_HD_AUDIO_STREAM_DESCRIPTOR**Constant value: **14**

TAG_EXTENSION_DTS_NEURAL_DESCRIPTORpublic static final int **TAG_EXTENSION_DTS_NEURAL_DESCRIPTOR**Constant value: **15**

TAG_EXTENSION_T2MI_DESCRIPTORpublic static final int **TAG_EXTENSION_T2MI_DESCRIPTOR**Constant value: **17**

TAG_EXTENSION_URI_LINKAGE_DESCRIPTORpublic static final int **TAG_EXTENSION_URI_LINKAGE_DESCRIPTOR**Constant value: **19**

extensionTagpublic int **extensionTag**

extendedDescriptorpublic com.wowza.wms.transport.mpeg2.ExtensionDVBDesciptor.**ExtendedDescriptor**
extendedDescriptor

Constructors**ExtensionDVBDesciptor**public **ExtensionDVBDesciptor()**

ExtensionDVBDescrptor

```
public ExtensionDVBDescrptor(java.nio.ByteBuffer descriptorData)
```

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class ExtensionDVBDDescriptor.ExtendedDescriptor

java.lang.Object

└-com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor

Direct Known Subclasses:

[URLinkageExtendedDescriptor](#), [T2MIExtendedDescriptor](#), [SupplementalAudioExtendedDescriptor](#),
[CPEExtendedDescriptor](#), [DefaultExtendedDescriptor](#)

public abstract class **ExtensionDVBDDescriptor.ExtendedDescriptor**
extends Object

Field Summary

public	ancillaryData
--------	-------------------------------

Constructor Summary

public	ExtensionDVBDDescriptor.ExtendedDescriptor()
--------	--

Method Summary

int	consumeAncillaryData (int bytesRead, java.nio.ByteBuffer descriptorData)
abstract int	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
String	toString ()
abstract void	toString (StringBuilder sb)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

ancillaryData

public byte **ancillaryData**

Constructors

(continued from last page)

ExtensionDVBDesciptor.ExtendedDescriptor

```
public ExtensionDVBDesciptor.ExtendedDescriptor()
```

Methods

decodeDescriptorData

```
public abstract int decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

toString

```
public abstract void toString(StringBuilder sb)
```

toString

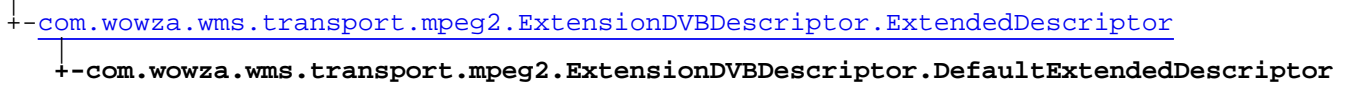
```
public String toString()
```

consumeAncillaryData

```
protected int consumeAncillaryData(int bytesRead,  
    java.nio.ByteBuffer descriptorData)
```

com.wowza.wms.transport.mpeg2 Class ExtensionDVBDescrptor.DefaultExtendedDescriptor

java.lang.Object



public class **ExtensionDVBDescrptor.DefaultExtendedDescriptor**
extends [ExtensionDVBDescrptor.ExtendedDescriptor](#)

Fields inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDescrptor.ExtendedDescriptor](#)

[ancillaryData](#)

Constructor Summary

public	ExtensionDVBDescrptor.DefaultExtendedDescriptor()
--------	---

Method Summary

int	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
-----	---

void	toString (StringBuilder sb)
------	---

Methods inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDescrptor.ExtendedDescriptor](#)

[consumeAncillaryData](#), [decodeDescriptorData](#), [toString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ExtensionDVBDescrptor.DefaultExtendedDescriptor

public **ExtensionDVBDescrptor.DefaultExtendedDescriptor**()

Methods

decodeDescriptorData

public int **decodeDescriptorData**(java.nio.ByteBuffer descriptorData)

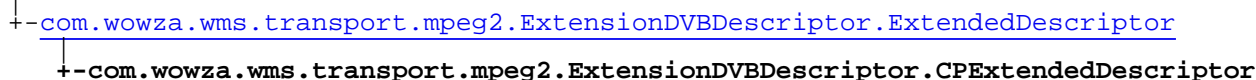
(continued from last page)

toString

```
public void toString(StringBuilder sb)
```

com.wowza.wms.transport.mpeg2 Class ExtensionDVBDDescriptor.CPEExtendedDescriptor

java.lang.Object



public class **ExtensionDVBDDescriptor.CPEExtendedDescriptor**
extends [ExtensionDVBDDescriptor.ExtendedDescriptor](#)

Field Summary

public	CPPid
public	CPSystemId

Fields inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor](#)

[ancillaryData](#)

Constructor Summary

public	ExtensionDVBDDescriptor.CPEExtendedDescriptor()
--------	---

Method Summary

int	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toString (StringBuilder sb)

Methods inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor](#)

[consumeAncillaryData](#), [decodeDescriptorData](#), [toString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

CPSystemId

public int **CPSystemId**

(continued from last page)

CPPid

```
public int CPPid
```

Constructors

ExtensionDVBDDescriptor.CPEExtendedDescriptor

```
public ExtensionDVBDDescriptor.CPEExtendedDescriptor()
```

Methods

decodeDescriptorData

```
public int decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

toString

```
public void toString(StringBuilder sb)
```

com.wowza.wms.transport.mpeg2 Class ExtensionDVBDescrptor.SupplementalAudioExtendedDescriptor

java.lang.Object

└─ [com.wowza.wms.transport.mpeg2.ExtensionDVBDescrptor.ExtendedDescriptor](#)

└─ **com.wowza.wms.transport.mpeg2.ExtensionDVBDescrptor.SupplementalAudioExtendedDescriptor**

public class **ExtensionDVBDescrptor.SupplementalAudioExtendedDescriptor**
extends [ExtensionDVBDescrptor.ExtendedDescriptor](#)

Field Summary

public	editoriaClassification
public	languageCode
public	languageCodePresent
public	mixType

Fields inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDescrptor.ExtendedDescriptor](#)

[ancillaryData](#)

Constructor Summary

public	ExtensionDVBDescrptor.SupplementalAudioExtendedDescriptor()
--------	---

Method Summary

int	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toString (StringBuilder sb)

Methods inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDescrptor.ExtendedDescriptor](#)

[consumeAncillaryData](#), [decodeDescriptorData](#), [toString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

(continued from last page)

Fields

mixType

```
public boolean mixType
```

editoriaClassification

```
public int editoriaClassification
```

languageCodePresent

```
public boolean languageCodePresent
```

languageCode

```
public byte languageCode
```

Constructors

ExtensionDVBDescrptor.SupplementalAudioExtendedDescriptor

```
public ExtensionDVBDescrptor.SupplementalAudioExtendedDescriptor()
```

Methods

decodeDescriptorData

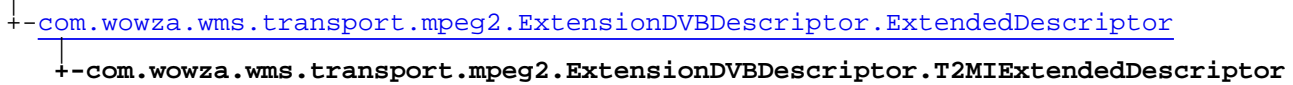
```
public int decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

toString

```
public void toString(StringBuilder sb)
```

com.wowza.wms.transport.mpeg2 Class ExtensionDVBDescrptor.T2MIExtendedDescriptor

java.lang.Object



public class **ExtensionDVBDescrptor.T2MIExtendedDescriptor**
extends [ExtensionDVBDescrptor.ExtendedDescriptor](#)

Field Summary

public	numT2MIStreamsMinusOne
public	pcrIscrCommonClockFlag
public	t2miStreamId

Fields inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDescrptor.ExtendedDescriptor](#)

[ancillaryData](#)

Constructor Summary

public	ExtensionDVBDescrptor.T2MIExtendedDescriptor()
--------	--

Method Summary

int	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toString (StringBuilder sb)

Methods inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDescrptor.ExtendedDescriptor](#)

[consumeAncillaryData](#), [decodeDescriptorData](#), [toString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

(continued from last page)

t2miStreamId

```
public int t2miStreamId
```

numT2MIStreamsMinusOne

```
public int numT2MIStreamsMinusOne
```

pcrIscrCommonClockFlag

```
public boolean pcrIscrCommonClockFlag
```

Constructors**ExtensionDVBDescrptor.T2MIExtendedDescriptor**

```
public ExtensionDVBDescrptor.T2MIExtendedDescriptor()
```

Methods**decodeDescriptorData**

```
public int decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

toString

```
public void toString(StringBuilder sb)
```

com.wowza.wms.transport.mpeg2 Class ExtensionDVBDescrptor.URILinkageExtendedDescriptor

java.lang.Object

└─ [com.wowza.wms.transport.mpeg2.ExtensionDVBDescrptor.ExtendedDescriptor](#)

└─

com.wowza.wms.transport.mpeg2.ExtensionDVBDescrptor.URILinkageExtendedDescriptor

public class **ExtensionDVBDescrptor.URILinkageExtendedDescriptor**
extends [ExtensionDVBDescrptor.ExtendedDescriptor](#)

Field Summary

public	minPollingInterval
public	uri
public	uriLength
public	uriLinkageType

Fields inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDescrptor.ExtendedDescriptor](#)

[ancillaryData](#)

Constructor Summary

public	ExtensionDVBDescrptor.URILinkageExtendedDescriptor()
--------	--

Method Summary

int	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toString (StringBuilder sb)

Methods inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDescrptor.ExtendedDescriptor](#)

[consumeAncillaryData](#), [decodeDescriptorData](#), [toString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

(continued from last page)

uriLinkageType

```
public int uriLinkageType
```

uriLength

```
public int uriLength
```

uri

```
public java.lang.String uri
```

minPollingInterval

```
public int minPollingInterval
```

Constructors

ExtensionDVBDescrptor.URILinkageExtendedDescriptor

```
public ExtensionDVBDescrptor.URILinkageExtendedDescriptor()
```

Methods

decodeDescriptorData

```
public int decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

toString

```
public void toString(StringBuilder sb)
```

com.wowza.wms.transport.mpeg2 Interface IMPEG2PacketProcessor

All Known Implementing Classes:

[MPEG2SectionAssembler](#), [MPEG2RawPacketProcessor](#), [MPEG2RawAssembler](#), [MPEG2PESPacketProcessor](#)

public interface **IMPEG2PacketProcessor**
extends

The Interface Impeg2PacketProcessor.

Method Summary

void	notifyAdaptationHeaders (boolean notify) Notify adaptation headers.
void	processMpeg2Buffer (int pid, byte[] bytes, int offset, int count) Process mpeg2 raw buffer.
void	processMpeg2Packet (MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet) Process mpeg2 packet.

Methods

notifyAdaptationHeaders

public void **notifyAdaptationHeaders**(boolean notify)

Notify adaptation headers.

Parameters:

notify - the notify

processMpeg2Packet

public void **processMpeg2Packet**([MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet](#) packet)
throws java.io.IOException

Process mpeg2 packet.

Parameters:

packet - the packet

Throws:

IOException - Signals that an I/O exception has occurred.

processMpeg2Buffer

public void **processMpeg2Buffer**(int pid,
byte[] bytes,
int offset,
int count)

(continued from last page)

Process mpeg2 raw buffer.

Parameters:

bytes

offset

count

com.wowza.wms.transport.mpeg2 Interface IMPEG2PESListener

All Known Implementing Classes:

[PESAssembler](#)

```
public interface IMPEG2PESListener
extends
```

Method Summary

void	<code>pesDataAvailable(MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet, int length, MPEG2PESPacket.PESHeader header)</code>
------	--

Methods

pesDataAvailable

```
public void pesDataAvailable(MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet,
    int length,
    MPEG2PESPacket.PESHeader header)
```

com.wowza.wms.transport.mpeg2 Interface **IMPEG2RawListener**

All Known Implementing Classes:

[RawAssembler](#)

```
public interface IMPEG2RawListener  
extends
```

Method Summary

void	processMpeg2Buffer (int pid, byte[] bytes, int offset, int count)
------	---

Methods

processMpeg2Buffer

```
public void processMpeg2Buffer(int pid,  
    byte[] bytes,  
    int offset,  
    int count)
```

com.wowza.wms.transport.mpeg2 Interface IMPEG2SectionListener

All Known Implementing Classes:

[SectionAssembler](#), [SITAssembler](#), [MPEG2TableAssembler](#)

```
public interface IMPEG2SectionListener
extends
```

The listener interface for receiving impeg2Section events. The class that is interested in processing a impeg2Section event implements this interface, and the object created with that class is registered with a component using the component's addImpeg2SectionListener method. When the impeg2Section event occurs, that object's appropriate method is invoked.

See Also:

[Impeg2SectionEvent](#)

Field Summary

public static final	INVALID The Constant INVALID. Value: -1
---------------------	--

Method Summary

void	adaptationHeader (AdaptationField field) Adaptation header.
boolean	headerNotify (MPEG2Section section) Header notify.
void	logDebug (String comment)
void	logError (String comment)
void	logError (String comment, Exception e)
void	logFatal (String comment)
void	logInfo (String comment)
boolean	logThrottleDoLog ()
void	logWarn (String comment)
void	sectionNotify (MPEG2Section section, boolean continuityError) Section notify.

Fields

(continued from last page)

INVALID

```
public static final int INVALID
```

The Constant INVALID.
Constant value: **-1**

Methods

adaptationHeader

```
public void adaptationHeader(AdaptationField field)
```

Adaptation header.

Parameters:

field - the field

headerNotify

```
public boolean headerNotify(MPEG2Section section)
```

Header notify.

Parameters:

section - the section

Returns:

true, if successful

sectionNotify

```
public void sectionNotify(MPEG2Section section,  
boolean continuityError)
```

Section notify.

Parameters:

section - the section

continuityError - the continuity error

logThrottleDoLog

```
public boolean logThrottleDoLog()
```

logFatal

```
public void logFatal(String comment)
```

logError

```
public void logError(String comment)
```

logError

```
public void logError(String comment,  
                    Exception e)
```

logWarn

```
public void logWarn(String comment)
```

logInfo

```
public void logInfo(String comment)
```

logDebug

```
public void logDebug(String comment)
```

com.wowza.wms.transport.mpeg2 Interface IMPEG2StreamListener

public interface **IMPEG2StreamListener**
extends

The listener interface for receiving impeg2Stream events. The class that is interested in processing a impeg2Stream event implements this interface, and the object created with that class is registered with a component using the component's addImpeg2StreamListener method. When the impeg2Stream event occurs, that object's appropriate method is invoked.

See Also:

[IMPEG2StreamEvent](#)

Method Summary

void	adaptationFieldAvailable (AdaptationField newAdapationField) Adaptation field available.
void	audioAvailable (MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet, int length, MPEG2PESPacket.PESHeader header) Audio available.
void	logDebug (String comment)
void	logError (String comment)
void	logError (String comment, Exception e)
void	logFatal (String comment)
void	logInfo (String comment)
boolean	logThrottleDoLog ()
void	logWarn (String comment)
void	patAvailable (ProgramAssociationTable newPAT) PAT available.
void	pmtAvailable (ProgramMapTable newPMT) PMT available.
void	sitAvailable (SpliceInformationTable newSIT) SIT available.
void	videoAvailable (MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet, int length, MPEG2PESPacket.PESHeader header) Video available.

Methods

(continued from last page)

patAvailable

```
public void patAvailable(ProgramAssociationTable newPAT)
```

PAT available.

Parameters:

newPAT - the new pat

pmtAvailable

```
public void pmtAvailable(ProgramMapTable newPMT)
```

PMT available.

Parameters:

newPMT - the new pmt

sitAvailable

```
public void sitAvailable(SpliceInformationTable newSIT)
```

SIT available.

Parameters:

newSIT - the new sit

adaptationFieldAvailable

```
public void adaptationFieldAvailable(AdaptationField newAdapationField)
```

Adaptation field available.

Parameters:

newAdapationField - the new adapation field

videoAvailable

```
public void videoAvailable(MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet,  
    int length,  
    MPEG2PESPacket.PESHeader header)
```

Video available.

Parameters:

packet - the packet
length - the length
header - the header

audioAvailable

```
public void audioAvailable(MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet,  
    int length,  
    MPEG2PESPacket.PESHeader header)
```

Audio available.

Parameters:

(continued from last page)

packet - the packet
length - the length
header - the header

logThrottleDoLog

```
public boolean logThrottleDoLog()
```

logFatal

```
public void logFatal(String comment)
```

logError

```
public void logError(String comment)
```

logError

```
public void logError(String comment,  
                    Exception e)
```

logWarn

```
public void logWarn(String comment)
```

logInfo

```
public void logInfo(String comment)
```

logDebug

```
public void logDebug(String comment)
```

com.wowza.wms.transport.mpeg2 Interface IMPEG2UserMonitorNotifyBase

All Subinterfaces:

[IMPEG2UserMonitorSectionNotify](#), [IMPEG2UserMonitorRawNotify](#), [IMPEG2UserMonitorPESNotify](#)

public interface **IMPEG2UserMonitorNotifyBase**
extends

Method Summary

void	onMonitorStart()
void	onMonitorStop()

Methods

onMonitorStart

public void **onMonitorStart**()

onMonitorStop

public void **onMonitorStop**()

com.wowza.wms.transport.mpeg2 Interface IMPEG2UserMonitorPESNotify

All Superinterfaces:

[IMPEG2UserMonitorNotifyBase](#)

public interface **IMPEG2UserMonitorPESNotify**

extends [IMPEG2UserMonitorNotifyBase](#)

Method Summary

void	onDataPES (int pid, MPEG2PESPacket.PESHeader header, byte[] buffer, int offset, int len)
------	--

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2UserMonitorNotifyBase](#)

[onMonitorStart](#), [onMonitorStop](#)

Methods

onDataPES

```
public void onDataPES(int pid,  
    MPEG2PESPacket.PESHeader header,  
    byte[] buffer,  
    int offset,  
    int len)
```

com.wowza.wms.transport.mpeg2 Interface IMPEG2UserMonitorRawNotify

All Superinterfaces:

[IMPEG2UserMonitorNotifyBase](#)

public interface **IMPEG2UserMonitorRawNotify**
extends [IMPEG2UserMonitorNotifyBase](#)

Method Summary

void	onDataRaw (int pid, byte[] bytes, int offset, int count)
------	--

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2UserMonitorNotifyBase](#)

[onMonitorStart](#), [onMonitorStop](#)

Methods

onDataRaw

```
public void onDataRaw(int pid,  
    byte[] bytes,  
    int offset,  
    int count)
```


com.wowza.wms.transport.mpeg2 Interface IMPEG2UserMonitorSectionNotify

All Superinterfaces:

[IMPEG2UserMonitorNotifyBase](#)

public interface **IMPEG2UserMonitorSectionNotify**
extends [IMPEG2UserMonitorNotifyBase](#)

Method Summary

void	onDataSection (int pid, AdaptationField field, MPEG2Section section)
------	--

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2UserMonitorNotifyBase](#)

[onMonitorStart](#), [onMonitorStop](#)

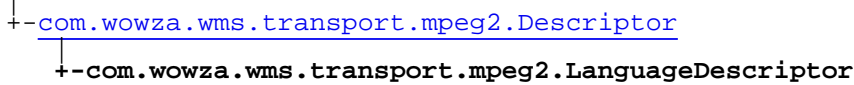
Methods

onDataSection

```
public void onDataSection(int pid,  
    AdaptationField field,  
    MPEG2Section section)
```

com.wowza.wms.transport.mpeg2 Class LanguageDescriptor

java.lang.Object



public class **LanguageDescriptor**
extends [Descriptor](#)

The Class LanguageDescriptor. The language descriptor is used to specify the language of the associated program element

Nested Class Summary

class	LanguageDescriptor.LanguageCode LanguageDescriptor.LanguageCode
-------	--

Field Summary

public	codes The codes.
--------	-------------------------------------

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	LanguageDescriptor() Instantiates a new language descriptor.
public	LanguageDescriptor(java.nio.ByteBuffer descriptorData) Instantiates a new language descriptor.

Method Summary

int	binarySize() How big is the language descriptor in binary.
-----	---

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toBin (java.nio.ByteBuffer buffer) Encodes the Language descriptor into binary form for use in transport
String	toString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#),
[getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

Fields

codes

```
public java.util.Map codes
```

The codes.

Constructors

LanguageDescriptor

```
public LanguageDescriptor()
```

Instantiates a new language descriptor.

LanguageDescriptor

```
public LanguageDescriptor(java.nio.ByteBuffer descriptorData)
```

Instantiates a new language descriptor.

Parameters:

descriptorData - the descriptor data

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

(continued from last page)

Encodes the Language descriptor into binary form for use in transport

Parameters:

buffer - ByteBuffer to put the binary data

binarySize

```
public int binarySize()
```

How big is the language descriptor in binary.

Returns:

the total size of the language descriptor in binary form, includes tag and length fields

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class LanguageDescriptor.LanguageCode

java.lang.Object

└─com.wowza.wms.transport.mpeg2.LanguageDescriptor.LanguageCode

```
public class LanguageDescriptor.LanguageCode
extends Object
```

The Class LanguageCode.

Field Summary

public	code ISO-639~language-code - Identifies the language or languages used by the associated program element.
public	type The audio type specifies the associated stream using the table below 0x00 Undefined 0x01 Clean Effects 0x02 Hearing Impaired 0x03 Visual Imparted commentary 0x04 - 0xFF reserved

Constructor Summary

public	LanguageDescriptor.LanguageCode()
--------	---

Method Summary

int	binarySize() How big is the language code in binary.
void	toBin(java.nio.ByteBuffer buffer) Encodes the Language code into binary form for use in transport
String	toString()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

code

```
public java.lang.String code
```

ISO-639~language-code - Identifies the language or languages used by the associated program element. The ISO-639-language-code contains a 3-character code as specified by ISO 639, Part 2. Each character is coded into 8 bits according to ISO 8859-1 and inserted in order into this 24-bit field. In the case of multilingual audio streams the sequence of ISO-639-language-code fields shall reflect the content of the audio stream.

type

```
public int type
```

The audio type specifies the associated stream using the table below 0x00 Undefined 0x01 Clean Effects 0x02 Hearing Impaired 0x03 Visual Impaired commentary 0x04 - 0xFF reserved

Constructors

LanguageDescriptor.LanguageCode

```
public LanguageDescriptor.LanguageCode()
```

Methods

binarySize

```
public int binarySize()
```

How big is the language code in binary.

Returns:

the total size of the language code in binary form

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

Encodes the Language code into binary form for use in transport

Parameters:

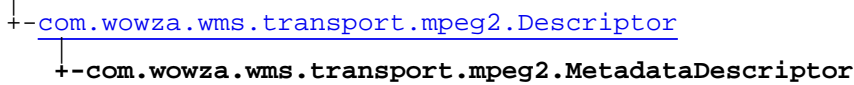
buffer - ByteBuffer to put the binary data

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class MetadataDescriptor

java.lang.Object



public class **MetadataDescriptor**
extends [Descriptor](#)

Field Summary

public	decoderConfigFlags
public	DSMCCFlag
public	metadataApplicationFormat
public	metadataFormat
public	metadataFormatIdentifier
public	metadataServiceId

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#),
[DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#),
[DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#),
[DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#),
[DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#),
[DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#),
[DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#),
[DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#),
[DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#),
[DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#),
[DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#),
[DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#),
[DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#),
[DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#),
[length](#), [tag](#)

Constructor Summary

public	MetadataDescriptor()
public	MetadataDescriptor (java.nio.ByteBuffer descriptorData)

Method Summary

int	binarySize()
void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toBin (java.nio.ByteBuffer buffer)
String	toString()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#), [getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

metadataApplicationFormat

```
public int metadataApplicationFormat
```

metadataFormat

```
public int metadataFormat
```

metadataFormatIdentifier

```
public int metadataFormatIdentifier
```

metadataServiceId

```
public int metadataServiceId
```

decoderConfigFlags

```
public int decoderConfigFlags
```


(continued from last page)

DSMCCFlag

```
public int DSMCCFlag
```

Constructors

MetadataDescriptor

```
public MetadataDescriptor()
```

MetadataDescriptor

```
public MetadataDescriptor(java.nio.ByteBuffer descriptorData)
```

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

Encodes the descriptor into binary format for use in a transport

binarySize

```
public int binarySize()
```

How big is the descriptor in binary.

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class MetadataPointerDescriptor

java.lang.Object

├- [com.wowza.wms.transport.mpeg2.Descriptor](#)

└- **com.wowza.wms.transport.mpeg2.MetadataPointerDescriptor**

public class **MetadataPointerDescriptor**

extends [Descriptor](#)

Field Summary

public static final	METADATA_APPLICATION_FORMAT_APPLE Value: 65535
public static final	METADATA_FORMAT_IDENTIFIER_APPLE Value: 1229206304
public	metadataApplicationFormat
public	metadataFormat
public	metadataFormatIdentifier
public	metadataLocatorRecordFlag
public	metadataServiceId
public	MPEGCarriageFlags
public	programNumber

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	MetadataPointerDescriptor()
public	MetadataPointerDescriptor (java.nio.ByteBuffer descriptorData)

Method Summary

int	binarySize()
void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toBin (java.nio.ByteBuffer buffer)
String	toString()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#), [getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Fields

METADATA_APPLICATION_FORMAT_APPLE

public static final int **METADATA_APPLICATION_FORMAT_APPLE**

Constant value: **65535**

(continued from last page)

METADATA_FORMAT_IDENTIFIER_APPLE

```
public static final int METADATA_FORMAT_IDENTIFIER_APPLE
```

Constant value: **1229206304****metadataApplicationFormat**

```
public int metadataApplicationFormat
```

metadataFormat

```
public int metadataFormat
```

metadataFormatIdentifier

```
public int metadataFormatIdentifier
```

metadataServiceId

```
public int metadataServiceId
```

metadataLocatorRecordFlag

```
public boolean metadataLocatorRecordFlag
```

MPEGCarriageFlags

```
public int MPEGCarriageFlags
```

programNumber

```
public int programNumber
```

Constructors**MetadataPointerDescriptor**

```
public MetadataPointerDescriptor()
```

(continued from last page)

MetadataPointerDescriptor

```
public MetadataPointerDescriptor(java.nio.ByteBuffer descriptorData)
```

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

Encodes the descriptor into binary format for use in a transport

binarySize

```
public int binarySize()
```

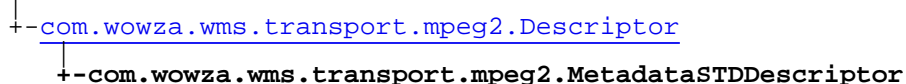
How big is the descriptor in binary.

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class MetadataSTDDescriptor

java.lang.Object



public class **MetadataSTDDescriptor**
extends [Descriptor](#)

Field Summary

public	metadataBufferSize
public	metadataInputLeakRate
public	metadataOutputLeakRate

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	MetadataSTDDescriptor()
public	MetadataSTDDescriptor (java.nio.ByteBuffer descriptorData)

Method Summary

int	binarySize()
void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)

String	toString()
--------	----------------------------

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#),
[getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#),
[wait](#)

Fields

metadataInputLeakRate

```
public int metadataInputLeakRate
```

metadataBufferSize

```
public int metadataBufferSize
```

metadataOutputLeakRate

```
public int metadataOutputLeakRate
```

Constructors

MetadataSTDDescriptor

```
public MetadataSTDDescriptor()
```

MetadataSTDDescriptor

```
public MetadataSTDDescriptor(java.nio.ByteBuffer descriptorData)
```

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

(continued from last page)

binarySize

```
public int binarySize()
```

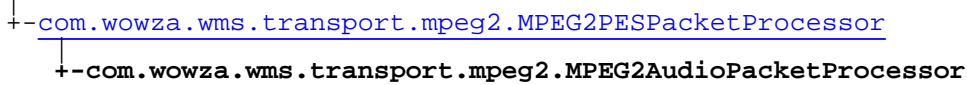
How big is the descriptor in binary.

toString

```
public String toString()
```


com.wowza.wms.transport.mpeg2 Class MPEG2AudioPacketProcessor

java.lang.Object



All Implemented Interfaces:

[IMPEG2PacketProcessor](#)

```
public class MPEG2AudioPacketProcessor
extends MPEG2PESPacketProcessor
```

The Class MPEG2AudioPacketProcessor.

Fields inherited from class [com.wowza.wms.transport.mpeg2.MPEG2PESPacketProcessor](#)

[continuityCounter](#), [continuityError](#), [currentPacket](#), [INVALID](#), [listener](#), [pesPacket](#), [PID](#)

Constructor Summary

public	MPEG2AudioPacketProcessor (int PID, IMPEG2StreamListener listener) Instantiates a new MPEG2 audio packet processor.
--------	--

Method Summary

void	handlePESData (int length, MPEG2PESPacket.PESHeader header)
------	---

Methods inherited from class [com.wowza.wms.transport.mpeg2.MPEG2PESPacketProcessor](#)

[checkContinuity](#), [findPESHeader](#), [getCodec](#), [handlePESData](#), [notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#), [processPESHeader](#), [setCodec](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2PacketProcessor](#)

[notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#)

Constructors

MPEG2AudioPacketProcessor

```
public MPEG2AudioPacketProcessor(int PID,
                                IMPEG2StreamListener listener)
```

Instantiates a new MPEG2 audio packet processor.

(continued from last page)

Parameters:

PID - the pid

listener - the listener

Methods

handlePESData

```
public void handlePESData(int length,  
    MPEG2PESPacket.PESHeader header)
```

Handle pes data.

com.wowza.wms.transport.mpeg2 Class MPEG2MPTS

java.lang.Object

└─com.wowza.wms.transport.mpeg2.MPEG2MPTS

```
public class MPEG2MPTS
extends Object
```

The Class mpeg2MPTS.

Nested Class Summary

class	MPEG2MPTS.MPEG2MPTSBuffer MPEG2MPTS.MPEG2MPTSBuffer
-------	--

Field Summary

public static final	INVALID The Constant INVALID. Value: -1
public	packetCount The packet count.
public static final	PID_DATATYPE_PES Value: 1
public static final	PID_DATATYPE_RAW Value: 3
public static final	PID_DATATYPE_SECTION Value: 2
public static final	PID_DATATYPE_UNKNOWN Value: 0
public static final	TS_PACKETLEN The Constant TS_PACKETLEN. Value: 188
public static final	TS_SYNCBYTE The Constant TS_SYNCBYTE. Value: 71

Constructor Summary

public	MPEG2MPTS()
--------	-----------------------------

Method Summary

boolean	getHasM2TSTimeCodes()
int	getPCRPid() Gets the pCR pid.
String	getShortClassName() getShortClassName returns just the class name instead of the com.wms.xxx.xx.className
void	listen(IMPEG2StreamListener who) Listen.
void	processNewBuffer(byte[] bytes, int offset, int count) Process new buffer.
void	setHasM2TSTimeCodes(boolean hasM2TSTimeCodes)
void	setPCRPid(int PID) Sets the pcr pid.
void	startStream(int PID, IMPEG2PacketProcessor parser) Start stream.
void	startStreamAudio(int PID, int codec) Start stream audio.
void	startStreamPAT() Start stream pat.
void	startStreamPMT(ProgramAssociationTable.ProgramEntry program) Start stream pmt.
void	startStreamSCTE(int PID) Start stream scte.
void	startStreamVideo(int PID, int codec) Start stream video.
void	startUserMonitorPES(int PID, IMPEG2UserMonitorPESNotify monitor)
void	startUserMonitorRaw(int PID, IMPEG2UserMonitorRawNotify monitor)
void	startUserMonitorSection(int PID, IMPEG2UserMonitorSectionNotify monitor)
void	stopStream(int PID) Stop stream.
void	stopStreamPMT(ProgramAssociationTable.ProgramEntry program) Stop stream pmt.
void	stopStreamSCTE(int PID) Stop stream scte.

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Fields

PID_DATATYPE_UNKNOWN

```
public static final int PID_DATATYPE_UNKNOWN
```

Constant value: **0**

PID_DATATYPE_PES

```
public static final int PID_DATATYPE_PES
```

Constant value: **1**

PID_DATATYPE_SECTION

```
public static final int PID_DATATYPE_SECTION
```

Constant value: **2**

PID_DATATYPE_RAW

```
public static final int PID_DATATYPE_RAW
```

Constant value: **3**

INVALID

```
public static final int INVALID
```

The Constant INVALID.
Constant value: **-1**

TS_PACKETLEN

```
public static final int TS_PACKETLEN
```

The Constant TS_PACKETLEN.
Constant value: **188**

TS_SYNCBYTE

```
public static final byte TS_SYNCBYTE
```

The Constant TS_SYNCBYTE.
Constant value: **71**

(continued from last page)

packetCount

```
public long packetCount
```

The packet count.

Constructors

MPEG2MPTS

```
public MPEG2MPTS()
```

Methods

getHasM2TSTimeCodes

```
public boolean getHasM2TSTimeCodes()
```

setHasM2TSTimeCodes

```
public void setHasM2TSTimeCodes(boolean hasM2TSTimeCodes)
```

listen

```
public void listen(IMPEG2StreamListener who)
```

Listen.

Parameters:

who - the who

startStreamPAT

```
public void startStreamPAT()
```

Start stream pat.

startStreamPMT

```
public void startStreamPMT(ProgramAssociationTable.ProgramEntry program)
```

Start stream pmt.

Parameters:

program - the program

stopStreamPMT

```
public void stopStreamPMT(ProgramAssociationTable.ProgramEntry program)
```

Stop stream pmt.

(continued from last page)

Parameters:

program - the program

startStreamVideo

```
public void startStreamVideo(int PID,  
                             int codec)
```

Start stream video.

Parameters:

PID - the pid

startStreamAudio

```
public void startStreamAudio(int PID,  
                             int codec)
```

Start stream audio.

Parameters:

PID - the pid

setPCRpid

```
public void setPCRpid(int PID)
```

Sets the pcr pid.

Parameters:

PID - the pid

getPCRpid

```
public int getPCRpid()
```

Gets the pCR pid.

Returns:

the pCR pid

startStreamSCTE

```
public void startStreamSCTE(int PID)
```

Start stream scte.

Parameters:

PID - the pid

startUserMonitorPES

```
public void startUserMonitorPES(int PID,  
                                IMPEG2UserMonitorPESNotify monitor)
```

(continued from last page)

startUserMonitorRaw

```
public void startUserMonitorRaw(int PID,  
    IMPEG2UserMonitorRawNotify monitor)
```

startUserMonitorSection

```
public void startUserMonitorSection(int PID,  
    IMPEG2UserMonitorSectionNotify monitor)
```

stopStreamSCTE

```
public void stopStreamSCTE(int PID)
```

Stop stream scte.

Parameters:

PID - the pid

startStream

```
public void startStream(int PID,  
    IMPEG2PacketProcessor parser)
```

Start stream.

Parameters:

PID - the pid
parser - the parser

stopStream

```
public void stopStream(int PID)
```

Stop stream.

Parameters:

PID - the pid

processNewBuffer

```
public void processNewBuffer(byte[] bytes,  
    int offset,  
    int count)  
throws java.io.IOException
```

Process new buffer.

Parameters:

bytes - the bytes
offset - the offset
count - the count

Throws:

IOException - Signals that an I/O exception has occurred.

getShortClassName

```
public String getShortClassName()
```

getShortClassName returns just the class name instead of the com.wms.xxx.xx.className

com.wowza.wms.transport.mpeg2 Class MPEG2MPTS.MPEG2MPTSBuffer

java.lang.Object

└─com.wowza.wms.transport.mpeg2.MPEG2MPTS.MPEG2MPTSBuffer

```
public class MPEG2MPTS.MPEG2MPTSBuffer
extends Object
```

The Class MPEG2MPTSBuffer.

Nested Class Summary

class	MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet
-------	--

Constructor Summary

public	MPEG2MPTS.MPEG2MPTSBuffer (byte[] buf, int offset, int length) Instantiates a new MPEG2 mpts buffer.
--------	---

Method Summary

MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet	readPacket() Read packet.
---	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MPEG2MPTS.MPEG2MPTSBuffer

```
public MPEG2MPTS.MPEG2MPTSBuffer(byte[] buf,
                                   int offset,
                                   int length)
```

Instantiates a new MPEG2 mpts buffer.

Parameters:

buf - the buf
offset - the offset
length - the length

Methods

(continued from last page)

readPacket

```
public MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet readPacket()  
    throws IllegalArgumentException
```

Read packet.

Returns:

the MPEG2 packet

Throws:

[IllegalArgumentException](#) - the illegal argument exception

com.wowza.wms.transport.mpeg2 Class MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet

java.lang.Object

└-com.wowza.wms.transport.mpeg2.MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet

```
public class MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet
extends Object
```

The Class MPEG2Packet.

Field Summary

public static final	ADAPTATION_CONTROL_ADAPATION_ONLY The Constant ADAPTATION_CONTROL_ADAPATION_ONLY. Value: 2
public static final	ADAPTATION_CONTROL_BOTH The Constant ADAPTATION_CONTROL_BOTH. Value: 3
public static final	ADAPTATION_CONTROL_PAYLOAD_ONLY The Constant ADAPTATION_CONTROL_PAYLOAD_ONLY. Value: 1
public static final	ADAPTATION_FIELD_PRESENT_MASK The Constant ADAPTATION_FIELD_PRESENT_MASK. Value: 2
public	adaptationFieldControl The adaptation field control.
public	continuityCounter The continuity counter.
public static final	PAYLOAD_PRESENT_MASK The Constant PAYLOAD_PRESENT_MASK. Value: 1
public	PID The pid.
public	PUSI The pusi.
public	transportError The transport error.
public	transportPriority The transport priority.
public	transportScrambling The transport scrambling.

Constructor Summary

public	MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet()
--------	---

Method Summary

AdaptationField	adaptationFieldRead() Adaptation field read.
void	clear() Clear.
String	dumpPacket (String contextStr) Dump packet.
boolean	LoadPacketData() Load packet data.
int	payloadAvailable() Payload available.
void	payloadMark() Payload mark.
int	payloadRead() Payload read.
boolean	payloadRead (byte[] bytes, int offset, int length) Payload read.
PacketFragment	payloadReadFragment (int length)
int	payloadReadInt (int count, int mask) Payload read int.
void	payloadReset() Payload reset.
boolean	payloadSkip (int count) Payload skip.
String	toString()
String	toString (int count) To string.
String	toString (int count, String contextStr)
String	toString (String contextStr)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

(continued from last page)

Fields

ADAPTATION_CONTROL_PAYLOAD_ONLY

```
public static final byte ADAPTATION_CONTROL_PAYLOAD_ONLY
```

The Constant ADAPTATION_CONTROL_PAYLOAD_ONLY.
Constant value: **1**

ADAPTATION_CONTROL_ADAPATION_ONLY

```
public static final byte ADAPTATION_CONTROL_ADAPATION_ONLY
```

The Constant ADAPTATION_CONTROL_ADAPATION_ONLY.
Constant value: **2**

ADAPTATION_CONTROL_BOTH

```
public static final byte ADAPTATION_CONTROL_BOTH
```

The Constant ADAPTATION_CONTROL_BOTH.
Constant value: **3**

ADAPTATION_FIELD_PRESENT_MASK

```
public static final byte ADAPTATION_FIELD_PRESENT_MASK
```

The Constant ADAPTATION_FIELD_PRESENT_MASK.
Constant value: **2**

PAYLOAD_PRESENT_MASK

```
public static final byte PAYLOAD_PRESENT_MASK
```

The Constant PAYLOAD_PRESENT_MASK.
Constant value: **1**

transportError

```
public boolean transportError
```

The transport error.

PUSI

```
public boolean PUSI
```

The pusi.

transportPriority

```
public boolean transportPriority
```

The transport priority.

PID

```
public int PID
```

(continued from last page)

The pid.

transportScrambling

```
public byte transportScrambling
```

The transport scrambling.

adaptationFieldControl

```
public byte adaptationFieldControl
```

The adaptation field control.

continuityCounter

```
public byte continuityCounter
```

The continuity counter.

Constructors

MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet

```
public MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet()
```

Methods

clear

```
public void clear()
```

Clear.

LoadPacketData

```
public boolean LoadPacketData()  
    throws IllegalArgumentException
```

Load packet data.

Returns:

true, if successful

Throws:

IllegalArgumentException - the illegal argument exception

adaptationFieldRead

```
public AdaptationField adaptationFieldRead()
```

Adaptation field read.

Returns:

the adaptation field

payloadRead

```
public int payloadRead()
```

Payload read.

Returns:
the int

payloadRead

```
public boolean payloadRead(byte[] bytes,  
    int offset,  
    int length)
```

Payload read.

Parameters:
bytes - the bytes
offset - the offset
length - the length

Returns:
the int

payloadReadFragment

```
public PacketFragment payloadReadFragment(int length)
```

payloadReadInt

```
public int payloadReadInt(int count,  
    int mask)
```

Payload read int.

Parameters:
count - the count
mask - the mask

Returns:
the int

payloadSkip

```
public boolean payloadSkip(int count)
```

Payload skip.

Parameters:
count - the count

Returns:
the int

(continued from last page)

payloadAvailable

```
public int payloadAvailable()
```

Payload available.

Returns:

the int

payloadMark

```
public void payloadMark()
```

Payload mark.

payloadReset

```
public void payloadReset()
```

Payload reset.

toString

```
public String toString()
```

toString

```
public String toString(String contextStr)
```

toString

```
public String toString(int count)
```

To string.

Parameters:

count - the count

Returns:

the string

toString

```
public String toString(int count,  
                        String contextStr)
```

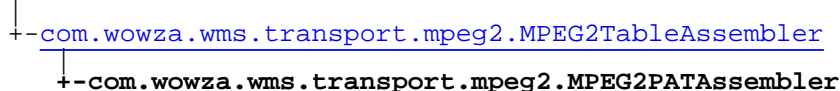
dumpPacket

```
public String dumpPacket(String contextStr)
```

Dump packet.

com.wowza.wms.transport.mpeg2 Class MPEG2PATAssembler

java.lang.Object



All Implemented Interfaces:

[IMPEG2SectionListener](#)

```
public class MPEG2PATAssembler
extends MPEG2TableAssembler
```

The Class mpeg2PATAssembler.

Field Summary

protected	deliverSection The deliver section.
public	listeners The listeners.
public	PAT The pat.
public static final	PAT_PID The Constant PAT_PID. Value: 0

Fields inherited from class [com.wowza.wms.transport.mpeg2.MPEG2TableAssembler](#)

[currentVersion](#), [deliver](#), [INVALID](#), [sections](#)

Fields inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[INVALID](#)

Constructor Summary

public	MPEG2PATAssembler()
--------	-------------------------------------

Method Summary

void	adaptationHeader (AdaptationField field)
void	buildTable ()
boolean	headerNotify (MPEG2Section section)

void	logDebug (String comment)
void	logError (String comment)
void	logError (String comment, Exception e)
void	logFatal (String comment)
void	logInfo (String comment)
boolean	logThrottleDoLog ()
void	logWarn (String comment)
void	monitorStart (IMPEG2StreamListener listener, MPEG2MPTS stream) Monitor start.
void	monitorStop (IMPEG2StreamListener listener) Monitor stop.
boolean	tableExist ()
int	tableVersion ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.MPEG2TableAssembler](#)

[adaptationHeader](#), [buildTable](#), [getShortClassName](#), [headerNotify](#), [sectionNotify](#),
[tableExist](#), [tableVersion](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[adaptationHeader](#), [headerNotify](#), [logDebug](#), [logError](#), [logError](#), [logFatal](#), [logInfo](#),
[logThrottleDoLog](#), [logWarn](#), [sectionNotify](#)

Fields

PAT_PID

```
public static final int PAT_PID
```

The Constant PAT_PID.
Constant value: **0**

PAT

```
public com.wowza.wms.transport.mpeg2.ProgramAssociationTable PAT
```

(continued from last page)

The pat.

listeners

```
public java.util.List listeners
```

The listeners.

deliverSection

```
protected boolean deliverSection
```

The deliver section.

Constructors

MPEG2PATAssembler

```
public MPEG2PATAssembler()
```

Methods

adaptationHeader

```
public void adaptationHeader(AdaptationField field)
```

headerNotify

```
public boolean headerNotify(MPEG2Section section)
```

tableExist

```
public boolean tableExist()
```

Table exist.

tableVersion

```
public int tableVersion()
```

Table version.

buildTable

```
public void buildTable()
```

Builds the table.

monitorStart

```
public void monitorStart(IMPEG2StreamListener listener,  
    MPEG2MPTS stream)
```

(continued from last page)

Monitor start.

Parameters:

listener - the listener
stream - the stream

monitorStop

```
public void monitorStop(IMPEG2StreamListener listener)
```

Monitor stop.

Parameters:

listener - the listener

logThrottleDoLog

```
public boolean logThrottleDoLog()
```

logFatal

```
public void logFatal(String comment)
```

logError

```
public void logError(String comment)
```

logError

```
public void logError(String comment,  
    Exception e)
```

logWarn

```
public void logWarn(String comment)
```

logInfo

```
public void logInfo(String comment)
```

logDebug

```
public void logDebug(String comment)
```

com.wowza.wms.transport.mpeg2

Class MPEG2PESAssembler

java.lang.Object



All Implemented Interfaces:

[IMPEG2PacketProcessor](#)

```

public class MPEG2PESAssembler
extends MPEG2PESPacketProcessor
  
```

Field Summary

public	listeners The listeners.
--------	---

Fields inherited from class [com.wowza.wms.transport.mpeg2.MPEG2PESPacketProcessor](#)

[continuityCounter](#), [continuityError](#), [currentPacket](#), [INVALID](#), [listener](#), [pesPacket](#), [PID](#)

Constructor Summary

public	MPEG2PESAssembler()
--------	-------------------------------------

Method Summary

void	handlePESData (int length, MPEG2PESPacket.PESHeader header)
------	---

Methods inherited from class [com.wowza.wms.transport.mpeg2.MPEG2PESPacketProcessor](#)

[checkContinuity](#), [findPESHeader](#), [getCodec](#), [handlePESData](#), [notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#), [processPESHeader](#), [setCodec](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2PacketProcessor](#)

[notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#)

Fields

(continued from last page)

listeners

```
public java.util.List listeners
```

The listeners.

Constructors

MPEG2PESAssembler

```
public MPEG2PESAssembler()
```

Methods

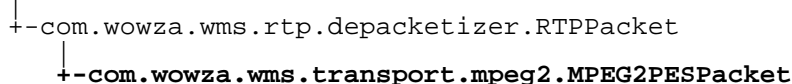
handlePESData

```
public void handlePESData(int length,  
    MPEG2PESPacket.PESHeader header)
```

Handle pes data.

com.wowza.wms.transport.mpeg2 Class MPEG2PESPacket

java.lang.Object



```

public class MPEG2PESPacket
extends com.wowza.wms.rtp.depaketizer.RTPPacket
  
```

Nested Class Summary

class	MPEG2PESPacket.PESHeader MPEG2PESPacket.PESHeader
-------	--

Field Summary

public	bufferPos
public	continuityCounter
public	continuityCouterError
public static final	INVALID Value: -1
public	packetStarted

Fields inherited from class com.wowza.wms.rtp.depaketizer.RTPPacket

codec, debugLog, fixH264VideoNALLenStartcodeMix, fixH264WrappingProblems, fragments, frameType, getProperties, isAllISliceKey, isISliceKey, isRTPPacketDebug, nalUnitFilter, sendCodecConfigChanges, seq, size, timecode, timecodeMillis, timeoffset, type

Constructor Summary

public	MPEG2PESPacket()
public	MPEG2PESPacket(long seq, long timecode)

Method Summary

void	addFragment (PacketFragment fragment)
void	clear()

java.util.Map	findPESHeaders()
---------------	----------------------------------

Methods inherited from class com.wowza.wms.rtp.depaketizer.RTPPacket

addFragment, addFragment, clearFragments, clone, decodeAud, decodeAudNALUnit, getBytes, getCodec, getFirstFragment, getFragments, getFrameType, getH264CodecConfigInfo, getH265CodecConfigInfo, getLastFragment, getSeq, getSize, getTimecode, getTimecodeMillis, getTimeoffset, getType, h264StartCodesToLengths, h265StartCodesToLengths, incSize, isDebugLog, isFixH264WrappingProblems, setCodec, setDebugLog, setFixH264WrappingProblems, setFrameType, setSeq, setSize, setTimecode, setTimecodeMillis, setTimeoffset, setType, toArray, write, write

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

INVALID

public static final int **INVALID**

Constant value: **-1**

continuityCounter

public int **continuityCounter**

continuityCouterError

public boolean **continuityCouterError**

bufferPos

public int **bufferPos**

packetStarted

public boolean **packetStarted**

Constructors

(continued from last page)

MPEG2PESPacket

```
public MPEG2PESPacket()
```

MPEG2PESPacket

```
public MPEG2PESPacket(long seq,  
                       long timecode)
```

Methods

clear

```
public void clear()
```

addFragment

```
public void addFragment(PacketFragment fragment)
```

findPESHeaders

```
public java.util.Map findPESHeaders()
```

com.wowza.wms.transport.mpeg2 Class MPEG2PESPacket.PESHeader

java.lang.Object

└─com.wowza.wms.transport.mpeg2.MPEG2PESPacket.PESHeader

public class **MPEG2PESPacket.PESHeader**
extends Object

The Class PESHeader.

Field Summary

public	additionalCopyInfoFlag The pes additional copy info flag.
public	copyright The pes copyright.
public	CRCFlag The pes pescrc flag.
public	dataAlignment The pes data alignment.
public	DSMTrickMode The pes dsm trick mode.
public	DTS The pes dts.
public	ESCRBase The pes escr base.
public	escrBuf The escr buf.
public	ESCRExt The pes escr ext.
public	ESCRFlag The pes escr flag.
public	ESRate The pes es rate.
public	ESRateFlag The pes es rate flag.
public	extFlag The pes pes ext flag.
public	length The pes packet len.

public	originalStuffLen
public	originalOrCopy The pes original or copy.
public	packetDataBytes The pes packet data byte.
public	packetHeaderBytes
public	packHeaderFieldFlag The pes pack header field flag.
public static final	PES_DSMCC_STREAM The Constant PES_DSMCC_STREAM. Value: 242
public static final	PES_ECM_STREAM The Constant PES_ECM_STREAM. Value: 240
public static final	PES_EMM_STREAM The Constant PES_EMM_STREAM. Value: 241
public static final	PES_EXTENSION The Constant PES_EXTENSION. Value: 181
public static final	PES_GROUP The Constant PES_GROUP. Value: 184
public static final	PES_H222_TYPE_A The Constant PES_H222_TYPE_A. Value: 244
public static final	PES_H222_TYPE_B The Constant PES_H222_TYPE_B. Value: 245
public static final	PES_H222_TYPE_C The Constant PES_H222_TYPE_C. Value: 246
public static final	PES_H222_TYPE_D The Constant PES_H222_TYPE_D. Value: 247
public static final	PES_H222_TYPE_E The Constant PES_H222_TYPE_E. Value: 248
public static final	PES_PADDING_STREAM The Constant PES_PADDING_STREAM. Value: 190

public static final	PES_PICTURE_START The Constant PES_PICTURE_START. Value: 0
public static final	PES_PRIVATE_STREAM_1 The Constant PES_PRIVATE_STREAM_1. Value: 189
public static final	PES_PRIVATE_STREAM_2 The Constant PES_PRIVATE_STREAM_2. Value: 191
public static final	PES_PROGRAM_MAP The Constant PES_PROGRAM_MAP. Value: 188
public static final	PES_PROGRAM_STREAM_DIRECTORY The Constant PES_PROGRAM_STREAM_DIRECTORY. Value: 255
public static final	PES_SEQUENCE_END The Constant PES_SEQUENCE_END. Value: 183
public static final	PES_SEQUENCE_ERROR The Constant PES_SEQUENCE_ERROR. Value: 180
public static final	PES_SEQUENCE_HEADER The Constant PES_SEQUENCE_HEADER. Value: 179
public static final	PES_USER_DATA The Constant PES_USER_DATA. Value: 178
public	PES2ExtFlag The pes pe s2 ext flag.
public	PESExt2Data The pes pes ext2 data.
public	previousPacketCRC The previous packet crc.
public	priority The pes priority.
public	privateData The pes private data.
public	privateDataFlag The pes private data flag.
public	programPacketSeqCounterFlag The pes program packet seq counter flag.

public	programPacketSequenceCounter The pes program packet sequence counter.
public	PSTDBufferFlag The pes pstd buffer flag.
public	PSTDBufferSize The PSTD buffer size.
public	PTS The pes pts.
public	PTSPTSFlags The pes ptsdts flags.
public	scramblingControl The pes scrambling control.
public	startCodePrefix The pes start code.
public	streamId The pes stream id.

Constructor Summary

public	MPEG2PESPacket.PESHeader()
public	MPEG2PESPacket.PESHeader(java.nio.ByteBuffer buffer)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

PES_PICTURE_START

```
public static final int PES_PICTURE_START
```

The Constant PES_PICTURE_START.
Constant value: **0**

PES_USER_DATA

```
public static final int PES_USER_DATA
```

The Constant PES_USER_DATA.
Constant value: **178**

PES_SEQUENCE_HEADER

```
public static final int PES_SEQUENCE_HEADER
```

(continued from last page)

The Constant PES_SEQUENCE_HEADER.
Constant value: **179**

PES_SEQUENCE_ERROR

```
public static final int PES_SEQUENCE_ERROR
```

The Constant PES_SEQUENCE_ERROR.
Constant value: **180**

PES_EXTENSION

```
public static final int PES_EXTENSION
```

The Constant PES_EXTENSION.
Constant value: **181**

PES_SEQUENCE_END

```
public static final int PES_SEQUENCE_END
```

The Constant PES_SEQUENCE_END.
Constant value: **183**

PES_GROUP

```
public static final int PES_GROUP
```

The Constant PES_GROUP.
Constant value: **184**

PES_PROGRAM_MAP

```
public static final int PES_PROGRAM_MAP
```

The Constant PES_PROGRAM_MAP.
Constant value: **188**

PES_PRIVATE_STREAM_1

```
public static final int PES_PRIVATE_STREAM_1
```

The Constant PES_PRIVATE_STREAM_1.
Constant value: **189**

PES_PADDING_STREAM

```
public static final int PES_PADDING_STREAM
```

The Constant PES_PADDING_STREAM.
Constant value: **190**

PES_PRIVATE_STREAM_2

```
public static final int PES_PRIVATE_STREAM_2
```

The Constant PES_PRIVATE_STREAM_2.
Constant value: **191**

(continued from last page)

PES_ECM_STREAM

```
public static final int PES_ECM_STREAM
```

The Constant PES_ECM_STREAM.
Constant value: **240**

PES_EMM_STREAM

```
public static final int PES_EMM_STREAM
```

The Constant PES_EMM_STREAM.
Constant value: **241**

PES_DSMCC_STREAM

```
public static final int PES_DSMCC_STREAM
```

The Constant PES_DSMCC_STREAM.
Constant value: **242**

PES_H222_TYPE_A

```
public static final int PES_H222_TYPE_A
```

The Constant PES_H222_TYPE_A.
Constant value: **244**

PES_H222_TYPE_B

```
public static final int PES_H222_TYPE_B
```

The Constant PES_H222_TYPE_B.
Constant value: **245**

PES_H222_TYPE_C

```
public static final int PES_H222_TYPE_C
```

The Constant PES_H222_TYPE_C.
Constant value: **246**

PES_H222_TYPE_D

```
public static final int PES_H222_TYPE_D
```

The Constant PES_H222_TYPE_D.
Constant value: **247**

PES_H222_TYPE_E

```
public static final int PES_H222_TYPE_E
```

The Constant PES_H222_TYPE_E.
Constant value: **248**

PES_PROGRAM_STREAM_DIRECTORY

```
public static final int PES_PROGRAM_STREAM_DIRECTORY
```

(continued from last page)

The Constant PES_PROGRAM_STREAM_DIRECTORY.
Constant value: **255**

startCodePrefix

public int **startCodePrefix**

The pes start code.

streamId

public int **streamId**

The pes stream id.

length

public int **length**

The pes packet len.

scramblingControl

public int **scramblingControl**

The pes scrambling control.

priority

public boolean **priority**

The pes priority.

dataAlignment

public boolean **dataAlignment**

The pes data alignment.

copyright

public boolean **copyright**

The pes copyright.

originalOrCopy

public boolean **originalOrCopy**

The pes original or copy.

PTSDTSFlags

public int **PTSDTSFlags**

The pes ptsdts flags.

(continued from last page)

ESCRFlag

```
public boolean ESCRFlag
```

The pes es cr flag.

ESRateFlag

```
public boolean ESRateFlag
```

The pes es rate flag.

DSMTrickMode

```
public boolean DSMTrickMode
```

The pes dsm trick mode.

additionalCopyInfoFlag

```
public boolean additionalCopyInfoFlag
```

The pes additional copy info flag.

CRCFlag

```
public boolean CRCFlag
```

The pes pes cr flag.

extFlag

```
public boolean extFlag
```

The pes pes ext flag.

PTS

```
public long PTS
```

The pes pts.

DTS

```
public long DTS
```

The pes dts.

ESCRBase

```
public int ESCRBase
```

The pes es cr base.

ESCRExt

```
public int ESCRExt
```

(continued from last page)

The pes escr ext.

escrBuf

public byte **escrBuf**

The escr buf.

ESRate

public int **ESRate**

The pes es rate.

previousPacketCRC

public int **previousPacketCRC**

The previous packet crc.

privateDataFlag

public boolean **privateDataFlag**

The pes private data flag.

packHeaderFieldFlag

public boolean **packHeaderFieldFlag**

The pes pack header field flag.

programPacketSeqCounterFlag

public boolean **programPacketSeqCounterFlag**

The pes program packet seq counter flag.

originalStuffLen

public int **originalStuffLen**

PSTDBufferFlag

public boolean **PSTDBufferFlag**

The pes pstd buffer flag.

PES2ExtFlag

public boolean **PES2ExtFlag**

The pes pe s2 ext flag.

(continued from last page)

privateData

public byte **privateData**

The pes private data.

packetHeaderBytes

public byte **packetHeaderBytes**

programPacketSequenceCounter

public int **programPacketSequenceCounter**

The pes program packet sequence counter.

PSTDBufferSize

public int **PSTDBufferSize**

The PSTD buffer size.

PESExt2Data

public byte **PESExt2Data**

The pes pes ext2 data.

packetDataBytes

public byte **packetDataBytes**

The pes packet data byte.

Constructors

MPEG2PESPacket.PESHeader

public **MPEG2PESPacket.PESHeader**()

MPEG2PESPacket.PESHeader

public **MPEG2PESPacket.PESHeader**(java.nio.ByteBuffer buffer)

com.wowza.wms.transport.mpeg2 Class MPEG2PESPacketProcessor

java.lang.Object

└─com.wowza.wms.transport.mpeg2.MPEG2PESPacketProcessor

All Implemented Interfaces:

[IMPEG2PacketProcessor](#)

Direct Known Subclasses:

[MPEG2VideoPacketProcessor](#), [MPEG2PESAssembler](#), [MPEG2AudioPacketProcessor](#)

public abstract class **MPEG2PESPacketProcessor**

extends Object

implements [IMPEG2PacketProcessor](#)

The Class mpeg2PESPacketProcessor.

Field Summary

public	continuityCounter The continuity counter.
public	continuityError The continuity error.
protected	currentPacket The current packet.
public static final	INVALID The Constant INVALID. Value: -1
protected	listener The listener.
protected	pesPacket
public	PID The pid.

Constructor Summary

public	MPEG2PESPacketProcessor ()
--------	---

Method Summary

void	checkContinuity () Check continuity.
int	findPESHeader () Find pes header.

int	getCodec()
abstract void	handlePESData (int length, MPEG2PESPacket.PESHeader header) Handle pes data.
void	notifyAdaptationHeaders (boolean deliver)
void	processMpeg2Buffer (int pid, byte[] bytes, int offset, int count)
void	processMpeg2Packet (MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet)
MPEG2PESPacket.PESHeader	processPESHeader () Process pes header.
void	setCodec (int codec)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2PacketProcessor](#)

[notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#)

Fields

INVALID

public static final int **INVALID**

The Constant INVALID.

Constant value: **-1**

PID

public int **PID**

The pid.

continuityCounter

public int **continuityCounter**

The continuity counter.

continuityError

public boolean **continuityError**

The continuity error.

(continued from last page)

listener

protected com.wowza.wms.transport.mpeg2.IMPEG2StreamListener **listener**

The listener.

pesPacket

protected com.wowza.wms.transport.mpeg2.MPEG2PESPacket **pesPacket**

currentPacket

protected com.wowza.wms.transport.mpeg2.MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet
currentPacket

The current packet.

Constructors

MPEG2PESPacketProcessor

```
public MPEG2PESPacketProcessor()
```

Methods

notifyAdaptationHeaders

```
public void notifyAdaptationHeaders(boolean deliver)
```

setCodec

```
public void setCodec(int codec)
```

getCodec

```
public int getCodec()
```

handlePESData

```
public abstract void handlePESData(int length,  
    MPEG2PESPacket.PESHeader header)
```

Handle pes data.

Parameters:

length - the length
header - the header

checkContinuity

```
public void checkContinuity()
```

Check continuity.

findPESHeader

```
public int findPESHeader()
```

Find pes header.

Returns:

the int

processMpeg2Buffer

```
public void processMpeg2Buffer(int pid,
    byte[] bytes,
    int offset,
    int count)
```

processMpeg2Packet

```
public final void processMpeg2Packet(MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet)
    throws java.io.IOException
```

processPESHeader

```
public MPEG2PESPacket.PESHeader processPESHeader()
```

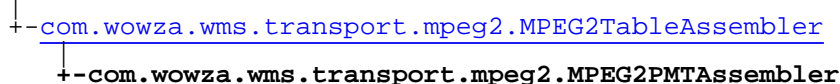
Process pes header.

Returns:

the pES header

com.wowza.wms.transport.mpeg2 Class MPEG2PMTAssembler

java.lang.Object



All Implemented Interfaces:

[IMPEG2SectionListener](#)

```
public class MPEG2PMTAssembler
extends MPEG2TableAssembler
```

The Class mpeg2PMTAssembler.

Field Summary

protected	deliverSection The deliver section.
public	listener The listener.
public	PID The pid.
public	PMT The pmt.
public	programNo The program no.

Fields inherited from class [com.wowza.wms.transport.mpeg2.MPEG2TableAssembler](#)

[currentVersion](#), [deliver](#), [INVALID](#), [sections](#)

Fields inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[INVALID](#)

Constructor Summary

public	MPEG2PMTAssembler()
--------	-------------------------------------

Method Summary

void	adaptationHeader (AdaptationField field)
void	buildTable ()
boolean	headerNotify (MPEG2Section section)

void	logDebug (String comment)
void	logError (String comment)
void	logError (String comment, Exception e)
void	logFatal (String comment)
void	logInfo (String comment)
boolean	logThrottleDoLog ()
void	logWarn (String comment)
void	monitorStart (ProgramAssociationTable.ProgramEntry program, IMPEG2StreamListener listener, MPEG2MPTS stream) Monitor start.
void	monitorStop () Monitor stop.
boolean	tableExist ()
int	tableVersion ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.MPEG2TableAssembler](#)

[adaptationHeader](#), [buildTable](#), [getShortClassName](#), [headerNotify](#), [sectionNotify](#), [tableExist](#), [tableVersion](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[adaptationHeader](#), [headerNotify](#), [logDebug](#), [logError](#), [logError](#), [logFatal](#), [logInfo](#), [logThrottleDoLog](#), [logWarn](#), [sectionNotify](#)

Fields

PMT

public com.wowza.wms.transport.mpeg2.ProgramMapTable **PMT**

The pmt.

PID

public int **PID**

(continued from last page)

The pid.

programNo

```
public int programNo
```

The program no.

listener

```
public com.wowza.wms.transport.mpeg2.IMPEG2StreamListener listener
```

The listener.

deliverSection

```
protected boolean deliverSection
```

The deliver section.

Constructors

MPEG2PMTAssembler

```
public MPEG2PMTAssembler()
```

Methods

adaptationHeader

```
public void adaptationHeader(AdaptationField field)
```

tableExist

```
public boolean tableExist()
```

Table exist.

tableVersion

```
public int tableVersion()
```

Table version.

headerNotify

```
public boolean headerNotify(MPEG2Section section)
```

buildTable

```
public void buildTable()
```

(continued from last page)

Builds the table.

monitorStart

```
public void monitorStart(ProgramAssociationTable.ProgramEntry program,  
    IMPEG2StreamListener listener,  
    MPEG2MPTS stream)
```

Monitor start.

Parameters:

program - the program
listener - the listener
stream - the stream

monitorStop

```
public void monitorStop()
```

Monitor stop.

logThrottleDoLog

```
public boolean logThrottleDoLog()
```

logFatal

```
public void logFatal(String comment)
```

logError

```
public void logError(String comment)
```

logError

```
public void logError(String comment,  
    Exception e)
```

logWarn

```
public void logWarn(String comment)
```

logInfo

```
public void logInfo(String comment)
```

(continued from last page)

logDebug

```
public void logDebug(String comment)
```

com.wowza.wms.transport.mpeg2 Class MPEG2RawAssembler

java.lang.Object

└─com.wowza.wms.transport.mpeg2.MPEG2RawAssembler

All Implemented Interfaces:

[IMPEG2PacketProcessor](#)

```
public class MPEG2RawAssembler
extends Object
implements IMPEG2PacketProcessor
```

Field Summary

public	listeners
--------	---------------------------

Constructor Summary

public	MPEG2RawAssembler()
--------	-------------------------------------

Method Summary

void	notifyAdaptationHeaders (boolean notify)
void	processMpeg2Buffer (int pid, byte[] bytes, int offset, int count)
void	processMpeg2Packet (MPEG2MPTS.MPEG2MPTSTBuffer.MPEG2Packet packet)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2PacketProcessor](#)

[notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#)

Fields

listeners

public java.util.List **listeners**

Constructors

(continued from last page)

MPEG2RawAssembler

```
public MPEG2RawAssembler()
```

Methods

processMpeg2Buffer

```
public void processMpeg2Buffer(int pid,  
    byte[] bytes,  
    int offset,  
    int count)
```

notifyAdaptationHeaders

```
public void notifyAdaptationHeaders(boolean notify)
```

processMpeg2Packet

```
public void processMpeg2Packet(MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet)  
    throws java.io.IOException
```

com.wowza.wms.transport.mpeg2 Class MPEG2RawPacketProcessor

java.lang.Object

└─com.wowza.wms.transport.mpeg2.MPEG2RawPacketProcessor

All Implemented Interfaces:

[IMPEG2PacketProcessor](#)

```
public class MPEG2RawPacketProcessor
extends Object
implements IMPEG2PacketProcessor
```

Constructor Summary

public	MPEG2RawPacketProcessor ()
--------	--

Method Summary

void	notifyAdaptationHeaders (boolean notify)
void	processMpeg2Buffer (int pid, byte[] bytes, int offset, int count)
void	processMpeg2Packet (MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2PacketProcessor](#)

[notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#)

Constructors

MPEG2RawPacketProcessor

```
public MPEG2RawPacketProcessor()
```

Methods

notifyAdaptationHeaders

```
public void notifyAdaptationHeaders(boolean notify)
```


(continued from last page)

processMpeg2Packet

```
public void processMpeg2Packet(MPEG2MPTS.MPEG2MPTSTBuffer.MPEG2Packet packet)
    throws java.io.IOException
```

processMpeg2Buffer

```
public void processMpeg2Buffer(int pid,
    byte[] bytes,
    int offset,
    int count)
```

com.wowza.wms.transport.mpeg2 Class MPEG2Section

java.lang.Object

└-com.wowza.wms.transport.mpeg2.MPEG2Section

public class **MPEG2Section**
extends Object

The Class mpeg2Section.

Field Summary

protected	continuityCounter The continuity counter.
protected static final	CURNEXT_MASK The Constant CURNEXT_MASK. Value: 1
protected static final	CURNEXT_OFFSET The Constant CURNEXT_OFFSET. Value: 5
protected static final	LAST_SECTION_OFFSET The Constant LAST_SECTION_OFFSET. Value: 7
protected static final	LENGHT_HIGH_BYTE_MASK The Constant LENGHT_HIGH_BYTE_MASK. Value: 3
protected static final	LENGTH_OFFSET The Constant LENGTH_OFFSET. Value: 1
protected static final	LENGTH_SIZE The Constant LENGTH_SIZE. Value: 2
protected static final	SECTION_OFFSET The Constant SECTION_OFFSET. Value: 6
protected static final	TABLE_ID_EXT LENGHT The Constant TABLE_ID_EXT_LENGHT. Value: 2
protected static final	TABLE_ID_EXT_OFFSET The Constant TABLE_ID_EXT_OFFSET. Value: 3

protected static final	VERSION_MASK The Constant VERSION_MASK. Value: 62
protected static final	VERSION_OFFSET The Constant VERSION_OFFSET. Value: 5

Constructor Summary

public	MPEG2Section ()
--------	----------------------------------

Method Summary

int	bytesWritten () Bytes written.
boolean	CRCIsValid () CRC is valid.
String	dumpSection (String contextStr) Dump section.
int	getAvailableData () Gets the available data.
int	getLastSectionNo () Gets the last section no.
int	getSectionLength () Gets the section length.
int	getSectionNo () Gets the section no.
int	getTableID () Gets the table id.
int	getTableIDExtension () Gets the table id extension.
int	getVersion () Gets the version.
boolean	isCurrent () Checks if is current.
int	read () Read.
int	readBytes (byte[] buf, int offset, int count) Read bytes.
int	readInt ()
int	readInt (int count, int mask) Read int.

void	rewind() Rewind.
void	skip(int count) Skip.
String	toString()
int	write(byte[] bytes) Write.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

continuityCounter

protected int **continuityCounter**

The continuity counter.

LENGTH_OFFSET

protected static final int **LENGTH_OFFSET**

The Constant LENGTH_OFFSET.
Constant value: **1**

LENGTH_SIZE

protected static final int **LENGTH_SIZE**

The Constant LENGTH_SIZE.
Constant value: **2**

LENGHT_HIGH_BYTE_MASK

protected static final byte **LENGHT_HIGH_BYTE_MASK**

The Constant LENGHT_HIGH_BYTE_MASK.
Constant value: **3**

TABLE_ID_EXT_OFFSET

protected static final int **TABLE_ID_EXT_OFFSET**

The Constant TABLE_ID_EXT_OFFSET.
Constant value: **3**

TABLE_ID_EXT LENGHT

protected static final int **TABLE_ID_EXT LENGHT**

(continued from last page)

The Constant `TABLE_ID_EXT_LENGTH`.
Constant value: **2**

VERSION_OFFSET

protected static final int **VERSION_OFFSET**

The Constant `VERSION_OFFSET`.
Constant value: **5**

VERSION_MASK

protected static final byte **VERSION_MASK**

The Constant `VERSION_MASK`.
Constant value: **62**

CURNEXT_OFFSET

protected static final int **CURNEXT_OFFSET**

The Constant `CURNEXT_OFFSET`.
Constant value: **5**

CURNEXT_MASK

protected static final byte **CURNEXT_MASK**

The Constant `CURNEXT_MASK`.
Constant value: **1**

SECTION_OFFSET

protected static final int **SECTION_OFFSET**

The Constant `SECTION_OFFSET`.
Constant value: **6**

LAST_SECTION_OFFSET

protected static final int **LAST_SECTION_OFFSET**

The Constant `LAST_SECTION_OFFSET`.
Constant value: **7**

Constructors

MPEG2Section

```
public MPEG2Section()
```

Methods

write

```
public int write(byte[] bytes)  
    throws java.io.IOException
```

(continued from last page)

Write.

Parameters:

bytes - the bytes

Returns:

the int

Throws:

`IOException` - Signals that an I/O exception has occurred.

bytesWritten

public int **bytesWritten()**

Bytes written.

Returns:

the int

getTableID

public int **getTableID()**

Gets the table id.

Returns:

the table id

getSectionLength

public int **getSectionLength()**

Gets the section length.

Returns:

the section length

getTableIDExtension

public int **getTableIDExtension()**

Gets the table id extension.

Returns:

the table id extension

getVersion

public int **getVersion()**

Gets the version.

Returns:

the version

(continued from last page)

isCurrent

```
public boolean isCurrent()
```

Checks if is current.

Returns:

true, if is current

getSectionNo

```
public int getSectionNo()
```

Gets the section no.

Returns:

the section no

getLastSectionNo

```
public int getLastSectionNo()
```

Gets the last section no.

Returns:

the last section no

getAvailableData

```
public int getAvailableData()
```

Gets the available data.

Returns:

the available data

CRCIsValid

```
public boolean CRCIsValid()
```

CRC is valid.

Returns:

true, if successful

rewind

```
public void rewind()
```

Rewind.

read

```
public int read()
```

Read.

Returns:

(continued from last page)

the int

readBytes

```
public int readBytes(byte[] buf,  
                    int offset,  
                    int count)
```

Read bytes.

Parameters:

buf - the buf
offset - the offset
count - the count

Returns:

the int

readInt

```
public int readInt(int count,  
                  int mask)
```

Read int.

Parameters:

count - the count
mask - the mask

Returns:

the int

readInt

```
public int readInt()
```

skip

```
public void skip(int count)
```

Skip.

Parameters:

count - the count

toString

```
public String toString()
```

dumpSection

```
public String dumpSection(String contextStr)
```

Dump section.

com.wowza.wms.transport.mpeg2 Class MPEG2SectionAssembler

java.lang.Object

└─com.wowza.wms.transport.mpeg2.MPEG2SectionAssembler

All Implemented Interfaces:

[IMPEG2PacketProcessor](#)

```
public class MPEG2SectionAssembler
extends Object
implements IMPEG2PacketProcessor
```

The Class MPEG2SectionAssembler.

Field Summary

public static final	INVALID The Constant INVALID. Value: -1
public	listeners The listeners.

Constructor Summary

public	MPEG2SectionAssembler()
--------	---

Method Summary

void	notifyAdaptationHeaders (boolean notify)
void	processMpeg2Buffer (int pid, byte[] bytes, int offset, int count)
void	processMpeg2Packet (MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet)
void	setHeaderLengthMin (int size) Sets the header length min.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2PacketProcessor](#)

[notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#)

Fields

(continued from last page)

INVALID

```
public static final int INVALID
```

The Constant INVALID.
Constant value: **-1**

listeners

```
public java.util.List listeners
```

The listeners.

Constructors

MPEG2SectionAssembler

```
public MPEG2SectionAssembler()
```

Methods

setHeaderLengthMin

```
public void setHeaderLengthMin(int size)
```

Sets the header length min.

Parameters:

size - the new header length min

notifyAdaptationHeaders

```
public void notifyAdaptationHeaders(boolean notify)
```

processMpeg2Buffer

```
public void processMpeg2Buffer(int pid,  
    byte[] bytes,  
    int offset,  
    int count)
```

processMpeg2Packet

```
public void processMpeg2Packet(MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet)  
    throws java.io.IOException
```

com.wowza.wms.transport.mpeg2 Class MPEG2TableAssembler

java.lang.Object

└-com.wowza.wms.transport.mpeg2.MPEG2TableAssembler

All Implemented Interfaces:

[IMPEG2SectionListener](#)

Direct Known Subclasses:

[MPEG2PMTAssembler](#), [MPEG2PATAssembler](#)

public abstract class **MPEG2TableAssembler**

extends Object

implements [IMPEG2SectionListener](#)

The Class mpeg2TableAssembler.

Field Summary

public	currentVersion The current version.
public	deliver The deliver.
public static final	INVALID The Constant INVALID. Value: -1
protected	sections The sections.

Fields inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[INVALID](#)

Constructor Summary

public	MPEG2TableAssembler()
--------	---------------------------------------

Method Summary

abstract void	adaptationHeader (AdaptationField field)
abstract void	buildTable () Builds the table.
String	getShortClassName () getShortClassName returns just the class name instead of the com.wms.xxx.xx.className

boolean	headerNotify (MPEG2Section section)
void	sectionNotify (MPEG2Section section, boolean continuityError)
abstract boolean	tableExist () Table exist.
abstract int	tableVersion () Table version.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[adaptationHeader](#), [headerNotify](#), [logDebug](#), [logError](#), [logError](#), [logFatal](#), [logInfo](#), [logThrottleDoLog](#), [logWarn](#), [sectionNotify](#)

Fields

INVALID

public static final int **INVALID**

The Constant INVALID.
Constant value: **-1**

deliver

public boolean **deliver**

The deliver.

sections

protected java.util.Map **sections**

The sections.

currentVersion

public int **currentVersion**

The current version.

Constructors

MPEG2TableAssembler

public **MPEG2TableAssembler**()

(continued from last page)

Methods

headerNotify

```
public boolean headerNotify(MPEG2Section section)
```

sectionNotify

```
public void sectionNotify(MPEG2Section section,  
    boolean continuityError)
```

getShortClassName

```
public String getShortClassName()
```

getShortClassName returns just the class name instead of the com.wms.xxx.xx.className

adaptationHeader

```
public abstract void adaptationHeader(AdaptationField field)
```

tableExist

```
public abstract boolean tableExist()
```

Table exist.

Returns:

true, if successful

tableVersion

```
public abstract int tableVersion()
```

Table version.

Returns:

the int

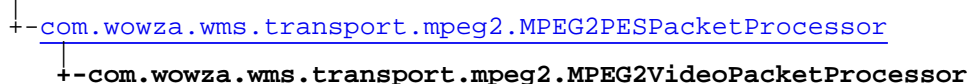
buildTable

```
public abstract void buildTable()
```

Builds the table.

com.wowza.wms.transport.mpeg2 Class MPEG2VideoPacketProcessor

java.lang.Object



All Implemented Interfaces:

[IMPEG2PacketProcessor](#)

```
public class MPEG2VideoPacketProcessor
extends MPEG2PESPacketProcessor
```

The Class mpeg2VideoPacketProcessor.

Fields inherited from class [com.wowza.wms.transport.mpeg2.MPEG2PESPacketProcessor](#)

[continuityCounter](#), [continuityError](#), [currentPacket](#), [INVALID](#), [listener](#), [pesPacket](#), [PID](#)

Constructor Summary

public	MPEG2VideoPacketProcessor (int PID, IMPEG2StreamListener listener) Instantiates a new mpeg2 video packet processor.
--------	--

Method Summary

void	handlePESData (int length, MPEG2PESPacket.PESHeader header)
------	---

Methods inherited from class [com.wowza.wms.transport.mpeg2.MPEG2PESPacketProcessor](#)

[checkContinuity](#), [findPESHeader](#), [getCodec](#), [handlePESData](#), [notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#), [processPESHeader](#), [setCodec](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2PacketProcessor](#)

[notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#)

Constructors

MPEG2VideoPacketProcessor

```
public MPEG2VideoPacketProcessor(int PID,
                                IMPEG2StreamListener listener)
```

Instantiates a new mpeg2 video packet processor.

(continued from last page)

Parameters:

PID - the pid

listener - the listener

Methods

handlePESData

```
public void handlePESData(int length,  
    MPEG2PESPacket.PESHeader header)
```

Handle pes data.

com.wowza.wms.transport.mpeg2 Class PESAssembler

java.lang.Object

└-com.wowza.wms.transport.mpeg2.PESAssembler

All Implemented Interfaces:

[IMPEG2PESListener](#)

```
public class PESAssembler
extends Object
implements IMPEG2PESListener
```

Constructor Summary

public	PESAssembler()
--------	--------------------------------

Method Summary

void	monitorStart (int PID, IMPEG2StreamListener listener, MPEG2MPTS stream, IMPEG2UserMonitorPESNotify monitor) Monitor start.
void	monitorStop () Monitor stop.
void	pesDataAvailable (MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet, int length, MPEG2PESPacket.PESHeader header)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2PESListener](#)

[pesDataAvailable](#)

Constructors

PESAssembler

```
public PESAssembler()
```

Methods

(continued from last page)

pesDataAvailable

```
public void pesDataAvailable(MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet,  
    int length,  
    MPEG2PESPacket.PESHeader header)
```

monitorStart

```
public void monitorStart(int PID,  
    IMPEG2StreamListener listener,  
    MPEG2MPTS stream,  
    IMPEG2UserMonitorPESNotify monitor)
```

Monitor start.

Parameters:

PID - the pid
listener - the listener
stream - the stream

monitorStop

```
public void monitorStop()
```

Monitor stop.

com.wowza.wms.transport.mpeg2 Class ProgramAssociationTable

java.lang.Object

└-com.wowza.wms.transport.mpeg2.ProgramAssociationTable

public class **ProgramAssociationTable**
extends Object

The Class ProgramAssociationTable.

Nested Class Summary

class	ProgramAssociationTable.ProgramEntry ProgramAssociationTable.ProgramEntry
-------	--

Field Summary

public static final	INVALID The Constant INVALID. Value: -1
public static final	PAT_TABLE_ID The Constant PAT_TABLE_ID. Value: 0
public	programs The programs.
public	version The version.

Constructor Summary

public	ProgramAssociationTable (java.util.Map sections) Instantiates a new program association table.
--------	---

Method Summary

boolean	equals (Object obj)
int	hashCode ()
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

INVALID

```
public static final int INVALID
```

The Constant INVALID.
Constant value: **-1**

PAT_TABLE_ID

```
public static final int PAT_TABLE_ID
```

The Constant PAT_TABLE_ID.
Constant value: **0**

version

```
public int version
```

The version.

programs

```
public java.util.Map programs
```

The programs.

Constructors

ProgramAssociationTable

```
public ProgramAssociationTable(java.util.Map sections)
```

Instantiates a new program association table.

Parameters:

sections - the sections

Methods

toString

```
public String toString()
```

hashCode

```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

(continued from last page)

com.wowza.wms.transport.mpeg2 Class ProgramAssociationTable.ProgramEntry

java.lang.Object

└-com.wowza.wms.transport.mpeg2.ProgramAssociationTable.ProgramEntry

```
public class ProgramAssociationTable.ProgramEntry
extends Object
```

The Class ProgramEntry.

Field Summary

public	pmtPID The pmt pid.
public	programNo The program no.

Method Summary

boolean	equals (Object obj)
int	hashCode ()
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

programNo

```
public int programNo
```

The program no.

pmtPID

```
public int pmtPID
```

The pmt pid.

Methods

(continued from last page)

toString

```
public String toString()
```

equals

```
public boolean equals(Object obj)
```

hashCode

```
public int hashCode()
```

com.wowza.wms.transport.mpeg2 Class ProgramMapTable

java.lang.Object

└-com.wowza.wms.transport.mpeg2.ProgramMapTable

```
public class ProgramMapTable
extends Object
```

The Class ProgramMapTable.

Nested Class Summary

class	ProgramMapTable.StreamInfo ProgramMapTable.StreamInfo
-------	--

Field Summary

public static final	INVALID The Constant INVALID. Value: -1
public static final	NO_PCR_PID The Constant NO_PCR_PID. Value: 131071
public	PCR_PID The pcr pid.
public static final	PMT_TABLE_ID The Constant PMT_TABLE_ID. Value: 2
public	programDescriptors The program descriptors.
public	programNo The program no.
public	streams The streams.
public	version The version.

Constructor Summary

public	ProgramMapTable() Instantiates a new program map table.
public	ProgramMapTable(java.util.Map sections) Instantiates a new program map table.

Method Summary

int	binarySize() calculates the binary size of the Stream Info structure
void	toBin(java.nio.ByteBuffer buffer) converts the Program map table to binary for use in a transport form
String	toString()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

INVALID

public static final int **INVALID**

The Constant INVALID.
Constant value: **-1**

PMT_TABLE_ID

public static final int **PMT_TABLE_ID**

The Constant PMT_TABLE_ID.
Constant value: **2**

NO_PCR_PID

public static final int **NO_PCR_PID**

The Constant NO_PCR_PID.
Constant value: **131071**

programNo

public int **programNo**

The program no.

version

public int **version**

The version.

PCR_PID

public int **PCR_PID**

The pcr pid.

programDescriptors

```
public com.wowza.util.MultiMap programDescriptors
```

The program descriptors.

streams

```
public java.util.Map streams
```

The streams.

Constructors

ProgramMapTable

```
public ProgramMapTable()
```

Instantiates a new program map table.

ProgramMapTable

```
public ProgramMapTable(java.util.Map sections)
```

Instantiates a new program map table.

Parameters:

sections - the sections

Methods

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

converts the Program map table to binary for use in a transport form

Parameters:

buffer - a ByteBuffer to put the binary data.

binarySize

```
public int binarySize()
```

calculates the binary size of the Stream Info structure

Returns:

includes the size of all descriptors included in the stream

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class ProgramMapTable.StreamInfo

java.lang.Object

└─com.wowza.wms.transport.mpeg2.ProgramMapTable.StreamInfo

```
public class ProgramMapTable.StreamInfo
extends Object
```

The Class StreamInfo.

Field Summary	
public	descriptors The descriptors.
public	PID The pid.
public	streamType The stream type.
public static final	STREAMTYPE_AUDIO_AAC_LOAS Value: 17
public static final	STREAMTYPE_AUDIO_AC3_ATSC Value: 129
public static final	STREAMTYPE_AUDIO_ADTS_AAC Value: 15
public static final	STREAMTYPE_AUDIO_EAC3_ATSC Value: 135
public static final	STREAMTYPE_AUDIO_MP3_1 Value: 3
public static final	STREAMTYPE_AUDIO_MP3_2 Value: 4
public static final	STREAMTYPE_CUEI Value: 134
public static final	STREAMTYPE_VIDEO_H264 Value: 27
public static final	STREAMTYPE_VIDEO_HEVC Value: 36

public static final	STREAMTYPE_VIDEO_MPEG4 Value: 16
public static final	STREAMTYPE_VIDEO1_MPEG2 Value: 2
public static final	STREAMTYPE_VIDEO2_MPEG2 Value: 128

Constructor Summary

public	ProgramMapTable.StreamInfo() Instantiates a new stream info.
public	ProgramMapTable.StreamInfo(MPEG2Section section) Instantiates a new stream info.

Method Summary

int	binarySize() calculates the binary size of the Stream Info structure
int	getAudioCodec()
int	getVideoCodec()
boolean	isAudioStreamType() Checks if is audio stream type.
boolean	isVideoStreamType() Checks if is video stream type.
String	toString()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

STREAMTYPE_VIDEO_H264

public static final int **STREAMTYPE_VIDEO_H264**

Constant value: **27**

STREAMTYPE_VIDEO1_MPEG2

public static final int **STREAMTYPE_VIDEO1_MPEG2**

(continued from last page)

Constant value: **2**

STREAMTYPE_VIDEO2_MPEG2public static final int **STREAMTYPE_VIDEO2_MPEG2**Constant value: **128**

STREAMTYPE_VIDEO_MPEG4public static final int **STREAMTYPE_VIDEO_MPEG4**Constant value: **16**

STREAMTYPE_VIDEO_HEVCpublic static final int **STREAMTYPE_VIDEO_HEVC**Constant value: **36**

STREAMTYPE_AUDIO_ADTS_AACpublic static final int **STREAMTYPE_AUDIO_ADTS_AAC**Constant value: **15**

STREAMTYPE_AUDIO_AAC_LOASpublic static final int **STREAMTYPE_AUDIO_AAC_LOAS**Constant value: **17**

STREAMTYPE_AUDIO_MP3_1public static final int **STREAMTYPE_AUDIO_MP3_1**Constant value: **3**

STREAMTYPE_AUDIO_MP3_2public static final int **STREAMTYPE_AUDIO_MP3_2**Constant value: **4**

STREAMTYPE_AUDIO_AC3_ATSCpublic static final int **STREAMTYPE_AUDIO_AC3_ATSC**Constant value: **129**

(continued from last page)

STREAMTYPE_AUDIO_EAC3_ATSC

```
public static final int STREAMTYPE_AUDIO_EAC3_ATSC
```

Constant value: **135**

STREAMTYPE_CUEI

```
public static final int STREAMTYPE_CUEI
```

Constant value: **134**

streamType

```
public int streamType
```

The stream type.

PID

```
public int PID
```

The pid.

descriptors

```
public com.wowza.util.MultiMap descriptors
```

The descriptors.

Constructors

ProgramMapTable.StreamInfo

```
public ProgramMapTable.StreamInfo()
```

Instantiates a new stream info.

ProgramMapTable.StreamInfo

```
public ProgramMapTable.StreamInfo(MPEG2Section section)
```

Instantiates a new stream info.

Parameters:

section - the section

Methods

isAudioStreamType

```
public boolean isAudioStreamType()
```

Checks if is audio stream type.

Returns:

(continued from last page)

true, if is audio stream type

getAudioCodec

```
public int getAudioCodec()
```

isVideoStreamType

```
public boolean isVideoStreamType()
```

Checks if is video stream type.

Returns:

true, if is video stream type

getVideoCodec

```
public int getVideoCodec()
```

toString

```
public String toString()
```

binarySize

```
public int binarySize()
```

calculates the binary size of the Stream Info structure

Returns:

includes the size of all descriptors included in the stream

com.wowza.wms.transport.mpeg2 Class RawAssembler

java.lang.Object

└─com.wowza.wms.transport.mpeg2.RawAssembler

All Implemented Interfaces:

[IMPEG2RawListener](#)

```
public class RawAssembler
extends Object
implements IMPEG2RawListener
```

Constructor Summary

public	RawAssembler ()
--------	---------------------------------

Method Summary

void	monitorStart (int PID, IMPEG2StreamListener listener, MPEG2MPTS stream, IMPEG2UserMonitorRawNotify monitor)
void	monitorStop () Monitor stop.
void	processMpeg2Buffer (int pid, byte[] bytes, int offset, int count)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2RawListener](#)

[processMpeg2Buffer](#)

Constructors

RawAssembler

```
public RawAssembler()
```

Methods

(continued from last page)

processMpeg2Buffer

```
public void processMpeg2Buffer(int pid,  
    byte[] bytes,  
    int offset,  
    int count)
```

monitorStart

```
public void monitorStart(int PID,  
    IMPEG2StreamListener listener,  
    MPEG2MPTS stream,  
    IMPEG2UserMonitorRawNotify monitor)
```

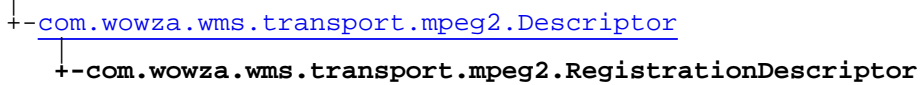
monitorStop

```
public void monitorStop()
```

Monitor stop.

com.wowza.wms.transport.mpeg2 Class RegistrationDescriptor

java.lang.Object



public class **RegistrationDescriptor**
extends [Descriptor](#)

The Class RegistrationDescriptor.

Field Summary

public	additionalIdentificationData The additional identification data.
public	formatIdentifier The format identifier.
public static final	REG_IDENTIFICATION_HEVC Value: 1212503619
public static final	REG_IDENTIFICATION_KLV Value: 1263294017
public static final	REG_IDENTIFICATION_SCTE_SPLICE_FORMAT The Constant REG_IDENTIFICATION_SCTE_SPLICE_FORMAT. Value: 1129661769

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	RegistrationDescriptor () Instantiates a new registration descriptor.
--------	--

public	RegistrationDescriptor (java.nio.ByteBuffer descriptorData) Instantiates a new registration descriptor from the provided byte buffer
--------	--

Method Summary

int	binarySize () How big is the registration descriptor in binary.
void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toBin (java.nio.ByteBuffer buffer) Encodes the registration descriptor into binary format for use in a transport
String	toString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#),
[getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

Fields

REG_IDENTIFICATION_SCTE_SPLICE_FORMAT

```
public static final int REG_IDENTIFICATION_SCTE_SPLICE_FORMAT
```

The Constant REG_IDENTIFICATION_SCTE_SPLICE_FORMAT.
Constant value: **1129661769**

REG_IDENTIFICATION_HEVC

```
public static final int REG_IDENTIFICATION_HEVC
```

Constant value: **1212503619**

REG_IDENTIFICATION_KLV

```
public static final int REG_IDENTIFICATION_KLV
```

Constant value: **1263294017**

formatIdentifier

```
public int formatIdentifier
```

The format identifier.

(continued from last page)

additionalIdentificationData

```
public byte additionalIdentificationData
```

The additional identification data.

Constructors

RegistrationDescriptor

```
public RegistrationDescriptor()
```

Instantiates a new registration descriptor.

RegistrationDescriptor

```
public RegistrationDescriptor(java.nio.ByteBuffer descriptorData)
```

Instantiates a new registration descriptor from the provided byte buffer

Parameters:

descriptorData - the descriptor data

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

Encodes the registration descriptor into binary format for use in a transport

Parameters:

buffer - a ByteBuffer to put the descriptor binary data into

binarySize

```
public int binarySize()
```

How big is the registration descriptor in binary.

Returns:

the total size of the descriptor in binary form, includes tag and length fields

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class SectionAssembler

java.lang.Object

└-com.wowza.wms.transport.mpeg2.SectionAssembler

All Implemented Interfaces:

[IMPEG2SectionListener](#)

```
public class SectionAssembler
extends Object
implements IMPEG2SectionListener
```

Field Summary

protected	deliverSection The deliver section.
protected	field
public	listener The listener.
public	monitor
public	sit The sit.

Fields inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[INVALID](#)

Constructor Summary

public	SectionAssembler()
--------	------------------------------------

Method Summary

void	adaptationHeader (AdaptationField field)
boolean	headerNotify (MPEG2Section section)
void	logDebug (String comment)
void	logError (String comment)
void	logError (String comment, Exception e)

void	logFatal (String comment)
void	logInfo (String comment)
boolean	logThrottleDoLog ()
void	logWarn (String comment)
void	monitorStart (int PID, IMPEG2StreamListener listener, MPEG2MPTS stream, IMPEG2UserMonitorSectionNotify monitor) Monitor start.
void	monitorStop () Monitor stop.
void	sectionNotify (MPEG2Section section, boolean continuityError)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[adaptationHeader](#), [headerNotify](#), [logDebug](#), [logError](#), [logError](#), [logFatal](#), [logInfo](#), [logThrottleDoLog](#), [logWarn](#), [sectionNotify](#)

Fields

deliverSection

protected boolean **deliverSection**

The deliver section.

listener

public com.wowza.wms.transport.mpeg2.IMPEG2StreamListener **listener**

The listener.

monitor

public com.wowza.wms.transport.mpeg2.IMPEG2UserMonitorSectionNotify **monitor**

sit

public com.wowza.wms.transport.mpeg2.section.cue.SpliceInformationTable **sit**

The sit.

(continued from last page)

field

```
protected com.wowza.wms.transport.mpeg2.AdaptationField field
```

Constructors

SectionAssembler

```
public SectionAssembler()
```

Methods

adaptationHeader

```
public void adaptationHeader(AdaptationField field)
```

headerNotify

```
public boolean headerNotify(MPEG2Section section)
```

sectionNotify

```
public void sectionNotify(MPEG2Section section,  
    boolean continuityError)
```

monitorStart

```
public void monitorStart(int PID,  
    IMPEG2StreamListener listener,  
    MPEG2MPTS stream,  
    IMPEG2UserMonitorSectionNotify monitor)
```

Monitor start.

Parameters:

PID - the pid
listener - the listener
stream - the stream

monitorStop

```
public void monitorStop()
```

Monitor stop.

logThrottleDoLog

```
public boolean logThrottleDoLog()
```

(continued from last page)

logFatal

```
public void logFatal(String comment)
```

logError

```
public void logError(String comment)
```

logError

```
public void logError(String comment,  
                    Exception e)
```

logWarn

```
public void logWarn(String comment)
```

logInfo

```
public void logInfo(String comment)
```

logDebug

```
public void logDebug(String comment)
```

com.wowza.wms.transport.mpeg2 Class SITAssembler

java.lang.Object

└-com.wowza.wms.transport.mpeg2.SITAssembler

All Implemented Interfaces:

[IMPEG2SectionListener](#)

```
public class SITAssembler
extends Object
implements IMPEG2SectionListener
```

The Class SITAssembler.

Field Summary

protected	deliverSection The deliver section.
public	listener The listener.
public	sit The sit.

Fields inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[INVALID](#)

Constructor Summary

public	SITAssembler()
--------	--------------------------------

Method Summary

void	adaptationHeader (AdaptationField field)
boolean	headerNotify (MPEG2Section section)
void	logDebug (String comment)
void	logError (String comment)
void	logError (String comment, Exception e)
void	logFatal (String comment)
void	logInfo (String comment)

boolean	logThrottleDoLog()
void	logWarn (String comment)
void	monitorStart (int PID, IMPEG2StreamListener listener, MPEG2MPTS stream) Monitor start.
void	monitorStop () Monitor stop.
void	sectionNotify (MPEG2Section section, boolean continuityError)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[adaptationHeader](#), [headerNotify](#), [logDebug](#), [logError](#), [logError](#), [logFatal](#), [logInfo](#), [logThrottleDoLog](#), [logWarn](#), [sectionNotify](#)

Fields

deliverSection

protected boolean **deliverSection**

The deliver section.

listener

public `com.wowza.wms.transport.mpeg2.IMPEG2StreamListener` **listener**

The listener.

sit

public `com.wowza.wms.transport.mpeg2.section.cue.SpliceInformationTable` **sit**

The sit.

Constructors

SITAssembler

public **SITAssembler**()

Methods

(continued from last page)

adaptationHeader

```
public void adaptationHeader(AdaptationField field)
```

headerNotify

```
public boolean headerNotify(MPEG2Section section)
```

sectionNotify

```
public void sectionNotify(MPEG2Section section,  
    boolean continuityError)
```

monitorStart

```
public void monitorStart(int PID,  
    IMPEG2StreamListener listener,  
    MPEG2MPTS stream)
```

Monitor start.

Parameters:

PID - the pid
listener - the listener
stream - the stream

monitorStop

```
public void monitorStop()
```

Monitor stop.

logThrottleDoLog

```
public boolean logThrottleDoLog()
```

logFatal

```
public void logFatal(String comment)
```

logError

```
public void logError(String comment)
```

(continued from last page)

logError

```
public void logError(String comment,  
                    Exception e)
```

logWarn

```
public void logWarn(String comment)
```

logInfo

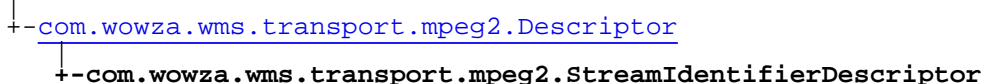
```
public void logInfo(String comment)
```

logDebug

```
public void logDebug(String comment)
```

com.wowza.wms.transport.mpeg2 Class StreamIdentifierDescriptor

java.lang.Object



```
public class StreamIdentifierDescriptor
extends Descriptor
```

The Class StreamIdentifierDescriptor. The stream identifier descriptor may be used in the PMT to label component streams of a service so that they can be differentiated. The stream identifier descriptor shall be located in the elementary descriptor loop following the relevant ES_info_length field. The stream identifier descriptor shall be used if either the program_splice_flag or the program_segmentation_flag is zero. If stream identifier descriptors are used, a stream identifier descriptor shall be present in each occurrence of the elementary stream loop within the PMT and shall have a unique component tag within the given program.

Field Summary

public	componentTag The component tag.
--------	--

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	StreamIdentifierDescriptor() Instantiates a new stream identifier descriptor.
public	StreamIdentifierDescriptor (java.nio.ByteBuffer descriptorData) Instantiates a new stream identifier descriptor.

Method Summary

int	binarySize() How big is the Stream Identifier descriptor in binary.
-----	--

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
int	getComponentTag ()
void	toBin (java.nio.ByteBuffer buffer)
String	toString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#),
[getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

Fields

componentTag

public int **componentTag**

The component tag.

Constructors

StreamIdentifierDescriptor

public **StreamIdentifierDescriptor**()

Instantiates a new stream identifier descriptor.

StreamIdentifierDescriptor

public **StreamIdentifierDescriptor**(java.nio.ByteBuffer descriptorData)

Instantiates a new stream identifier descriptor.

Parameters:

descriptorData - the descriptor data

Methods

decodeDescriptorData

public void **decodeDescriptorData**(java.nio.ByteBuffer descriptorData)

Decode descriptor data.

(continued from last page)

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

Encodes the descriptor into binary format for use in a transport

binarySize

```
public int binarySize()
```

How big is the Stream Identifier descriptor in binary.

Returns:

the total size of the descriptor in binary form, includes tag and length fields

toString

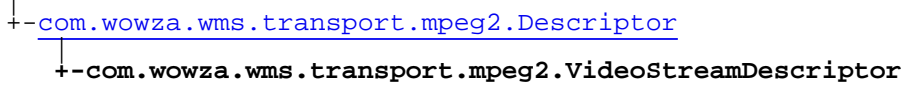
```
public String toString()
```

getComponentTag

```
public int getComponentTag()
```

com.wowza.wms.transport.mpeg2 Class VideoStreamDescriptor

java.lang.Object



```

public class VideoStreamDescriptor
extends Descriptor
  
```

The Class VideoStreamDescriptor. The video stream descriptor provides basic information which identifies the coding parameters of a video elementary stream as described in ITU-T Rec. H.262 I ISO/IEC 13818-2 or ISO/IEC 11172-2.

Field Summary	
public	constrainedParameter The constrained parameter.
public static final	FRAME_RATE_23_976 The Constant FRAME_RATE_23_976. Value: 1
public static final	FRAME_RATE_24 The Constant FRAME_RATE_24. Value: 2
public static final	FRAME_RATE_25 The Constant FRAME_RATE_25. Value: 3
public static final	FRAME_RATE_29_97 The Constant FRAME_RATE_29_97. Value: 4
public static final	FRAME_RATE_30 The Constant FRAME_RATE_30. Value: 5
public static final	FRAME_RATE_50 The Constant FRAME_RATE_50. Value: 6
public static final	FRAME_RATE_59_94 The Constant FRAME_RATE_59_94. Value: 7
public static final	FRAME_RATE_60 The Constant FRAME_RATE_60. Value: 8
public	frameRateCode The frame rate code.

public	mpeg1ChromaFormat The mpeg1 chroma format.
public	mpeg1FrameRateExt The mpeg1 frame rate ext.
public	mpeg1Only The mpeg1 only.
public	mpeg1ProfileLevel The mpeg1 profile level.
public	multipleFrameRate The multiple frame rate.
public	stillPicture The still picture.

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	VideoStreamDescriptor () Instantiates a new video stream descriptor.
public	VideoStreamDescriptor (java.nio.ByteBuffer descriptorData) Instantiates a new video stream descriptor.

Method Summary

int	binarySize () How big is the video stream descriptor in binary.
void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toBin (java.nio.ByteBuffer buffer) Encodes the Video stream descriptor into binary form for use in transport
String	toString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#),
[getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`,
`wait`

Fields

FRAME_RATE_23_976

```
public static final int FRAME_RATE_23_976
```

The Constant FRAME_RATE_23_976.
Constant value: **1**

FRAME_RATE_24

```
public static final int FRAME_RATE_24
```

The Constant FRAME_RATE_24.
Constant value: **2**

FRAME_RATE_25

```
public static final int FRAME_RATE_25
```

The Constant FRAME_RATE_25.
Constant value: **3**

FRAME_RATE_29_97

```
public static final int FRAME_RATE_29_97
```

The Constant FRAME_RATE_29_97.
Constant value: **4**

FRAME_RATE_30

```
public static final int FRAME_RATE_30
```

The Constant FRAME_RATE_30.
Constant value: **5**

FRAME_RATE_50

```
public static final int FRAME_RATE_50
```

The Constant FRAME_RATE_50.
Constant value: **6**

FRAME_RATE_59_94

```
public static final int FRAME_RATE_59_94
```

(continued from last page)

The Constant `FRAME_RATE_59_94`.
Constant value: **7**

FRAME_RATE_60

```
public static final int FRAME_RATE_60
```

The Constant `FRAME_RATE_60`.
Constant value: **8**

multipleFrameRate

```
public boolean multipleFrameRate
```

The multiple frame rate.

frameRateCode

```
public int frameRateCode
```

The frame rate code.

mpeg1Only

```
public boolean mpeg1Only
```

The mpeg1 only.

constrainedParameter

```
public boolean constrainedParameter
```

The constrained parameter.

stillPicture

```
public boolean stillPicture
```

The still picture.

mpeg1ProfileLevel

```
public int mpeg1ProfileLevel
```

The mpeg1 profile level.

mpeg1ChromaFormat

```
public int mpeg1ChromaFormat
```

The mpeg1 chroma format.

mpeg1FrameRateExt

```
public boolean mpeg1FrameRateExt
```

The mpeg1 frame rate ext.

(continued from last page)

Constructors

VideoStreamDescriptor

```
public VideoStreamDescriptor()
```

Instantiates a new video stream descriptor.

VideoStreamDescriptor

```
public VideoStreamDescriptor(java.nio.ByteBuffer descriptorData)
```

Instantiates a new video stream descriptor.

Parameters:

descriptorData - the descriptor data

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

Encodes the Video stream descriptor into binary form for use in transport

Parameters:

buffer - ByteBuffer to put the binary data

binarySize

```
public int binarySize()
```

How big is the video stream descriptor in binary.

Returns:

the total size of the descriptor in binary form, includes tag and length fields

toString

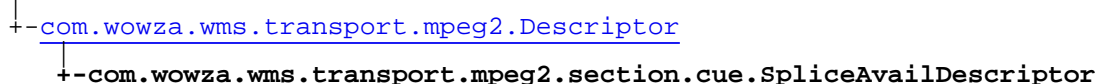
```
public String toString()
```

Package

**com.wowza.wms.transport.mpeg2.section.cu
e**

com.wowza.wms.transport.mpeg2.section.cue Class SpliceAvailDescriptor

java.lang.Object



public class **SpliceAvailDescriptor**
extends [Descriptor](#)

Field Summary

public	identifier
public	providerAvailId

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	SpliceAvailDescriptor()
public	SpliceAvailDescriptor (java.nio.ByteBuffer descriptorData)

Method Summary

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
AMFDataObj	serializeAMF (SpliceInformationTableSerializeAMFContext context)
String	toDebugString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#),
[getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#),
[wait](#)

Fields

identifier

```
public int identifier
```

providerAvailId

```
public long providerAvailId
```

Constructors

SpliceAvailDescriptor

```
public SpliceAvailDescriptor()
```

SpliceAvailDescriptor

```
public SpliceAvailDescriptor(java.nio.ByteBuffer descriptorData)
```

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toDebugString

```
public String toDebugString()
```

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

(continued from last page)

com.wowza.wms.transport.mpeg2.section.cue Class SpliceBandwidthReservationCommand

java.lang.Object

└- [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

└- [com.wowza.wms.transport.mpeg2.section.cue.SpliceBandwidthReservationCommand](#)

public class **SpliceBandwidthReservationCommand**
extends [SpliceCommand](#)

The Class SpliceBandwidthReservationCommand.

Fields inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[INVALID](#), [name](#), [SPLICE_COMMAND_BANDWIDTH_RES](#), [SPLICE_COMMAND_INSERT](#), [SPLICE_COMMAND_NULL](#), [SPLICE_COMMAND_SCHEDULE](#), [SPLICE_COMMAND_TIME_SIGNAL](#), [type](#)

Constructor Summary

public	SpliceBandwidthReservationCommand() Instantiates a new splice bandwidth reservation command.
--------	---

Method Summary

AMFDataObj	serializeAMF(SpliceInformationTableSerializeAMFContext context)
String	toString()

Methods inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[getName](#), [getType](#), [serializeAMF](#), [toString](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

SpliceBandwidthReservationCommand

public **SpliceBandwidthReservationCommand()**

Instantiates a new splice bandwidth reservation command.

Methods

(continued from last page)

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceCommand

java.lang.Object

└-com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand

Direct Known Subclasses:

[SpliceTimeSignalCommand](#), [SpliceScheduleCommand](#), [SpliceNullCommand](#), [SpliceInsertCommand](#),
[SpliceBandwidthReservationCommand](#)

```
public class SpliceCommand
extends Object
```

The Class SpliceCommand.

Field Summary

public static final	INVALID The Constant INVALID. Value: -1
public	name The name.
public static final	SPLICE_COMMAND_BANDWIDTH_RES The Constant SPLICE_COMMAND_BANDWIDTH_RES. Value: 7
public static final	SPLICE_COMMAND_INSERT The Constant SPLICE_COMMAND_INSERT. Value: 5
public static final	SPLICE_COMMAND_NULL The Constant SPLICE_COMMAND_NULL. Value: 0
public static final	SPLICE_COMMAND_SCHEDULE The Constant SPLICE_COMMAND_SCHEDULE. Value: 4
public static final	SPLICE_COMMAND_TIME_SIGNAL The Constant SPLICE_COMMAND_TIME_SIGNAL. Value: 6
public	type The type.

Constructor Summary

public	SpliceCommand()
--------	---------------------------------

Method Summary

String	getName()
int	getType()
AMFDataObj	serializeAMF (SpliceInformationTableSerializeAMFContext context)
String	toString()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

INVALID

```
public static final int INVALID
```

The Constant INVALID.
Constant value: **-1**

SPLICE_COMMAND_NULL

```
public static final byte SPLICE_COMMAND_NULL
```

The Constant SPLICE_COMMAND_NULL.
Constant value: **0**

SPLICE_COMMAND_SCHEDULE

```
public static final byte SPLICE_COMMAND_SCHEDULE
```

The Constant SPLICE_COMMAND_SCHEDULE.
Constant value: **4**

SPLICE_COMMAND_INSERT

```
public static final byte SPLICE_COMMAND_INSERT
```

The Constant SPLICE_COMMAND_INSERT.
Constant value: **5**

SPLICE_COMMAND_TIME_SIGNAL

```
public static final byte SPLICE_COMMAND_TIME_SIGNAL
```

The Constant SPLICE_COMMAND_TIME_SIGNAL.
Constant value: **6**

SPLICE_COMMAND_BANDWIDTH_RES

```
public static final byte SPLICE_COMMAND_BANDWIDTH_RES
```

The Constant SPLICE_COMMAND_BANDWIDTH_RES.

(continued from last page)

Constant value: **7**

type

```
public int type
```

The type.

name

```
public java.lang.String name
```

The name.

Constructors

SpliceCommand

```
public SpliceCommand()
```

Methods

getType

```
public int getType()
```

getName

```
public String getName()
```

serializeAMF

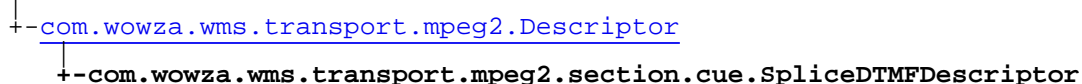
```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceDTMFDescriptor

java.lang.Object



public class **SpliceDTMFDescriptor**
extends [Descriptor](#)

Field Summary

public	dtmfBytes
public	dtmfCount
public	identifier
public	preroll

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	SpliceDTMFDescriptor()
public	SpliceDTMFDescriptor (java.nio.ByteBuffer descriptorData)

Method Summary

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
------	---

String	getDTMFBytesAsBase64()
AMFDataObj	serializeAMF(SpliceInformationTableSerializeAMFContext context)
String	toDebugString()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#),
[getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#),
[wait](#)

Fields

identifier

```
public int identifier
```

preroll

```
public int preroll
```

dtmfCount

```
public int dtmfCount
```

dtmfBytes

```
public byte dtmfBytes
```

Constructors

SpliceDTMFDescriptor

```
public SpliceDTMFDescriptor()
```

SpliceDTMFDescriptor

```
public SpliceDTMFDescriptor(java.nio.ByteBuffer descriptorData)
```

(continued from last page)

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

getDTMFBytesAsBase64

```
public String getDTMFBytesAsBase64()
```

toDebugString

```
public String toDebugString()
```

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceEvent

java.lang.Object

└─com.wowza.wms.transport.mpeg2.section.cue.SpliceEvent

public class **SpliceEvent**
extends Object

The Class SpliceEvent.

Nested Class Summary

class	SpliceEvent.BreakDuration SpliceEvent.BreakDuration
class	SpliceEvent.ComponentSpliceTime SpliceEvent.ComponentSpliceTime

Field Summary

public	availNum The avail num.
public	availsExpected The avails expected.
public	breakDuration The break duration.
public	cancel The cancel.
public	componentSplices The component splices.
public	durationFlag The duration flag.
public	eventID The event id.
public	outOfNetwork The out of network.
public	programID The program id.
public	programSplice The program splice.
public	spliceImmediate The splice immediate.

public	spliceTime The splice time.
--------	--

Constructor Summary

public	SpliceEvent (MPEG2Section data, boolean fromInsertCmd) Instantiates a new splice event.
--------	---

Method Summary

int	getAvailNum ()
int	getAvailsExpected ()
SpliceEvent.BreakDuration	getBreakDuration ()
java.util.Map	getComponentSplices ()
int	getEventID ()
int	getProgramID ()
SpliceTime	getSpliceTime ()
boolean	isCancel ()
boolean	isDurationFlag ()
boolean	isOutOfNetwork ()
boolean	isProgramSplice ()
boolean	isSpliceImmediate ()
AMFDataObj	serializeAMF (SpliceInformationTableSerializeAMFContext context)
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

eventID

public int **eventID**

(continued from last page)

The event id.

cancel

public boolean **cancel**

The cancel.

outOfNetwork

public boolean **outOfNetwork**

The out of network.

programSplice

public boolean **programSplice**

The program splice.

durationFlag

public boolean **durationFlag**

The duration flag.

spliceImmediate

public boolean **spliceImmediate**

The splice immediate.

spliceTime

public com.wowza.wms.transport.mpeg2.section.cue.SpliceTime **spliceTime**

The splice time.

componentSplices

public java.util.Map **componentSplices**

The component splices.

breakDuration

public com.wowza.wms.transport.mpeg2.section.cue.SpliceEvent.BreakDuration
breakDuration

The break duration.

programID

public int **programID**

The program id.

(continued from last page)

availNum

```
public int availNum
```

The avail num.

availsExpected

```
public int availsExpected
```

The avails expected.

Constructors

SpliceEvent

```
public SpliceEvent(MPEG2Section data,  
                  boolean fromInsertCmd)
```

Instantiates a new splice event.

Parameters:

data - the data

fromInsertCmd - the from insert cmd

Methods

getEventID

```
public int getEventID()
```

isCancel

```
public boolean isCancel()
```

isOutOfNetwork

```
public boolean isOutOfNetwork()
```

isProgramSplice

```
public boolean isProgramSplice()
```

isDurationFlag

```
public boolean isDurationFlag()
```

(continued from last page)

isSpliceImmediate

```
public boolean isSpliceImmediate()
```

getSpliceTime

```
public SpliceTime getSpliceTime()
```

getComponentSplices

```
public java.util.Map getComponentSplices()
```

getBreakDuration

```
public SpliceEvent.BreakDuration getBreakDuration()
```

getProgramID

```
public int getProgramID()
```

getAvailNum

```
public int getAvailNum()
```

getAvailsExpected

```
public int getAvailsExpected()
```

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceEvent.BreakDuration

java.lang.Object

└-com.wowza.wms.transport.mpeg2.section.cue.SpliceEvent.BreakDuration

```
public class SpliceEvent.BreakDuration
extends Object
```

The Class BreakDuration.

Constructor Summary

public	SpliceEvent.BreakDuration (MPEG2Section data) Instantiates a new break duration.
--------	--

Method Summary

String	toString ()
--------	-----------------------------

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

SpliceEvent.BreakDuration

```
public SpliceEvent.BreakDuration(MPEG2Section data)
```

Instantiates a new break duration.

Parameters:

data - the data

Methods

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceEvent.ComponentSpliceTime

java.lang.Object

└─com.wowza.wms.transport.mpeg2.section.cue.SpliceEvent.ComponentSpliceTime

```
public class SpliceEvent.ComponentSpliceTime
extends Object
```

The Class ComponentSpliceTime.

Field Summary

public	componentTag The component tag.
public	spliceTime The splice time.

Constructor Summary

public	SpliceEvent.ComponentSpliceTime (MPEG2Section data, boolean fromInsertCommand) Instantiates a new component splice time.
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

componentTag

```
public int componentTag
```

The component tag.

spliceTime

```
public com.wowza.wms.transport.mpeg2.section.cue.SpliceTime spliceTime
```

The splice time.

Constructors

SpliceEvent.ComponentSpliceTime

```
public SpliceEvent.ComponentSpliceTime(MPEG2Section data,
boolean fromInsertCommand)
```

Instantiates a new component splice time.

(continued from last page)

Parameters:

data - the data

fromInsertCommand - the from insert command

com.wowza.wms.transport.mpeg2.section.cue Class SpliceInformationTable

java.lang.Object

└-com.wowza.wms.transport.mpeg2.section.cue.SpliceInformationTable

```
public class SpliceInformationTable
extends Object
```

The Class SpliceInformationTable.

Field Summary

public static final	AMF_VERSION Value: 1
public	command The command.
public	cwIndex The CW index.
public	encryptedCRC The encrypted crc.
public	encryptedPacket The encrypted packet.
public	encryptionAlgorithm The encryption algorithm.
public static final	INVALID The Constant INVALID. Value: -1
public	protocolVersion The protocol version.
public	ptsAdjustment The PTS adjustment.
public static final	SIT_TABLE_ID The Constant SIT_TABLE_ID. Value: 252
public	spliceDescriptors The splice descriptors.

Constructor Summary

public	SpliceInformationTable (MPEG2Section section) Instantiates a new splice information table.
--------	--

Method Summary

SpliceCommand	getCommand()
int	getCwIndex()
int	getEncryptedCRC()
int	getEncryptionAlgorithm()
int	getProtocolVersion()
long	getPtsAdjustment()
java.util.List	getSpliceDescriptors()
boolean	isEncryptedPacket()
AMFDataObj	serializeAMF(SpliceInformationTableSerializeAMFContext context)
String	toString()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

AMF_VERSION

```
public static final int AMF_VERSION
```

Constant value: **1**

INVALID

```
public static final int INVALID
```

The Constant INVALID.
Constant value: **-1**

SIT_TABLE_ID

```
public static final int SIT_TABLE_ID
```

The Constant SIT_TABLE_ID.
Constant value: **252**

(continued from last page)

protocolVersion

```
public int protocolVersion
```

The protocol version.

encryptedPacket

```
public boolean encryptedPacket
```

The encrypted packet.

encryptionAlgorithm

```
public int encryptionAlgorithm
```

The encryption algorithm.

ptsAdjustment

```
public long ptsAdjustment
```

The PTS adjustment.

cwIndex

```
public int cwIndex
```

The CW index.

command

```
public com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand command
```

The command.

spliceDescriptors

```
public java.util.List spliceDescriptors
```

The splice descriptors.

encryptedCRC

```
public int encryptedCRC
```

The encrypted crc.

Constructors

SpliceInformationTable

```
public SpliceInformationTable(MPEG2Section section)
```

Instantiates a new splice information table.

Parameters:

section - the section

Methods

getProtocolVersion

```
public int getProtocolVersion()
```

isEncryptedPacket

```
public boolean isEncryptedPacket()
```

getEncryptionAlgorithm

```
public int getEncryptionAlgorithm()
```

getPtsAdjustment

```
public long getPtsAdjustment()
```

getCwIndex

```
public int getCwIndex()
```

getCommand

```
public SpliceCommand getCommand()
```

getSpliceDescriptors

```
public java.util.List getSpliceDescriptors()
```

getEncryptedCRC

```
public int getEncryptedCRC()
```

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

(continued from last page)

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceInformationTableSerializeAMFContext

java.lang.Object



com.wowza.wms.transport.mpeg2.section.cue.SpliceInformationTableSerializeAMFContext

```
public class SpliceInformationTableSerializeAMFContext
extends Object
```

Field Summary

public	rtpTrack
public	timeReference

Constructor Summary

public	SpliceInformationTableSerializeAMFContext()
--------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

timeReference

```
public com.wowza.util.RolloverLong timeReference
```

rtpTrack

```
public com.wowza.wms.rtp.model.RTPTrack rtpTrack
```

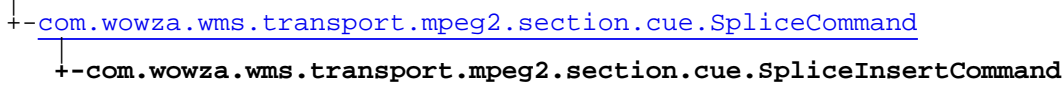
Constructors

SpliceInformationTableSerializeAMFContext

```
public SpliceInformationTableSerializeAMFContext()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceInsertCommand

java.lang.Object



public class **SpliceInsertCommand**
extends [SpliceCommand](#)

The Class SpliceInsertCommand.

Field Summary

public	event The event.
--------	-------------------------------------

Fields inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[INVALID](#), [name](#), [SPLICE_COMMAND_BANDWIDTH_RES](#), [SPLICE_COMMAND_INSERT](#), [SPLICE_COMMAND_NULL](#), [SPLICE_COMMAND_SCHEDULE](#), [SPLICE_COMMAND_TIME_SIGNAL](#), [type](#)

Constructor Summary

public	SpliceInsertCommand (MPEG2Section data) Instantiates a new splice insert command.
--------	---

Method Summary

SpliceEvent	getEvent ()
AMFDataObj	serializeAMF (SpliceInformationTableSerializeAMFContext context)
String	toString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[getName](#), [getType](#), [serializeAMF](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

(continued from last page)

event

```
public com.wowza.wms.transport.mpeg2.section.cue.SpliceEvent event
```

The event.

Constructors

SpliceInsertCommand

```
public SpliceInsertCommand(MPEG2Section data)
```

Instantiates a new splice insert command.

Parameters:

data - the data

Methods

getEvent

```
public SpliceEvent getEvent()
```

serializeAMF

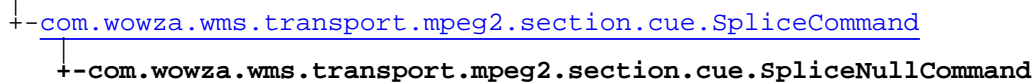
```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceNullCommand

java.lang.Object



```
public class SpliceNullCommand
extends SpliceCommand
```

The Class SpliceNullCommand.

Fields inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[INVALID](#), [name](#), [SPLICE_COMMAND_BANDWIDTH_RES](#), [SPLICE_COMMAND_INSERT](#), [SPLICE_COMMAND_NULL](#), [SPLICE_COMMAND_SCHEDULE](#), [SPLICE_COMMAND_TIME_SIGNAL](#), [type](#)

Constructor Summary

public	SpliceNullCommand() Instantiates a new splice null command.
--------	--

Method Summary

AMFDataObj	serializeAMF(SpliceInformationTableSerializeAMFContext context)
String	toString()

Methods inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[getName](#), [getType](#), [serializeAMF](#), [toString](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

SpliceNullCommand

```
public SpliceNullCommand()
```

Instantiates a new splice null command.

Methods

(continued from last page)

serializeAMF

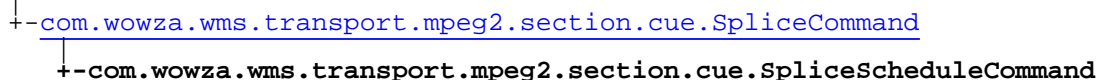
```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceScheduleCommand

java.lang.Object



public class **SpliceScheduleCommand**
extends [SpliceCommand](#)

The Class SpliceScheduleCommand.

Field Summary

public	spliceEvents The splice events.
--------	--

Fields inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[INVALID](#), [name](#), [SPLICE_COMMAND_BANDWIDTH_RES](#), [SPLICE_COMMAND_INSERT](#), [SPLICE_COMMAND_NULL](#), [SPLICE_COMMAND_SCHEDULE](#), [SPLICE_COMMAND_TIME_SIGNAL](#), [type](#)

Constructor Summary

public	SpliceScheduleCommand (MPEG2Section data) Instantiates a new splice schedule command.
--------	---

Method Summary

java.util.List	getSpliceEvents ()
AMFDataObj	serializeAMF (SpliceInformationTableSerializeAMFContext context)
String	toString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[getName](#), [getType](#), [serializeAMF](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

(continued from last page)

spliceEvents

```
public java.util.List spliceEvents
```

The splice events.

Constructors

SpliceScheduleCommand

```
public SpliceScheduleCommand(MPEG2Section data)
```

Instantiates a new splice schedule command.

Parameters:

data - the data

Methods

getSpliceEvents

```
public java.util.List getSpliceEvents()
```

serializeAMF

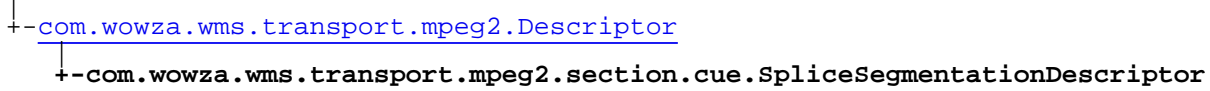
```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceSegmentationDescriptor

java.lang.Object



```

public class SpliceSegmentationDescriptor
extends Descriptor
  
```

Nested Class Summary

class	SpliceSegmentationDescriptor.ComponentInfo SpliceSegmentationDescriptor.ComponentInfo
-------	--

Field Summary

public	archiveAllowedFlag
public	componentCount
public	components
public	deliveryNotRestrictedFlag
public	deviceRestrictions
public	identifier
public	noRegionalBlackoutFlag
public	programSegmentationFlag
public	segmentationDurationFlag
public	segmentationEventCancelIndicator
public	segmentationEventId
public	segmentationTypeId
public	segmentationUPID
public	segmentationUPIDLength
public	segmentationUPIDType

public	segmentDuration
public	segmentNum
public	segmentsExpected
public	webDeliveryAllowedFlag

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	SpliceSegmentationDescriptor()
public	SpliceSegmentationDescriptor (java.nio.ByteBuffer descriptorData)

Method Summary

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
AMFDataObj	serializeAMF (SpliceInformationTableSerializeAMFContext context)
String	toDebugString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#), [getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Fields

(continued from last page)

identifier

```
public int identifier
```

segmentationEventId

```
public long segmentationEventId
```

segmentationEventCancelIndicator

```
public int segmentationEventCancelIndicator
```

programSegmentationFlag

```
public int programSegmentationFlag
```

segmentationDurationFlag

```
public int segmentationDurationFlag
```

deliveryNotRestrictedFlag

```
public int deliveryNotRestrictedFlag
```

webDeliveryAllowedFlag

```
public int webDeliveryAllowedFlag
```

noRegionalBlackoutFlag

```
public int noRegionalBlackoutFlag
```

archiveAllowedFlag

```
public int archiveAllowedFlag
```

deviceRestrictions

```
public int deviceRestrictions
```

(continued from last page)

componentCount

```
public int componentCount
```

components

```
public  
com.wowza.wms.transport.mpeg2.section.cue.SpliceSegmentationDescriptor.ComponentInfo  
components
```

segmentDuration

```
public long segmentDuration
```

segmentationUPIDType

```
public int segmentationUPIDType
```

segmentationUPIDLength

```
public int segmentationUPIDLength
```

segmentationUPID

```
public byte segmentationUPID
```

segmentationTypeId

```
public int segmentationTypeId
```

segmentNum

```
public int segmentNum
```

segmentsExpected

```
public int segmentsExpected
```

(continued from last page)

Constructors

SpliceSegmentationDescriptor

```
public SpliceSegmentationDescriptor()
```

SpliceSegmentationDescriptor

```
public SpliceSegmentationDescriptor(java.nio.ByteBuffer descriptorData)
```

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toDebugString

```
public String toDebugString()
```

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```


com.wowza.wms.transport.mpeg2.section.cue Class SpliceSegmentationDescriptor.ComponentInfo

java.lang.Object



com.wowza.wms.transport.mpeg2.section.cue.SpliceSegmentationDescriptor.ComponentInfo

```
public class SpliceSegmentationDescriptor.ComponentInfo
extends Object
```

Field Summary

public	componentTag
public	ptsOffset

Constructor Summary

public	SpliceSegmentationDescriptor.ComponentInfo()
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

componentTag

```
public int componentTag
```

ptsOffset

```
public long ptsOffset
```

Constructors

SpliceSegmentationDescriptor.ComponentInfo

```
public SpliceSegmentationDescriptor.ComponentInfo()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceTime

java.lang.Object

└─com.wowza.wms.transport.mpeg2.section.cue.SpliceTime

```
public class SpliceTime
extends Object
```

The Class SpliceTime.

Constructor Summary

public	SpliceTime (int spliceTime) Instantiates a new splice time.
public	SpliceTime (MPEG2Section data) Instantiates a new splice time.

Method Summary

long	getSpliceTime ()
boolean	isSpecified ()
boolean	isUTC ()
AMFDataObj	serializeAMF (SpliceInformationTableSerializeAMFContext context)
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

SpliceTime

```
public SpliceTime(int spliceTime)
```

Instantiates a new splice time.

Parameters:

spliceTime - the splice time

(continued from last page)

SpliceTime

```
public SpliceTime(MPEG2Section data)
```

Instantiates a new splice time.

Parameters:

data - the data

Methods

isSpecified

```
public boolean isSpecified()
```

isUTC

```
public boolean isUTC()
```

getSpliceTime

```
public long getSpliceTime()
```

serializeAMF

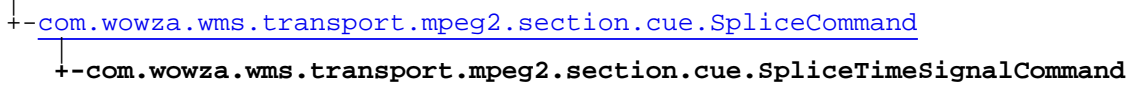
```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceTimeSignalCommand

java.lang.Object



public class **SpliceTimeSignalCommand**
extends [SpliceCommand](#)

The Class SpliceTimeSignalCommand.

Field Summary

public	time The time.
--------	-----------------------------------

Fields inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[INVALID](#), [name](#), [SPLICE_COMMAND_BANDWIDTH_RES](#), [SPLICE_COMMAND_INSERT](#), [SPLICE_COMMAND_NULL](#), [SPLICE_COMMAND_SCHEDULE](#), [SPLICE_COMMAND_TIME_SIGNAL](#), [type](#)

Constructor Summary

public	SpliceTimeSignalCommand (MPEG2Section data) Instantiates a new splice time signal command.
--------	--

Method Summary

SpliceTime	getTime()
AMFDataObj	serializeAMF (SpliceInformationTableSerializeAMFContext context)
String	toString()

Methods inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[getName](#), [getType](#), [serializeAMF](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

(continued from last page)

time

```
public com.wowza.wms.transport.mpeg2.section.cue.SpliceTime time
```

The time.

Constructors

SpliceTimeSignalCommand

```
public SpliceTimeSignalCommand(MPEG2Section data)
```

Instantiates a new splice time signal command.

Parameters:

data - the data

Methods

getTime

```
public SpliceTime getTime()
```

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

toString

```
public String toString()
```

Package

com.wowza.wms.util

com.wowza.wms.util Class RTPUtils

java.lang.Object

└-com.wowza.wms.util.RTPUtils

public class **RTPUtils**
extends Object

Constructor Summary

public	RTPUtils()
--------	----------------------------

Method Summary

static double[]	decodeRangeHeader (String rangeStr) Decode RTP range header, Internal use.
static RTPStream	decodeStreamInfo (IApplicationInstance appInstance, RTPContext context, String streamId, String streamInfo) Decode SDP info and create RTP stream
static RTPStream	decodeStreamInfo (IApplicationInstance appInstance, RTPStreamContext rtpStreamContext, RTPContext context, String streamId, String streamInfo) Decode SDP info and create RTP stream
static RTPStream	decodeStreamInfo (RTPContext context, String streamId, String streamInfo) Decode SDP info and create RTP stream
static byte[]	formatH264CodecConfig (byte[] sps, java.util.List pps, byte[] profileLevel) Format codec config info, Internal use.
static byte[]	formatH264CodecConfigPacket (byte[] sps, java.util.List pps, byte[] profileLevel) Format codec config info, Internal use.
static boolean	loadConfigFile (RTPContext rtpContext, String fileURL) Load config file, Internal use.
static RTPPushPublishSession	startRTPPull (IApplicationInstance appInstance, String streamName, boolean streamPacketizer, String ipAddress, int streamPort) Start pushing an RTP stream
static RTPPushPublishSession	startRTPPull (IApplicationInstance appInstance, String streamName, boolean streamPacketizer, String ipAddress, int streamPort, boolean isRTPWrapped) Start pushing an RTP stream
static RTPPushPublishSession	startRTPPull (IApplicationInstance appInstance, String streamName, boolean streamPacketizer, String ipAddress, int audioPort, int videoPort) Start pushing an RTP stream

static RTPPushPublishSession	startRTPPull(IApplicationInstance appInstance, String streamName, boolean streamPacketizer, String ipAddress, int audioPort, int videoPort, boolean isRTPWrapped) Start pushing an RTP stream
static RTPPushPublishSession	startRTPPull(IApplicationInstance appInstance, String streamName, RTPDestination rtpDestination) Start pushing an RTP stream
static void	stopRTPPull(RTPPushPublishSession rtpPushPublishSession) Stop pushing an RTP stream
static String	updateSDPDestination(RTPDestination rtpDestination, String sdpData) Update SDP data information with RTP destination information
static void	writeCodecConfig(RTPTrack rtpTrack, int codecId, long adjTimecode, byte[] codecConfig)
static void	writeCodecConfig(RTPTrack rtpTrack, long adjTimecode, byte[] codecConfig) Write codec config information, Internal use.
static void	writeCodecConfig(RTPTrack rtpTrack, long adjTimecode, byte[] codecConfig, int codec)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

RTPUtils

```
public RTPUtils()
```

Methods

updateSDPDestination

```
public static String updateSDPDestination(RTPDestination rtpDestination, String sdpData)
```

Update SDP data information with RTP destination information

Parameters:

rtpDestination - RTP destination

sdpData - SDP data

Returns:

modified SDP data

(continued from last page)

decodeRangeHeader

```
public static double[] decodeRangeHeader(String rangeStr)
```

Decode RTP range header, Internal use.

Parameters:

rangeStr

Returns:

range values

stopRTPPull

```
public static void stopRTPPull(RTTPushPublishSession rtpPushPublishSession)
```

Stop pushing an RTP stream

Parameters:

rtpPushPublishSession - RTP push session

startRTPPull

```
public static RTTPushPublishSession startRTPPull(IApplicationInstance appInstance,  
String streamName,  
boolean streamPacketizer,  
String ipAddress,  
int streamPort,  
boolean isRTPWrapped)
```

Start pushing an RTP stream

Parameters:

appInstance - application instance
streamName - stream name
streamPacketizer - stream packetizer
ipAddress - IP address
streamPort - stream port
isRTPWrapped - is RTP wrapped

Returns:

RTP push session

startRTPPull

```
public static RTTPushPublishSession startRTPPull(IApplicationInstance appInstance,  
String streamName,  
boolean streamPacketizer,  
String ipAddress,  
int streamPort)
```

Start pushing an RTP stream

Parameters:

appInstance - application instance
streamName - stream name
streamPacketizer - stream packetizer
ipAddress - IP address
streamPort - stream port

(continued from last page)

Returns:

RTP push session

startRTPPull

```
public static RTTPushPublishSession startRTPPull(IApplicationInstance appInstance,  
    String streamName,  
    boolean streamPacketizer,  
    String ipAddress,  
    int audioPort,  
    int videoPort)
```

Start pushing an RTP stream

Parameters:

appInstance - application instance
streamName - stream name
streamPacketizer - stream packetizer
ipAddress - IP address
audioPort - audio port
videoPort - video port

Returns:

RTP push session

startRTPPull

```
public static RTTPushPublishSession startRTPPull(IApplicationInstance appInstance,  
    String streamName,  
    boolean streamPacketizer,  
    String ipAddress,  
    int audioPort,  
    int videoPort,  
    boolean isRTPWrapped)
```

Start pushing an RTP stream

Parameters:

appInstance - application instance
streamName - stream name
streamPacketizer - stream packetizer
ipAddress - IP address
audioPort - audio port
videoPort - video port
isRTPWrapped - is RTP wrapped

Returns:

RTP push session

startRTPPull

```
public static RTTPushPublishSession startRTPPull(IApplicationInstance appInstance,  
    String streamName,  
    RTPDestination rtpDestination)
```

Start pushing an RTP stream

Parameters:

appInstance - application instance
streamName - stream name
rtpDestination - RTP destination

(continued from last page)

Returns:

RTP push session

writeCodecConfig

```
public static void writeCodecConfig(RTPTrack rtpTrack,
    int codecId,
    long adjTimecode,
    byte[] codecConfig)
```

writeCodecConfig

```
public static void writeCodecConfig(RTPTrack rtpTrack,
    long adjTimecode,
    byte[] codecConfig)
```

Write codec config information, Internal use.

Parameters:

rtpTrack - RTP track
adjTimecode - timecode (milliseconds)
codecConfig - codec config

writeCodecConfig

```
public static void writeCodecConfig(RTPTrack rtpTrack,
    long adjTimecode,
    byte[] codecConfig,
    int codec)
```

loadConfigFile

```
public static boolean loadConfigFile(RTPContext rtpContext,
    String fileURL)
```

Load config file, Internal use.

Parameters:

rtpContext
fileURL

decodeStreamInfo

```
public static RTPStream decodeStreamInfo(RTPContext context,
    String streamId,
    String streamInfo)
```

Decode SDP info and create RTP stream

Parameters:

context - RTP context
streamId - stream id
streamInfo - SDP data

Returns:

(continued from last page)

RTP stream

decodeStreamInfo

```
public static RTPStream decodeStreamInfo(IApplicationInstance appInstance,
    RTPContext context,
    String streamId,
    String streamInfo)
```

Decode SDP info and create RTP stream

Parameters:

appInstance - app instance
context - rtp context
streamId - stream id
streamInfo - stream info (SDP data)

Returns:

rtp stream

decodeStreamInfo

```
public static RTPStream decodeStreamInfo(IApplicationInstance appInstance,
    RTPStreamContext rtpStreamContext,
    RTPContext context,
    String streamId,
    String streamInfo)
```

Decode SDP info and create RTP stream

Parameters:

appInstance - app instance
rtpStreamContext - rtp stream context
context - rtp context
streamId - stream id
streamInfo - stream info (SDP data)

Returns:

rtp stream

formatH264CodecConfigPacket

```
public static byte[] formatH264CodecConfigPacket(byte[] sps,
    java.util.List ppss,
    byte[] profileLevel)
```

Format codec config info, Internal use.

Parameters:

sps
ppss
profileLevel

Returns:

bytes

(continued from last page)

formatH264CodecConfig

```
public static byte[] formatH264CodecConfig(byte[] sps,  
      java.util.List ppss,  
      byte[] profileLevel)
```

Format codec config info, Internal use.

Parameters:

- sps
- ppss
- profileLevel

Returns:

- bytes

com.wowza.wms.util Class StreamUtils

java.lang.Object

└-com.wowza.wms.util.StreamUtils

public class **StreamUtils**
extends Object

Constructor Summary

public	StreamUtils()
--------	-------------------------------

Method Summary

static int	directOutput (byte[] dataBuffer, int[] headerValues, boolean isAbsTimecode, int src, java.io.OutputStream out, AMFObj wmsObj, byte[] workBuffer, int chunkSize) Direct output, Internal use.
static double	getStreamBitrate (IApplicationInstance appInstance, String streamName)
static double	getStreamBitrate (IMediaStream stream) Get the approximate bitrate of a media file in bits/per-second.
static double	getStreamLength (IApplicationInstance appInstance, String streamName) Get the duration of a media file in seconds.
static double	getStreamLength (IMediaStream stream) Get the duration of a media file in seconds.
static boolean	loadConfigFile (StreamList streamDefs, String fileURL) Load Streams.xml, Internal use.
static int	packetOutput (java.io.OutputStream out, IMediaStream stream, AMFPacket packet, long timecode, AMFObj wmsObj, byte[] workBuffer, int chunkSize) Packet output.
static int	packetOutput (java.io.OutputStream out, IMediaStream stream, AMFPacket packet, long timecode, AMFObj wmsObj, byte[] workBuffer, int chunkSize, boolean referenceWrite) Packet output.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

(continued from last page)

StreamUtils

```
public StreamUtils()
```

Methods

getStreamLength

```
public static double getStreamLength(IMediaStream stream)
```

Get the duration of a media file in seconds. This will work correctly with all RandomAccessReaders and caching technology

Parameters:

stream - stream

Returns:

duration in seconds

getStreamBitrate

```
public static double getStreamBitrate(IMediaStream stream)
```

Get the approximate bitrate of a media file in bits/per-second. This will work correctly with all RandomAccessReaders and caching technology.

Parameters:

stream - stream

Returns:

bitrate in bits/per-second

getStreamLength

```
public static double getStreamLength(IApplicationInstance appInstance,  
String streamName)
```

Get the duration of a media file in seconds. This will work correctly with all RandomAccessReaders and caching technology

Parameters:

appInstance - application instance

streamName - stream name

Returns:

duration in seconds

getStreamBitrate

```
public static double getStreamBitrate(IApplicationInstance appInstance,  
String streamName)
```

(continued from last page)

directOutput

```
public static int directOutput(byte[] dataBuffer,  
    int[] headerValues,  
    boolean isAbsTimecode,  
    int src,  
    java.io.OutputStream out,  
    AMFObj wmsObj,  
    byte[] workBuffer,  
    int chunkSize)
```

Direct output. Internal use.

Parameters:

dataBuffer
headerValues
isAbsTimecode
src
out
wmsObj
workBuffer
chunkSize

Returns:

c

packetOutput

```
public static int packetOutput(java.io.OutputStream out,  
    IMediaStream stream,  
    AMFPacket packet,  
    long timecode,  
    AMFObj wmsObj,  
    byte[] workBuffer,  
    int chunkSize)
```

Packet output. Internal use.

Parameters:

out
stream
packet
timecode
wmsObj
workBuffer
chunkSize

Returns:

bytes

packetOutput

```
public static int packetOutput(java.io.OutputStream out,  
    IMediaStream stream,  
    AMFPacket packet,  
    long timecode,  
    AMFObj wmsObj,  
    byte[] workBuffer,  
    int chunkSize,  
    boolean referenceWrite)
```

Packet output. Internal use.

(continued from last page)

Parameters:

out
stream
packet
timecode
wmsObj
workBuffer
chunkSize
referenceWrite

Returns:

bytes

loadConfigFile

```
public static boolean loadConfigFile(StreamList streamDefs,  
    String fileURL)
```

Load Streams.xml, Internal use.

Parameters:

streamDefs
fileURL

Package

com.wowza.wms.util.crontab

com.wowza.wms.util.crontab Class CrontabEvent

java.lang.Object

↳ **com.wowza.wms.util.crontab.CrontabEvent**

All Implemented Interfaces:

Comparable

```
public class CrontabEvent
extends Object
implements Comparable
```

Holds an event's schedule and is responsible for calculating event activation.

Field Summary

public static final	DAY Value: 2
public static	DT_FORMAT
public static final	HOUR Value: 1
public static final	MINUTE Value: 0
public static final	MONTH Value: 3
public static final	WEEKDAY Value: 5
public static final	YEAR Value: 4

Constructor Summary

public	CrontabEvent()
--------	--------------------------------

Method Summary

int	compareTo(CrontabEvent o) Allows CronEvents to be sorted via Java Sort Class.
void	dump() dumps this event's information to the console

String	getError()
int	getErrorField()
ICrontabEventHandler	getEventHandler()
String	getEventStr()
CrontabField	getField(int whichField)
org.joda.time.MutableDateTime	getLastRun()
org.joda.time.MutableDateTime	getNextRun()
String	getTarget()
boolean	isDebugEnabled()
boolean	isExpired() Indicates whether or not all execution dates for this event occur in the past
boolean	isMatch(org.joda.time.MutableDateTime date) Determines if this event will fire on the date passed in
void	setDebug(boolean debug) turns on/off debug logging
void	setError(String error)
void	setErrorField(int errorField)
void	setEventHandler(ICrontabEventHandler handler)
void	setEventStr(String entry)
void	setField(int whichField, CrontabField field)
void	setLastRun() Sets the last run time to now
void	setLastRun(org.joda.time.MutableDateTime date)
void	setTarget(String target)
boolean	start() Starts this events timer
void	stop() stops this events timer

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Methods inherited from interface `java.lang.Comparable`

```
compareTo
```

Fields

DT_FORMAT

```
public static org.joda.time.format.DateTimeFormatter DT_FORMAT
```

MINUTE

```
public static final int MINUTE
```

Constant value: **0**

HOUR

```
public static final int HOUR
```

Constant value: **1**

DAY

```
public static final int DAY
```

Constant value: **2**

MONTH

```
public static final int MONTH
```

Constant value: **3**

YEAR

```
public static final int YEAR
```

Constant value: **4**

WEEKDAY

```
public static final int WEEKDAY
```

Constant value: **5**

Constructors

CrontabEvent

```
public CrontabEvent()
```

Methods

start

```
public boolean start()
```

Starts this events timer

Returns:

true - if timer is started, else false

stop

```
public void stop()
```

stops this events timer

isMatch

```
public boolean isMatch(org.joda.time.MutableDateTime date)
```

Determines if this event will fire on the date passed in

Parameters:

date

Returns:

boolean

setField

```
public void setField(int whichField,  
    CrontabField field)
```

getField

```
public CrontabField getField(int whichField)
```

setTarget

```
public void setTarget(String target)
```

(continued from last page)

getTarget

```
public String getTarget()
```

setEventStr

```
public void setEventStr(String entry)
```

getEventStr

```
public String getEventStr()
```

getNextRun

```
public org.joda.time.MutableDateTime getNextRun()
```

getLastRun

```
public org.joda.time.MutableDateTime getLastRun()
```

setLastRun

```
public void setLastRun(org.joda.time.MutableDateTime date)
```

getError

```
public String getError()
```

setError

```
public void setError(String error)
```

getErrorField

```
public int getErrorField()
```

setErrorField

```
public void setErrorField(int errorField)
```

(continued from last page)

setLastRun

```
public void setLastRun()
```

Sets the last run time to now

setDebug

```
public void setDebug(boolean debug)
```

turns on/off debug logging

Parameters:

debug -- true/false

isDebugEnabled

```
public boolean isDebugEnabled()
```

setEventHandler

```
public void setEventHandler(ICrontabEventHandler handler)
```

getEventHandler

```
public ICrontabEventHandler getEventHandler()
```

isExpired

```
public boolean isExpired()
```

Indicates whether or not all execution dates for this event occur in the past

Returns:

true/false

compareTo

```
public int compareTo(CrontabEvent o)
```

Allows CronEvents to be sorted via Java Sort Class. Compares nextRun dates of two CronEvents where earlier events are considered "less" than later events, (e.g. today < tomorrow) and nulls are "greater" than events with dates (e.g. tomorrow < null) This provides the logic to sort events by soonest to latest with nulls at the end

Parameters:

o -- CronEvent to compare this event to

Returns:

-1,0,1 - if equal, if this event is greater than

(continued from last page)

dump

```
public void dump()
```

 dumps this event's information to the console

com.wowza.wms.util.crontab Interface ICrontabEventHandler

public interface **ICrontabEventHandler**
extends

EventHandler functions are called from a Java timer task context and therefore should execute very quickly so as not to delay execution of subsequent timers. If there is heavy processing which needs to take place, the implementation for these functions should spawn a thread to do it.

Method Summary

void	onCronEvent (CrontabEvent event)
------	---

Methods

onCronEvent

public void **onCronEvent**([CrontabEvent](#) event)

Package

com.wowza.wms.vhost

com.wowza.wms.vhost Class HostPort

java.lang.Object

└-com.wowza.wms.vhost.HostPort

```
public class HostPort
extends Object
```

HostPort: data object that describes a socket connection. The address can be defined by ipAddress or by domainName. It can also contain a reference to an SSLFactory class that can be used to create a secure connection to the server.

Field Summary

public static final	TYPE_ADMIN Value: Admin
public static final	TYPE_STREAMING Value: Streaming

Constructor Summary

public	HostPort() Create an empty HostPort object
--------	---

Method Summary

void	addHttpProvider(IHTTPProvider httpProvider)
void	addHttpProvider(IHTTPProvider2 httpProvider)
void	addHttpProvider(int index, IHTTPProvider2 httpProvider)
void	addHTTPStreamerAdapterID(String ID)
void	configureSocketAcceptor(org.apache.mina.transport.socket.nio.SocketAcceptorConfig socketConfig) Configure a socketAcceport
java.net.InetAddress	getAddress() Get the ipAddress as an InetAddress object
String	getAddressRawStr()
String	getAddressStr() Get a String representation of the address
HostPortConfig	getConfiguration() Get the socket configuration

String	getHTTPIdent2Response()
String	getHTTPIdentResponse()
java.util.List	getHttpProviders()
java.util.List	getHTTPStreamerAdapterIDs()
String	getName()
int	getPort() Get port
int	getProcessorCount() Get the number of threads to use to service this incoming port
HostPortSSLConfig	getSSLConfig()
String	getSslFactoryClass() Get full class name or SSLFactory class
String	getTypeStr()
boolean	isAdmin()
boolean	isSecure()
boolean	isStreaming()
boolean	isSuspended()
void	setDomainName(String domainName) Set domainName.
void	setHTTPIdent2Response(String httpIdent2Response)
void	setHTTPIdentResponse(String httpIdentResponse)
void	setIpAddress(String ipAddress) Set ipAddress for object.
void	setName(String name)
void	setPort(int port) Set port
void	setProcessorCount(int processorCount) Set the number of threads to use to service this incoming port
void	setSSLConfig(HostPortSSLConfig sslConfig)

void	setSslFactoryClass (String sslFactoryClass) Set full class name of SSLFactory class
void	setSuspended (boolean isSuspended)
void	setTypeStr (String typeStr)
int	size (int index, IHTTPProvider2 httpProvider)
String	toString () Return object as formatted string
String	toString (boolean mBeanSafe) Return object as formatted string

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

TYPE_ADMIN

```
public static final java.lang.String TYPE_ADMIN
```

Constant value: **Admin**

TYPE_STREAMING

```
public static final java.lang.String TYPE_STREAMING
```

Constant value: **Streaming**

Constructors

HostPort

```
public HostPort()
```

Create an empty HostPort object

Methods

setDomainName

```
public void setDomainName(String domainName)
```

Set domainName. A domainName of * defines a local connection.

Parameters:

domainName - domainName like www.mycompany.com or * for local

getAddress

```
public java.net.InetAddress getAddress()
```

Get the ipAddress as an InetAddress object

Returns:

ipAddress as an InetAddress object. At this point the domainName (if specified) will be resolved.

getAddressStr

```
public String getAddressStr()
```

Get a String representation of the address

Returns:

String representation of the address/domainName. If * it will return [any]

getAddressRawStr

```
public String getAddressRawStr()
```

setIpAddress

```
public void setIpAddress(String ipAddress)
```

Set ipAddress for object. A ipAddress of * defines a local connection.

Parameters:

ipAddress - ipAddress like 127.0.0.1 or * for local

getPort

```
public int getPort()
```

Get port

Returns:

port

setPort

```
public void setPort(int port)
```

Set port

Parameters:

port - port

getSslFactoryClass

```
public String getSslFactoryClass()
```

Get full class name or SSLFactory class

(continued from last page)

Returns:

full class name or SSLFactory or "" if not specified

setSslFactoryClass

```
public void setSslFactoryClass(String sslFactoryClass)
```

Set full class name of SSLFactory class

Parameters:

sslFactoryClass - full class name or SSLFactory or "" if not specified

getProcessorCount

```
public int getProcessorCount()
```

Get the number of threads to use to service this incoming port

Returns:

number of processor threads

setProcessorCount

```
public void setProcessorCount(int processorCount)
```

Set the number of threads to use to service this incoming port

Parameters:

processorCount - number of processor threads

toString

```
public String toString(boolean mBeanSafe)
```

Return object as formatted string

Parameters:

mBeanSafe - make the name safe for JMX management interface

Returns:

formmatted string

toString

```
public String toString()
```

Return object as formatted string

Returns:

formmatted string

getConfiguration

```
public HostPortConfig getConfiguration()
```

Get the socket configuration

Returns:

(continued from last page)

socket configuration

configureSocketAcceptor

```
public void  
configureSocketAcceptor(org.apache.mina.transport.socket.nio.SocketAcceptorConfig  
socketConfig)
```

Configure a socketAcceptor

Parameters:

socketConfig - socket acceptor

getHttpProviders

```
public java.util.List getHttpProviders()
```

addHttpProvider

```
public void addHttpProvider(IHTTPProvider httpProvider)
```

addHttpProvider

```
public void addHttpProvider(IHTTPProvider2 httpProvider)
```

addHttpProvider

```
public void addHttpProvider(int index,  
IHTTPProvider2 httpProvider)
```

size

```
public int size(int index,  
IHTTPProvider2 httpProvider)
```

isSuspended

```
public boolean isSuspended()
```

setSuspended

```
public void setSuspended(boolean isSuspended)
```

(continued from last page)

getHTTPStreamerAdapterIDs

```
public java.util.List getHTTPStreamerAdapterIDs()
```

addHTTPStreamerAdapterID

```
public void addHTTPStreamerAdapterID(String ID)
```

isSecure

```
public boolean isSecure()
```

getSSLConfig

```
public HostPortSSLConfig getSSLConfig()
```

setSSLConfig

```
public void setSSLConfig(HostPortSSLConfig sslConfig)
```

getHTTPIdentResponse

```
public String getHTTPIdentResponse()
```

setHTTPIdentResponse

```
public void setHTTPIdentResponse(String httpIdentResponse)
```

getHTTPIdent2Response

```
public String getHTTPIdent2Response()
```

setHTTPIdent2Response

```
public void setHTTPIdent2Response(String httpIdent2Response)
```

getTypeStr

```
public String getTypeStr()
```

(continued from last page)

setTypeStr

```
public void setTypeStr(String typeStr)
```

getName

```
public String getName()
```

setName

```
public void setName(String name)
```

isAdmin

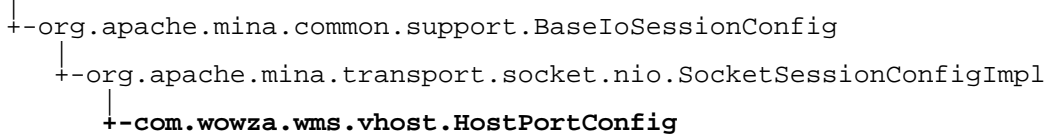
```
public boolean isAdmin()
```

isStreaming

```
public boolean isStreaming()
```

com.wowza.wms.vhost Class HostPortConfig

java.lang.Object



All Implemented Interfaces:

Cloneable, org.apache.mina.common.IoSessionConfig, org.apache.mina.transport.socket.nio.SocketSessionConfig

```

public class HostPortConfig
extends org.apache.mina.transport.socket.nio.SocketSessionConfigImpl
  
```

Constructor Summary

public	HostPortConfig()
--------	----------------------------------

Method Summary

void	configureSocketAcceptor (org.apache.mina.transport.socket.nio.SocketAcceptorConfig socketConfig)
void	configureSocketConnector (org.apache.mina.transport.socket.nio.SocketConnectorConfig socketConfig)
int	getAcceptorBackLog ()
int	getConnectionTimeout ()
int	getReadBufferSize ()
void	setAcceptorBackLog (int acceptorBackLog)
void	setConnectionTimeout (int connectionTimeout)
void	setReadBufferSize (int readBufferSize)

Methods inherited from class org.apache.mina.transport.socket.nio.SocketSessionConfigImpl

getReadBufferSize, getReceiveBufferSize, getSendBufferSize, getSoLinger, getTrafficClass, isGetTrafficClassAvailable, isKeepAlive, isOobInline, isReuseAddress, isSetReceiveBufferSizeAvailable, isSetSendBufferSizeAvailable, isSetTrafficClassAvailable, isTcpNoDelay, setKeepAlive, setOobInline, setReadBufferSize, setReceiveBufferSize, setReuseAddress, setSendBufferSize, setSoLinger, setTcpNoDelay, setTrafficClass

Methods inherited from class org.apache.mina.common.support.BaseIoSessionConfig

```
clone
```

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Methods inherited from interface `org.apache.mina.common.IoSessionConfig`

```
clone
```

Methods inherited from interface `org.apache.mina.transport.socket.nio.SocketSessionConfig`

```
getReadBufferSize, getReceiveBufferSize, getSendBufferSize, getSoLinger, getTrafficClass, isKeepAlive, isOobInline, isReuseAddress, isTcpNoDelay, setKeepAlive, setOobInline, setReadBufferSize, setReceiveBufferSize, setReuseAddress, setSendBufferSize, setSoLinger, setTcpNoDelay, setTrafficClass
```

Methods inherited from interface `org.apache.mina.common.IoSessionConfig`

```
clone
```

Constructors

HostPortConfig

```
public HostPortConfig()
```

Methods

configureSocketConnector

```
public void configureSocketConnector(org.apache.mina.transport.socket.nio.SocketConnectorConfig socketConfig)
```

configureSocketAcceptor

```
public void configureSocketAcceptor(org.apache.mina.transport.socket.nio.SocketAcceptorConfig socketConfig)
```

getAcceptorBackLog

```
public int getAcceptorBackLog()
```

(continued from last page)

setAcceptorBackLog

```
public void setAcceptorBackLog(int acceptorBackLog)
```

getConnectionTimeout

```
public int getConnectionTimeout()
```

setConnectionTimeout

```
public void setConnectionTimeout(int connectionTimeout)
```

getReadBufferSize

```
public int getReadBufferSize()
```

setReadBufferSize

```
public void setReadBufferSize(int readBufferSize)
```

com.wowza.wms.vhost Class HostPortList

java.lang.Object

└─com.wowza.wms.vhost.HostPortList

```
public class HostPortList
extends Object
```

HostPortList: data object that contains a collection of HostPort objects.

Constructor Summary

public	HostPortList() Create empty HostPortList
--------	---

Method Summary

void	add(HostPort hostPort) Add HostPort object
HostPort	get(int index) Get HostPort object at index, null if out of bounds
int	size() Get number of HostPort objects

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

HostPortList

```
public HostPortList()
```

Create empty HostPortList

Methods

add

```
public void add(HostPort hostPort)
```

Add HostPort object

Parameters:

hostPort

size

```
public int size()
```

Get number of HostPort objects

Returns:

number of HostPort objects

get

```
public HostPort get(int index)
```

Get HostPort object at index, null if out of bounds

Parameters:

index - index

Returns:

HostPort object at index, null if out of bounds

com.wowza.wms.vhost Class HostPortSSLCertificateConfig

java.lang.Object

└─com.wowza.wms.vhost.HostPortSSLCertificateConfig

```
public class HostPortSSLCertificateConfig
extends Object
```

Field Summary

protected	keyStoreAlias
protected	keyStorePass
protected	keyStorePath
protected	keyStoreType

Constructor Summary

public	HostPortSSLCertificateConfig()
public	HostPortSSLCertificateConfig (String keyStorePath, String keyStorePass, String keyStoreType)

Method Summary

String	getKeyStoreAlias()
String	getKeyStorePass()
String	getKeyStorePath()
String	getKeyStoreType()
void	setKeyStoreAlias (String keyStoreAlias)
void	setKeyStorePass (String keyStorePass)
void	setKeyStorePath (String keyStorePath)
void	setKeyStoreType (String keyStoreType)
String	toString()

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Fields**keyStorePath**

protected `java.lang.String` **keyStorePath**

keyStorePass

protected `java.lang.String` **keyStorePass**

keyStoreAlias

protected `java.lang.String` **keyStoreAlias**

keyStoreType

protected `java.lang.String` **keyStoreType**

Constructors**HostPortSSLCertificateConfig**

```
public HostPortSSLCertificateConfig()
```

HostPortSSLCertificateConfig

```
public HostPortSSLCertificateConfig(String keyStorePath,  
                                     String keyStorePass,  
                                     String keyStoreType)
```

Methods**getKeyStorePath**

```
public String getKeyStorePath()
```

setKeyStorePath

```
public void setKeyStorePath(String keyStorePath)
```

getKeyStorePass

```
public String getKeyStorePass()
```

setKeyStorePass

```
public void setKeyStorePass(String keyStorePass)
```

getKeyStoreType

```
public String getKeyStoreType()
```

setKeyStoreType

```
public void setKeyStoreType(String keyStoreType)
```

getKeyStoreAlias

```
public String getKeyStoreAlias()
```

setKeyStoreAlias

```
public void setKeyStoreAlias(String keyStoreAlias)
```

toString

```
public String toString()
```

com.wowza.wms.vhost Class HostPortSSLConfig

java.lang.Object

└-com.wowza.wms.vhost.HostPortSSLConfig

```
public class HostPortSSLConfig
extends Object
```

Constructor Summary

public	HostPortSSLConfig()
--------	-------------------------------------

Method Summary

String	getAlgorithm()
HostPortSSLCertificateConfig	getCertificateConfig()
String[]	getCipherSuites()
String	getDomainToKeyStoreMapPathStr()
String	getKeyStorePass()
String	getKeyStorePath()
String	getKeyStoreType()
String[]	getProtocols()
String	getSSLProtocol()
String	getUniqueId()
void	setAlgorithm(String algorithm)
void	setCipherSuites(String[] cipherSuites)
void	setDomainToKeyStoreMapPathStr(String domainToKeyStoreMapPathStr)
void	setKeyStorePass(String keystorePass)
void	setKeyStorePath(String keyStorePath)

void	setKeyStoreType (String keystoreType)
void	setProtocols (String[] protocols)
void	setSSLProtocol (String sslProtocol)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

HostPortSSLConfig

```
public HostPortSSLConfig()
```

Methods

getUniqueId

```
public String getUniqueId()
```

getKeyStorePath

```
public String getKeyStorePath()
```

setKeyStorePath

```
public void setKeyStorePath(String keyStorePath)
```

getKeyStorePass

```
public String getKeyStorePass()
```

setKeyStorePass

```
public void setKeyStorePass(String keystorePass)
```

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getKeyStoreType

```
public String getKeyStoreType()
```

setKeyStoreType

```
public void setKeyStoreType(String keystoreType)
```

getSSLProtocol

```
public String getSSLProtocol()
```

setSSLProtocol

```
public void setSSLProtocol(String sslProtocol)
```

getAlgorithm

```
public String getAlgorithm()
```

setAlgorithm

```
public void setAlgorithm(String algorithm)
```

getCipherSuites

```
public String[] getCipherSuites()
```

setCipherSuites

```
public void setCipherSuites(String[] cipherSuites)
```

getProtocols

```
public String[] getProtocols()
```

setProtocols

```
public void setProtocols(String[] protocols)
```

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getCertificateConfig

```
public HostPortSSLCertificateConfig getCertificateConfig()
```

getDomainToKeyStoreMapPathStr

```
public String getDomainToKeyStoreMapPathStr()
```

setDomainToKeyStoreMapPathStr

```
public void setDomainToKeyStoreMapPathStr(String domainToKeyStoreMapPathStr)
```

com.wowza.wms.vhost Interface IAcceptorNotify

public interface IAcceptorNotify
extends

IAcceptorNotify: listener interface used by IVHost addAcceptorListener

Method Summary

void	onAcceptorCreate (HostPort hostPort, java.util.Map acceptorMap) Triggered when a new acceptor is created
void	onAcceptorDestroy (HostPort hostPort, java.util.Map acceptorMap) Triggered when a new acceptor is deleted

Methods

onAcceptorCreate

```
public void onAcceptorCreate(HostPort hostPort,  
    java.util.Map acceptorMap)
```

Triggered when a new acceptor is created

Parameters:

hostPort - HostPort object
acceptorMap - Map of acceptors

onAcceptorDestroy

```
public void onAcceptorDestroy(HostPort hostPort,  
    java.util.Map acceptorMap)
```

Triggered when a new acceptor is deleted

Parameters:

hostPort - HostPort object
acceptorMap - Map of acceptors

com.wowza.wms.vhost Interface IVHost

public interface **IVHost**
extends

IVHost: public interface to VHost object.

Field Summary	
public static final	ACCEPTORS_ACCEPTOR Acceptor types: acceptor Value: acceptor
public static final	ACCEPTORS_HANDLERADAPTER Acceptor types: handler Value: handlerAdapter
public static final	CODEC_AUDIO_AAC Value: 10
public static final	CODEC_AUDIO_AC3 Value: 1
public static final	CODEC_AUDIO_ALS Value: 13
public static final	CODEC_AUDIO_G711_ALAW Value: 7
public static final	CODEC_AUDIO_G711_MULAW Value: 8
public static final	CODEC_AUDIO_MP3 Value: 2
public static final	CODEC_AUDIO_MP3_8 Value: 15
public static final	CODEC_AUDIO_NELLYMOSER Value: 6
public static final	CODEC_AUDIO_NELLYMOSER_16MONO Value: 4
public static final	CODEC_AUDIO_NELLYMOSER_8MONO Value: 5

public static final	CODEC_AUDIO_OPUS Value: 12
public static final	CODEC_AUDIO_PCM_BE Value: 0
public static final	CODEC_AUDIO_PCM_LE Value: 3
public static final	CODEC_AUDIO_PCM_SWF Value: 1
public static final	CODEC_AUDIO_RESERVED Value: 9
public static final	CODEC_AUDIO_SPEEX Value: 11
public static final	CODEC_AUDIO_UNKNOWN Value: -1
public static final	CODEC_AUDIO_VORBIS Value: 9
public static final	CODEC_STREAM_MP2T Value: 0
public static final	CODEC_STREAM_UNKNOWN Value: -1
public static final	CODEC_VIDEO_H263 Value: 9
public static final	CODEC_VIDEO_H264 Value: 7
public static final	CODEC_VIDEO_H265 Value: 12
public static final	CODEC_VIDEO_MPEG2 Value: 11
public static final	CODEC_VIDEO_MPEG4 Value: 10
public static final	CODEC_VIDEO_SCREEN Value: 3

public static final	CODEC_VIDEO_SCREEN2 Value: 6
public static final	CODEC_VIDEO_SPARK Value: 2
public static final	CODEC_VIDEO_UNKNOWN Value: -1
public static final	CODEC_VIDEO_VERSION_VPX_VP8 Value: 8
public static final	CODEC_VIDEO_VERSION_VPX_VP9 Value: 9
public static final	CODEC_VIDEO_VP6 Value: 4
public static final	CODEC_VIDEO_VP6A Value: 5
public static final	CODEC_VIDEO_VP8 Value: 8
public static final	CODEC_VIDEO_VPX Value: 8
public static final	CONTENTTYPE_ACKBANDWIDTH AMF Content type: set acknowledge bandwidth size Value: 5
public static final	CONTENTTYPE_AUDIO AMF Content type: audio packet Value: 8
public static final	CONTENTTYPE_BUFFERSIZE AMF Content type: set buffer size Value: 4
public static final	CONTENTTYPE_DATA AMF Content type: data packet Value: 18
public static final	CONTENTTYPE_DATA0 AMF Content type: data packet (AMF0) Value: 18
public static final	CONTENTTYPE_DATA3 AMF Content type: data packet (AMF3) Value: 15

public static final	CONTENTTYPE_FUNCTION AMF Content type: function data (AMF0) Value: 20
public static final	CONTENTTYPE_FUNCTION0 AMF Content type: function data (AMF0) Value: 20
public static final	CONTENTTYPE_FUNCTION3 AMF Content type: function data (AMF3) Value: 17
public static final	CONTENTTYPE_MEDIACHUNK AMF Content type: media chunk Value: 22
public static final	CONTENTTYPE_PLAYCALLBACK AMF Content type: play callback Value: 127
public static final	CONTENTTYPE_SETBANDWIDTH AMF Content type: set bandwidth size Value: 6
public static final	CONTENTTYPE_SETCHUNKSIZE AMF Content type: set packet chunk size Value: 1
public static final	CONTENTTYPE_SHAREDOBJECTS AMF Content type: shared object packet (AMF0) Value: 19
public static final	CONTENTTYPE_SHAREDOBJECTS0 AMF Content type: shared object packet (AMF0) Value: 19
public static final	CONTENTTYPE_SHAREDOBJECTS3 AMF Content type: shared object packet (AMF3) Value: 16
public static final	CONTENTTYPE_UKNOWN AMF Content type: unknown Value: 0
public static final	CONTENTTYPE_VIDEO AMF Content type: video packet Value: 9
public static final	CONTENTTYPE_WATCHDOG AMF Content type: watch dog Value: 3
public static final	COUNTER_HTTPCUPERTINO Value: 2

public static final	COUNTER_HTTPDVRCHUNKS Value: 7
public static final	COUNTER_HTTPMPEGDASH Value: 6
public static final	COUNTER_HTTPSANJOSE Value: 4
public static final	COUNTER_HTTPSMOOTH Value: 3
public static final	COUNTER_HTTPPTS Value: 8
public static final	COUNTER_HTTPWEBM Value: 5
public static final	COUNTER_RTMP Value: 0
public static final	COUNTER_RTP Value: 1
public static final	COUNTER_TOTAL Value: 10
public static final	COUNTER_WEBRTC Value: 9
public static final	DEFAULT_WEBRTC_IDLEFREQUENCY Value: 25
public static final	FILEFORMAT_FLV Value: 1
public static final	FILEFORMAT_MP4 Value: 2
public static final	FILEFORMAT_UNKNOWN Value: -1
public static final	LICENSECOUNTER_DRM_BUYDRM_LIVE Value: 9
public static final	LICENSECOUNTER_DRM_BUYDRM_VOD Value: 10

public static final	LICENSECOUNTER_DRM_EZDRM_LIVE Value: 4
public static final	LICENSECOUNTER_DRM_EZDRM_VOD Value: 5
public static final	LICENSECOUNTER_DRM_VERIMATRIX_LIVE Value: 6
public static final	LICENSECOUNTER_DRM_VERIMATRIX_VOD Value: 7
public static final	LICENSECOUNTER_NDVR Value: 3
public static final	LICENSECOUNTER_PUBLISHER Value: 0
public static final	LICENSECOUNTER_PUBLISHERTRANSCODER Value: 8
public static final	LICENSECOUNTER_TOTAL Value: 20
public static final	LICENSECOUNTER_TRANSCODE_DECODE Value: 1
public static final	LICENSECOUNTER_TRANSCODE_DECODECOUNTAUDIO Value: 14
public static final	LICENSECOUNTER_TRANSCODE_DECODECOUNTAUDIOVIDEO Value: 16
public static final	LICENSECOUNTER_TRANSCODE_DECODECOUNTVIDEO Value: 15
public static final	LICENSECOUNTER_TRANSCODE_DECODEPOLLING Value: 11
public static final	LICENSECOUNTER_TRANSCODE_ENCODE Value: 2
public static final	LICENSECOUNTER_TRANSCODE_ENCODECOUNTAUDIO Value: 17
public static final	LICENSECOUNTER_TRANSCODE_ENCODECOUNTAUDIOVIDEO Value: 19

public static final	LICENSECOUNTER_TRANSCODE_ENCODECOUNTVIDEO Value: 18
public static final	LICENSECOUNTER_TRANSCODE_ENCODEPOLLING Value: 12
public static final	LICENSECOUNTER_TRANSCODE_STREAMNAMES Value: 13
public static final	LICENSECOUNTERS_DRM
public static final	VHOST_DEFAULT Value: _defaultVHost_
public static final	VHOST_DEFAULT_HTTP_PERSISTENT Value: false

Method Summary

void	addAcceptorListener (IAcceptorNotify acceptorListener) Add acceptor listener.
void	addApplicationListener (IApplicationNotify applicationListener) Add application listener.
void	addIdleWorkerListener (IIdleWorkerNotify idleWorkerListener) Add idleWorker listener.
void	addStartupStream (StartupStream startupStream) Add a stream to the list of streams to start and virtual host startup
boolean	applicationExists (String name) Return true if an application folder exists for this application name
void	closeHostPort (HostPort hostPort, boolean isSuspend) Close an individual HostPort
IApplication	getApplication (String applicationName) Get application by name.
java.util.List	getApplicationFolderNames () Get a list of application folder names
edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock	getApplicationLock () Get the object used in synchronized statements to lock and application.
java.util.List	getApplicationNames () Get a list of application names
int	getApplicationTimeout () Get application time out (milliseconds).
AuthenticationList	getAuthenticationList () Get the list of available authentication methods

CEACaptionConversionContext	getCEACaptionConversionContext() Get CEACaptionConversionContextMP3 tag map attached to vHost (CEACaptionConversion.xml).
IClient	getClient(int clientId) Get client by client id.
IClient	getClient(int clientId, boolean create) Get client by client id and create if does not exist.
int	getClientCount() Get number of clients connected to this vHost.
int	getClientIdleFrequency() Get default client idle frequency (milliseconds)
int	getClientTimeout() Get client timeout.
ConnectionCounter	getConnectionCounter() Get vHost connection counter.
ConnectionCounterSimple	getConnectionCounter(int counterIndex) Get vHost connection counter for a specific technology (see IVHost.COUNTER_*)
int	getConnectionLimit() Get vHost connection limit.
int	getCoreHandlerPoolSize() Get the handler core thread pool size.
int	getCoreTransportPoolSize() Get the transport core thread pool size.
String	getDateStarted() Get date and time the server was started.
DomainToKeyStoreMapList	getDomainToKeyStoreMapList() Get the SSL certificate map list.
DvrRecorderList	getDvrRecorderList() Get the DvrRecorderList
DvrStoreList	getDvrStoreList() Get the list of DVR Stores
java.util.Properties	getDynamicLogProperties() Get the dynamic log properties defined at the vhost level in conf/log4j.properties
int	getFileIOPoolSize() Get the default file io pool size.
ThreadPool	getHandlerThreadPool() Get the VHost handler thread pool.
String	getHomePath() Get vHost configuration path.
HostPortList	getHostPortsList() Get list of host port definitions for vHost.

boolean	getHTTPPersistentRejectInvalid() Get HTTPPersistent rejection status.
HTTPProviderContext	getHTTPProviderContext() Get the HTTPProvider Context
IHTTPStreamerAdapter	getHTTPStreamerAdapter(String ID) Get an HTTPStreamerAdapter by ID
java.util.List	getHTTPStreamerAdapterIDs() Get a list of HTTPStreamerAdapter IDs
HTTPStreamerContext	getHTTPStreamerContext() Get the HTTPStreamer (Cupertino Streaming and Silverlight Smooth Streaming) host context
HTTPStreamerList	getHTTPStreamerList() Get the list of HTTPStreamers
int	getHTTPStreamerMaxPathLen() Get the max HTTP streamer path length
IVHostHTTPStreamerRequestValidator	getHTTPStreamerRequestValidator() Get the HTTP streamer request validator
int	getIdleCheckFrequency() Get idle check frequency (milliseconds)
int	getIdleMinimumWaitTime() Get the minimum time (milliseconds) the idle worker thread will sleep before generating idle events
int	getIdleWorkerCount() Get number of threads used to generate idle events
IdleWorkersUtil	getIdleWorkers() Get the idle worker utility
IOPerformanceCounter	getIoPerformanceCounter() Get vHost IO performance counter.
IOPerformanceCounter	getIoPerformanceCounter(int counterIndex) Get vHost IO performance counter for a specific technology (see IVHost.COUNTER_*)
IOScheduler	getIOScheduler() Get IO scheduler for vHost.
int	getKeepAliveTimeout() Get the RTMPT connection keep alive timeout
LiveStreamPacketizerList	getLiveStreamPacketizerList() Get the LiveStreamPacketizerList
ILiveStreamRecordManager	getLiveStreamRecordManager() Returns the LiveStreamRecordManager associated with this vhost This object contains the active LiveStreamRecorders
LiveStreamTranscoderList	getLiveStreamTranscoderList() Get the LiveStreamTranscoderList

long	getLiveStreamTranscoderSessionCount() Get the current number of live stream transcoder sessions.
WMSProperties	getManagerProperties() Get VHost's manager's properties collection
int	getMaximumPendingReadBytes() Set maximum number of bytes a client connection can have waiting to be written before the connection is terminated.
int	getMaximumPendingWriteBytes() Get maximum number a bytes a client connection can have waiting to be sent before the connection is terminated.
int	getMaximumSetBufferTime() Get maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call.
MediaCasterList	getMediaCasterList() Get the list of media caster definitions (MediaCaster.xml)
MediaCasterSettings	getMediaCasterSettings() Get the media caster settings
int	getMediaReaderContentType(String mediaType) Get the content type of a media stream name prefix (see IMediaReader.CONTENTTYPE_*)
MediaReaderList	getMediaReaders() Get the media readers attached to vHost (MediaReaders.xml).
MediaWriterList	getMediaWriters() Get the media writers attached to vHost (MediaWriters.xml).
java.util.Map	getMp3TagMap() Get MP3 tag map attached to vHost (MP3Tags.xml).
java.util.Map	getMp4TagMap() Get MP4 tag map attached to vHost (MP4Tags.xml).
String	getName() Get vHost name
HostPortConfig	getNetConnectionHostPortConfig() Get the socket configuration for server to server connections
int	getNetConnectionIdleFrequency() Get server to server idle frequency (milliseconds)
int	getNetConnectionProcessorCount() Get net connection processor count.
int	getNextNetConnectionId() Get next connection id.
int	getPingTimeout() Get ping timeout (milliseconds)
WMSProperties	getProperties() Get properties attached to this vHost.

String	getProperty (String key) Get virtual host property.
void	getProtocolUsage (boolean[] protocolsInUse) Get the protocols in use by this application instance (see IApplicationInstance.PROTOCOLUSAGE_*)
PushPublishContext	getPushPublishContext () Get the push publish context
com.wowza.wms.pushpublish.manager.IPushPublishManager	getPushPublishManager () Returns the PushPublishManager associated with this vhost This object provides access to PushPublishers associated with
RTPContext	getRTPContext () Get the RTP (real time protocol) virtual host context
RTPUDPDatagramConfig	getRTPDatagramConfigIncoming () Get the RTP Datagram Socket configuration
RTPUDPDatagramConfig	getRTPDatagramConfigOutgoing () Get the RTP Datagram Socket configuration
int	getRTPIdleFrequency () Get default RTP idle frequency (milliseconds)
int	getRTSPMaxPathLen () Get the max RTSP stream path length
IVHostRTSPRequestValidator	getRTSPRequestValidator () Get the RTSP request validator
java.util.List	getStartupStreams () Get the list of streams to start at virtual host startup
int	getStartupStreamsDelayTime () Get startup streams delay time (milliseconds).
StreamList	getStreamTypes () Get default stream type.
ThreadPool	getThreadPool () Get the VHost handler thread pool.
com.wowza.wms.transcoder.thumbnailer.ThumbnailerContext	getThumbnailerContext () Get the VOD transcoder context
TimedTextProviderConfiguration	getTimedTextProviderConfig () Get the config of TimedTextProviders
String	getTimeRunning () Get the time vHost has been running.
double	getTimeRunningSeconds () Get time running in seconds
com.wowza.wms.transcoder.vod.TranscoderVODContext	getTranscoderVODContext () Get the VOD transcoder context

ThreadPool	getTransportThreadPool() Get the VHost transport thread pool.
UDPTransportManager	getUDPTransportManager() Get the UDP transport manager.
int	getUnidentifiedSessionTimeout() Get the unidentified session timeout (TCP session that we are not able to identify)
int	getValidationFrequency() Get time between validation pings (milliseconds)
com.wowza.wms.webrtc.model.WebRTCContext	getWebRTCContext() Get the WebRTC virtual host context
int	getWebRTCIdleFrequency() Get default WebRTC idle frequency (milliseconds)
com.wowza.wms.webrtc.tcpsession.IWebRTCTCPSessionFactory	getWebRTCSessionFactory() Get WebRTC session factory
WebSocketContext	getWebSocketContext() Get the WebSocket Context
int	getWebSocketSessionCount() Get the total number of WebSocket sessions
java.util.List	getWebSocketSessions() Get a list of active WebSocket sessions
void	init(String basePath) Initialize vHost.
boolean	isApplicationLoaded(String applicationName) Return true is the application is loaded
boolean	isShuttingDown() Is the VHost shutting down
boolean	isStartStarupStreams() Returns true if the startup streams are to start and vhost startup
boolean	isSuspended() Returns true is all HostPorts connected to this VHost are suspended
boolean	isWebRTCSessionFactory() Is WebRTC enabled for this virtual host
void	killClient(int clientId) Remove client from vHost and send disconnect message.
void	killRTSPSession(String rtspSessionId) Kill an RTSP connection by the RTSP session id
void	putHTTPStreamerAdapter(String ID, IHTTPStreamerAdapter adapter) Add an HTTPStreamerAdapter
void	removeAcceptorListener(IAcceptorNotify acceptorListener) Remove acceptor listener.

void	removeApplicationListener (IApplicationNotify applicationListener) Remove applation listener.
void	removeClient (int clientId) Remove client from vHost.
void	removeIdleWorkerListener (IIIdleWorkerNotify idleWorkerListener) Remove idleWorker listener
void	reparentClient (IClient client) Move a client object to a new vhost.
void	setAdminInterfaceHostPort (HostPort adminInterfaceHostPort) Set admin interface host port (not used)
void	setApplicationTimeout (int applicationTimeout) Set application time out (milliseconds).
void	setClientIdleFrequency (int clientIdleFrequency) Set default client idle frequency (milliseconds)
void	setClientTimeout (int clientTimeout) Set client timeout.
void	setCoreHandlerPoolSize (int corePoolSize) Set the handler core thread pool size.
void	setCoreTransportPoolSize (int corePoolSize) Set the transport core thread pool size.
void	setDynamicLogProperties (java.util.Properties dynamicLogProperties) Set the dynamic log properties set at the vhost level
void	setFileIOPoolSize (int fileIOPoolSize) Set default file io thread pool size.
void	setHTTPPersistentRejectInvalid (boolean flag) Set if invalid HTTP requests should be rejected when using persistent connections
void	setHTTPStreamerMaxPathLen (int httpStreamerMaxPathLen) Set the max HTTP streamer path length
void	setHTTPStreamerRequestValidator (IVHostHTTPStreamerRequestValidator httpRequestValidator) Set the HTTP streamer request validator
void	setIdleCheckFrequency (int idleCheckFrequency) Set idle check frequency (milliseconds)
void	setIdleMinimumWaitTime (int idleMinimumWaitTime) Set the minimum time (milliseconds) the idle worker thread will sleep before generating idle events
void	setIdleWorkerCount (int idleWorkerCount) Set number of threads used to generate idle events
void	setKeepAliveTimeout (int keepAliveTimeout) Set the RTMPT connection keep alive timeout

void	setMaximumPendingReadBytes (int maximumPendingReaderBytes) Get maximum number of bytes a client connection can have waiting to be written before the connection is terminated.
void	setMaximumPendingWriteBytes (int maximumPendingWriteBytes) Set maximum number a bytes a client connection can have waiting to be sent before the connection is terminated.
void	setMaximumSetBufferTime (int maximumSetBufferTime) Set maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call.
void	setNetConnectionIdleFrequency (int netConnectionIdleFrequency) Set the server to server idle frequency (milliseconds)
void	setNetConnectionProcessorCount (int netConnectionProcessorCount) Set net connection processor count.
void	setPingTimeout (int pingTimeout) Set ping timeout (milliseconds)
void	setRTPIidleFrequency (int rtpIdleFrequency) Set default RTP idle frequency (milliseconds)
void	setRTSPMaxPathLen (int rtspStreamerMaxPathLen) Set the max RTSP stream path length
void	setRTSPRequestValidator (IVHostRTSPRequestValidator rtspRequestValidator) Set the RTSP request validator
void	setShuttingDown (boolean shuttingDown) Set VHost shutting down flag
void	setStartStarupStreams (boolean startStarupStreams) Set to true to startup startup stream as vhost startup
void	setStartupStreamsDelayTime (int startupStreamsDelayTime) Set startup streams delay time (milliseconds).
void	setUnidentifiedSessionTimeout (int unidentifiedSessionTimeout) Set the unidentified session timeout (TCP session that we are not able to identify)
void	setValidationFrequency (int validationFrequency) Set time between validation pings (milliseconds)
void	setWebRTCIdleFrequency (int webrtcIdleFrequency) Set default WebRTC idle frequency (milliseconds)
void	shutdown () Shutdown.
void	shutdownApplication (String appName) Shutdown an application by name.
void	shutdownApplication (String appName, boolean deleteFolder) Shutdown an application by name.
boolean	startApplicationInstance (String appName) Start an application instance.

boolean	startApplicationInstance (String appName, String appInstanceName) Start an application instance.
void	startStartupStreams () Method to start startup streams
void	stopStartupStreams () Method to stop startup streams
void	suspendAllHostPorts () Suspend all HostPorts from accepting new connections.
boolean	touchApplicationInstance (String appName) Start an application instance if it is not already started then touch it so it stays loaded for at least 3 seconds.
boolean	touchApplicationInstance (String appName, String appInstanceName) Start an application instance if it is not already started then touch it so it stays loaded for at least 3 seconds.
void	unbindAllHostPorts () Unbind all HostPorts and drop all connections
void	updateLoggingDuration () Internal: update the internal logging values.

Fields

VHOST_DEFAULT

```
public static final java.lang.String VHOST_DEFAULT
```

Constant value: `_defaultVHost_`

VHOST_DEFAULT_HTTP_PERSISTENT

```
public static final boolean VHOST_DEFAULT_HTTP_PERSISTENT
```

Constant value: `false`

LICENSECOUNTER_PUBLISHER

```
public static final int LICENSECOUNTER_PUBLISHER
```

Constant value: `0`

LICENSECOUNTER_TRANSCODE_DECODE

```
public static final int LICENSECOUNTER_TRANSCODE_DECODE
```

Constant value: `1`

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LICENSECOUNTER_TRANSCODE_ENCODE

```
public static final int LICENSECOUNTER_TRANSCODE_ENCODE
```

Constant value: **2**

LICENSECOUNTER_NDVR

```
public static final int LICENSECOUNTER_NDVR
```

Constant value: **3**

LICENSECOUNTER_DRM_EZDRM_LIVE

```
public static final int LICENSECOUNTER_DRM_EZDRM_LIVE
```

Constant value: **4**

LICENSECOUNTER_DRM_EZDRM_VOD

```
public static final int LICENSECOUNTER_DRM_EZDRM_VOD
```

Constant value: **5**

LICENSECOUNTER_DRM_VERIMATRIX_LIVE

```
public static final int LICENSECOUNTER_DRM_VERIMATRIX_LIVE
```

Constant value: **6**

LICENSECOUNTER_DRM_VERIMATRIX_VOD

```
public static final int LICENSECOUNTER_DRM_VERIMATRIX_VOD
```

Constant value: **7**

LICENSECOUNTER_PUBLISHERTRANSCODER

```
public static final int LICENSECOUNTER_PUBLISHERTRANSCODER
```

Constant value: **8**

LICENSECOUNTER_DRM_BUYDRM_LIVE

```
public static final int LICENSECOUNTER_DRM_BUYDRM_LIVE
```

Constant value: **9**

LICENSECOUNTER_DRM_BUYDRM_VOD

```
public static final int LICENSECOUNTER_DRM_BUYDRM_VOD
```

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Constant value: **10**

LICENSECOUNTER_TRANSCODE_DECODEPOLLINGpublic static final int **LICENSECOUNTER_TRANSCODE_DECODEPOLLING**Constant value: **11**

LICENSECOUNTER_TRANSCODE_ENCODEPOLLINGpublic static final int **LICENSECOUNTER_TRANSCODE_ENCODEPOLLING**Constant value: **12**

LICENSECOUNTER_TRANSCODE_STREAMNAMESpublic static final int **LICENSECOUNTER_TRANSCODE_STREAMNAMES**Constant value: **13**

LICENSECOUNTER_TRANSCODE_DECODECOUNTAUDIOpublic static final int **LICENSECOUNTER_TRANSCODE_DECODECOUNTAUDIO**Constant value: **14**

LICENSECOUNTER_TRANSCODE_DECODECOUNTVIDEOpublic static final int **LICENSECOUNTER_TRANSCODE_DECODECOUNTVIDEO**Constant value: **15**

LICENSECOUNTER_TRANSCODE_DECODECOUNTAUDIOVIDEOpublic static final int **LICENSECOUNTER_TRANSCODE_DECODECOUNTAUDIOVIDEO**Constant value: **16**

LICENSECOUNTER_TRANSCODE_ENCODECOUNTAUDIOpublic static final int **LICENSECOUNTER_TRANSCODE_ENCODECOUNTAUDIO**Constant value: **17**

LICENSECOUNTER_TRANSCODE_ENCODECOUNTVIDEOpublic static final int **LICENSECOUNTER_TRANSCODE_ENCODECOUNTVIDEO**Constant value: **18**

LICENSECOUNTER_TRANSCODE_ENCODECOUNTAUDIOVIDEO

```
public static final int LICENSECOUNTER_TRANSCODE_ENCODECOUNTAUDIOVIDEO
```

Constant value: **19**

LICENSECOUNTER_TOTAL

```
public static final int LICENSECOUNTER_TOTAL
```

Constant value: **20**

LICENSECOUNTERS_DRM

```
public static final int LICENSECOUNTERS_DRM
```

COUNTER_RTMP

```
public static final int COUNTER_RTMP
```

Constant value: **0**

COUNTER_RTP

```
public static final int COUNTER_RTP
```

Constant value: **1**

COUNTER_HTTPCUPERTINO

```
public static final int COUNTER_HTTPCUPERTINO
```

Constant value: **2**

COUNTER_HTTPSMOOTH

```
public static final int COUNTER_HTTPSMOOTH
```

Constant value: **3**

COUNTER_HTTPSANJOSE

```
public static final int COUNTER_HTTPSANJOSE
```

Constant value: **4**

COUNTER_HTTPWEBM

```
public static final int COUNTER_HTTPWEBM
```

(continued from last page)

Constant value: **5**

COUNTER_HTTPMPEGDASH

```
public static final int COUNTER_HTTPMPEGDASH
```

Constant value: **6**

COUNTER_HTTPDVRCHUNKS

```
public static final int COUNTER_HTTPDVRCHUNKS
```

Constant value: **7**

COUNTER_HTTPPTS

```
public static final int COUNTER_HTTPPTS
```

Constant value: **8**

COUNTER_WEBRTC

```
public static final int COUNTER_WEBRTC
```

Constant value: **9**

COUNTER_TOTAL

```
public static final int COUNTER_TOTAL
```

Constant value: **10**

CODEC_VIDEO_UNKNOWN

```
public static final int CODEC_VIDEO_UNKNOWN
```

Constant value: **-1**

CODEC_VIDEO_SPARK

```
public static final int CODEC_VIDEO_SPARK
```

Constant value: **2**

CODEC_VIDEO_SCREEN

```
public static final int CODEC_VIDEO_SCREEN
```

Constant value: **3**

CODEC_VIDEO_VP6

```
public static final int CODEC_VIDEO_VP6
```

Constant value: **4**

CODEC_VIDEO_VP6A

```
public static final int CODEC_VIDEO_VP6A
```

Constant value: **5**

CODEC_VIDEO_SCREEN2

```
public static final int CODEC_VIDEO_SCREEN2
```

Constant value: **6**

CODEC_VIDEO_H264

```
public static final int CODEC_VIDEO_H264
```

Constant value: **7**

CODEC_VIDEO_VPX

```
public static final int CODEC_VIDEO_VPX
```

Constant value: **8**

CODEC_VIDEO_VP8

```
public static final int CODEC_VIDEO_VP8
```

Constant value: **8**

CODEC_VIDEO_H263

```
public static final int CODEC_VIDEO_H263
```

Constant value: **9**

CODEC_VIDEO_MPEG4

```
public static final int CODEC_VIDEO_MPEG4
```

Constant value: **10**

(continued from last page)

CODEC_VIDEO_MPEG2

```
public static final int CODEC_VIDEO_MPEG2
```

Constant value: **11**

CODEC_VIDEO_H265

```
public static final int CODEC_VIDEO_H265
```

Constant value: **12**

CODEC_VIDEO_VERSION_VPX_VP8

```
public static final int CODEC_VIDEO_VERSION_VPX_VP8
```

Constant value: **8**

CODEC_VIDEO_VERSION_VPX_VP9

```
public static final int CODEC_VIDEO_VERSION_VPX_VP9
```

Constant value: **9**

CODEC_AUDIO_UNKNOWN

```
public static final int CODEC_AUDIO_UNKNOWN
```

Constant value: **-1**

CODEC_AUDIO_PCM_BE

```
public static final int CODEC_AUDIO_PCM_BE
```

Constant value: **0**

CODEC_AUDIO_PCM_SWF

```
public static final int CODEC_AUDIO_PCM_SWF
```

Constant value: **1**

CODEC_AUDIO_AC3

```
public static final int CODEC_AUDIO_AC3
```

Constant value: **1**

CODEC_AUDIO_MP3

```
public static final int CODEC_AUDIO_MP3
```

(continued from last page)

Constant value: **2**

CODEC_AUDIO_PCM_LE

```
public static final int CODEC_AUDIO_PCM_LE
```

Constant value: **3**

CODEC_AUDIO_NELLYMOSER_16MONO

```
public static final int CODEC_AUDIO_NELLYMOSER_16MONO
```

Constant value: **4**

CODEC_AUDIO_NELLYMOSER_8MONO

```
public static final int CODEC_AUDIO_NELLYMOSER_8MONO
```

Constant value: **5**

CODEC_AUDIO_NELLYMOSER

```
public static final int CODEC_AUDIO_NELLYMOSER
```

Constant value: **6**

CODEC_AUDIO_G711_ALAW

```
public static final int CODEC_AUDIO_G711_ALAW
```

Constant value: **7**

CODEC_AUDIO_G711_MULAW

```
public static final int CODEC_AUDIO_G711_MULAW
```

Constant value: **8**

CODEC_AUDIO_RESERVED

```
public static final int CODEC_AUDIO_RESERVED
```

Constant value: **9**

CODEC_AUDIO_VORBIS

```
public static final int CODEC_AUDIO_VORBIS
```

Constant value: **9**

CODEC_AUDIO_AAC

```
public static final int CODEC_AUDIO_AAC
```

Constant value: **10**

CODEC_AUDIO_SPEEX

```
public static final int CODEC_AUDIO_SPEEX
```

Constant value: **11**

CODEC_AUDIO_OPUS

```
public static final int CODEC_AUDIO_OPUS
```

Constant value: **12**

CODEC_AUDIO_ALS

```
public static final int CODEC_AUDIO_ALS
```

Constant value: **13**

CODEC_AUDIO_MP3_8

```
public static final int CODEC_AUDIO_MP3_8
```

Constant value: **15**

CODEC_STREAM_UNKNOWN

```
public static final int CODEC_STREAM_UNKNOWN
```

Constant value: **-1**

CODEC_STREAM_MP2T

```
public static final int CODEC_STREAM_MP2T
```

Constant value: **0**

FILEFORMAT_UNKNOWN

```
public static final int FILEFORMAT_UNKNOWN
```

Constant value: **-1**

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FILEFORMAT_FLV

```
public static final int FILEFORMAT_FLV
```

Constant value: **1**

FILEFORMAT_MP4

```
public static final int FILEFORMAT_MP4
```

Constant value: **2**

CONTENTTYPE_UNKNOWN

```
public static final byte CONTENTTYPE_UNKNOWN
```

AMF Content type: unknown
Constant value: **0**

CONTENTTYPE_SETCHUNKSIZE

```
public static final byte CONTENTTYPE_SETCHUNKSIZE
```

AMF Content type: set packet chunk size
Constant value: **1**

CONTENTTYPE_WATCHDOG

```
public static final byte CONTENTTYPE_WATCHDOG
```

AMF Content type: watch dog
Constant value: **3**

CONTENTTYPE_BUFFERSIZE

```
public static final byte CONTENTTYPE_BUFFERSIZE
```

AMF Content type: set buffer size
Constant value: **4**

CONTENTTYPE_ACKBANDWIDTH

```
public static final byte CONTENTTYPE_ACKBANDWIDTH
```

AMF Content type: set acknowledge bandwidth size
Constant value: **5**

CONTENTTYPE_SETBANDWIDTH

```
public static final byte CONTENTTYPE_SETBANDWIDTH
```

AMF Content type: set bandwidth size
Constant value: **6**

CONTENTTYPE_AUDIO

```
public static final byte CONTENTTYPE_AUDIO
```

(continued from last page)

AMF Content type: audio packet
Constant value: **8**

CONTENTTYPE_VIDEO

public static final byte **CONTENTTYPE_VIDEO**

AMF Content type: video packet
Constant value: **9**

CONTENTTYPE_DATA

public static final byte **CONTENTTYPE_DATA**

AMF Content type: data packet
Constant value: **18**

CONTENTTYPE_DATA0

public static final byte **CONTENTTYPE_DATA0**

AMF Content type: data packet (AMF0)
Constant value: **18**

CONTENTTYPE_DATA3

public static final byte **CONTENTTYPE_DATA3**

AMF Content type: data packet (AMF3)
Constant value: **15**

CONTENTTYPE_SHAREDOBJECTS

public static final byte **CONTENTTYPE_SHAREDOBJECTS**

AMF Content type: shared object packet (AMF0)
Constant value: **19**

CONTENTTYPE_SHAREDOBJECTS0

public static final byte **CONTENTTYPE_SHAREDOBJECTS0**

AMF Content type: shared object packet (AMF0)
Constant value: **19**

CONTENTTYPE_SHAREDOBJECTS3

public static final byte **CONTENTTYPE_SHAREDOBJECTS3**

AMF Content type: shared object packet (AMF3)
Constant value: **16**

CONTENTTYPE_FUNCTION

public static final byte **CONTENTTYPE_FUNCTION**

AMF Content type: function data (AMF0)
Constant value: **20**

CONTENTTYPE_FUNCTION0

```
public static final byte CONTENTTYPE_FUNCTION0
```

AMF Content type: function data (AMF0)
Constant value: **20**

CONTENTTYPE_MEDIACHUNK

```
public static final byte CONTENTTYPE_MEDIACHUNK
```

AMF Content type: media chunk
Constant value: **22**

CONTENTTYPE_FUNCTION3

```
public static final byte CONTENTTYPE_FUNCTION3
```

AMF Content type: function data (AMF3)
Constant value: **17**

CONTENTTYPE_PLAYCALLBACK

```
public static final byte CONTENTTYPE_PLAYCALLBACK
```

AMF Content type: play callback
Constant value: **127**

ACCEPTORS_ACCEPTOR

```
public static final java.lang.String ACCEPTORS_ACCEPTOR
```

Acceptor types: acceptor
Constant value: **acceptor**

ACCEPTORS_HANDLERADAPTER

```
public static final java.lang.String ACCEPTORS_HANDLERADAPTER
```

Acceptor types: handler
Constant value: **handlerAdapter**

DEFAULT_WEBRTC_IDLEFREQUENCY

```
public static final int DEFAULT_WEBRTC_IDLEFREQUENCY
```

Constant value: **25**

Methods

init

```
public void init(String basePath)
```

Initialize vHost.

Parameters:

(continued from last page)

basePath - base path to configuration files

shutdown

```
public void shutdown()
```

Shutdown.

getStreamTypes

```
public StreamList getStreamTypes()
```

Get default stream type.

Returns:

default stream type

getProperty

```
public String getProperty(String key)
```

Get virtual host property.

Parameters:

key - key

Returns:

property value or null if does not exist

getClientTimeout

```
public int getClientTimeout()
```

Get client timeout.

Returns:

client timeout

getNextNetConnectionId

```
public int getNextNetConnectionId()
```

Get next connection id.

Returns:

next connection id

getClient

```
public IClient getClient(int clientId)
```

Get client by client id.

Parameters:

clientId - client id

Returns:

client

getClient

```
public IClient getClient(int clientId,  
                        boolean create)
```

Get client by client id and create if does not exist.

Parameters:

clientId - client id
create - create if does not exist

Returns:

client

removeClient

```
public void removeClient(int clientId)
```

Remove client from vHost.

Parameters:

clientId - client id

killClient

```
public void killClient(int clientId)
```

Remove client from vHost and send disconnect message.

Parameters:

clientId - client id

killRTSPSession

```
public void killRTSPSession(String rtspSessionId)
```

Kill an RTSP connection by the RTSP session id

Parameters:

rtspSessionId - RTSP session id

getApplication

```
public IApplication getApplication(String applicationName)
```

Get application by name.

Parameters:

applicationName - application name

Returns:

application

isApplicationLoaded

```
public boolean isApplicationLoaded(String applicationName)
```

Return true is the application is loaded

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Parameters:

applicationName - application name

Returns:

true if application is loaded

getHomePath

```
public String getHomePath()
```

Get vHost configuration path.

Returns:

configuration path

getProperties

```
public WMSProperties getProperties()
```

Get properties attached to this vHost.

Returns:

properties attached to this vHost

getManagerProperties

```
public WMSProperties getManagerProperties()
```

Get VHost's manager's properties collection

Returns:

manager's property collection

getCoreTransportPoolSize

```
public int getCoreTransportPoolSize()
```

Get the transport core thread pool size.

Returns:

default core thread pool size

setCoreTransportPoolSize

```
public void setCoreTransportPoolSize(int corePoolSize)
```

Set the transport core thread pool size.

Parameters:

corePoolSize - core thread pool size

getCoreHandlerPoolSize

```
public int getCoreHandlerPoolSize()
```

Get the handler core thread pool size.

(continued from last page)

Returns:

default core thread pool size

setCoreHandlerPoolSize

```
public void setCoreHandlerPoolSize(int corePoolSize)
```

Set the handler core thread pool size.

Parameters:

corePoolSize - core thread pool size

getFileIOPoolSize

```
public int getFileIOPoolSize()
```

Get the default file io pool size.

Returns:

default file io pool size

setFileIOPoolSize

```
public void setFileIOPoolSize(int fileIOPoolSize)
```

Set default file io thread pool size.

Parameters:

fileIOPoolSize - default file io thread pool size

setClientTimeout

```
public void setClientTimeout(int clientTimeout)
```

Set client timeout. An inactive client connected by RTMPT protocol will be deleted after this timeout.

Parameters:

clientTimeout - client timeout

getHostPortsList

```
public HostPortList getHostPortsList()
```

Get list of host port definitions for vHost.

Returns:

list of host port definitions for vHost

getThreadPool

```
public ThreadPool getThreadPool()
```

Get the VHost handler thread pool. Same as getHandlerThreadPool.

Returns:

VHost handler thread pool

(continued from last page)

getTransportThreadPool

```
public ThreadPool getTransportThreadPool()
```

Get the VHost transport thread pool. This thread pool is used to read/write data from the transports sockets.

Returns:

VHost transport thread pool

getHandlerThreadPool

```
public ThreadPool getHandlerThreadPool()
```

Get the VHost handler thread pool. This thread pool is used to process the incoming events.

Returns:

VHost handler thread pool

getName

```
public String getName()
```

Get vHost name

Returns:

vHost name

setAdminInterfaceHostPort

```
public void setAdminInterfaceHostPort(HostPort adminInterfaceHostPort)
```

Set admin interface host port (not used)

Parameters:

adminInterfaceHostPort - admin interface host port

getClientCount

```
public int getClientCount()
```

Get number of clients connected to this vHost.

Returns:

number of clients connected to this vHost

getNetConnectionProcessorCount

```
public int getNetConnectionProcessorCount()
```

Get net connection processor count. Number of threads used for server to server communication (not finished).

Returns:

net connection processor count

setNetConnectionProcessorCount

```
public void setNetConnectionProcessorCount(int netConnectionProcessorCount)
```

(continued from last page)

Set net connection processor count. Number of threads used for server to server communication (not finished).

Parameters:

netConnectionProcessorCount - net connection processor count

addApplicationListener

```
public void addApplicationListener(IApplicationNotify applicationListener)
```

Add application listener. An application listener will receive the following events: onApplicationCreate, onApplicationDestroy.

Parameters:

applicationListener - application listener

removeApplicationListener

```
public void removeApplicationListener(IApplicationNotify applicationListener)
```

Remove application listener.

Parameters:

applicationListener - application listener

addAcceptorListener

```
public void addAcceptorListener(IAcceptorNotify acceptorListener)
```

Add acceptor listener. Acceptor listeners will receive the following events: onAcceptorCreate, onAcceptorDestroy.

Parameters:

acceptorListener - acceptor listener

removeAcceptorListener

```
public void removeAcceptorListener(IAcceptorNotify acceptorListener)
```

Remove acceptor listener.

Parameters:

acceptorListener - acceptor listener

getIOScheduler

```
public IOScheduler getIOScheduler()
```

Get IO scheduler for vHost. IO scheduler is used to schedule reads from the disk to increase server throughput for static file serving.

Returns:

IO scheduler for vHost

getIoPerformanceCounter

```
public IOPerformanceCounter getIoPerformanceCounter()
```

Get vHost IO performance counter.

Returns:

io performance counter

getIoPerformanceCounter

```
public IOPerformanceCounter getIoPerformanceCounter(int counterIndex)
```

Get vHost IO performance counter for a specific technology (see IVHost.COUNTER_*)

Parameters:

counterIndex - counter index (see IVHost.COUNTER_*)

Returns:

io performance counter

getConnectionCounter

```
public ConnectionCounter getConnectionCounter()
```

Get vHost connection counter.

Returns:

connection counter

getConnectionCounter

```
public ConnectionCounterSimple getConnectionCounter(int counterIndex)
```

Get vHost connection counter for a specific technology (see IVHost.COUNTER_*)

Parameters:

counterIndex - counter index (see IVHost.COUNTER_*)

Returns:

connection counter

getDateStarted

```
public String getDateStarted()
```

Get date and time the server was started.

Returns:

date and time the server was started

getTimeRunning

```
public String getTimeRunning()
```

Get the time vHost has been running.

Returns:

formatted string with vHost uptime

getTimeRunningSeconds

```
public double getTimeRunningSeconds()
```

Get time running in seconds

(continued from last page)

Returns:

time running in seconds

getConnectionLimit

```
public int getConnectionLimit()
```

Get vHost connection limit.

Returns:

vHost connection limit

getMediaReaders

```
public MediaReaderList getMediaReaders()
```

Get the media readers attached to vHost (MediaReaders.xml).

Returns:

media readers attached to vHost

getMediaWriters

```
public MediaWriterList getMediaWriters()
```

Get the media writers attached to vHost (MediaWriters.xml).

Returns:

media writers attached to vHost

getMp3TagMap

```
public java.util.Map getMp3TagMap()
```

Get MP3 tag map attached to vHost (MP3Tags.xml).

Returns:

MP3 tag map attached to vHost

getMp4TagMap

```
public java.util.Map getMp4TagMap()
```

Get MP4 tag map attached to vHost (MP4Tags.xml).

Returns:

MP4 tag map attached to vHost

getCEACaptionConversionContext

```
public CEACaptionConversionContext getCEACaptionConversionContext()
```

Get CEACaptionConversionContextMP3 tag map attached to vHost (CEACaptionConversion.xml).

Returns:

MP3 tag map attached to vHost

(continued from last page)

updateLoggingDuration

```
public void updateLoggingDuration()
```

Internal: update the internal logging values.

getApplicationTimeout

```
public int getApplicationTimeout()
```

Get application time out (milliseconds). Time from last client disconnect to application destruction.

Returns:

application time out (milliseconds)

setApplicationTimeout

```
public void setApplicationTimeout(int applicationTimeout)
```

Set application time out (milliseconds).

Parameters:

applicationTimeout - application time out (milliseconds)

getPingTimeout

```
public int getPingTimeout()
```

Get ping timeout (milliseconds)

Returns:

ping timeout (milliseconds)

setPingTimeout

```
public void setPingTimeout(int pingTimeout)
```

Set ping timeout (milliseconds)

Parameters:

pingTimeout - ping timeout (milliseconds)

getValidationFrequency

```
public int getValidationFrequency()
```

Get time between validation pings (milliseconds)

Returns:

time between validation pings (milliseconds)

setValidationFrequency

```
public void setValidationFrequency(int validationFrequency)
```

Set time between validation pings (milliseconds)

Parameters:

(continued from last page)

validationFrequency - time between validation pings (milliseconds)

getMaximumPendingWriteBytes

```
public int getMaximumPendingWriteBytes()
```

Get maximum number a bytes a client connection can have waiting to be sent before the connection is terminated. If set to zero this feature is turned off.

Returns:

maximum number a bytes a client connection can have waiting to be sent before the connection is terminated

setMaximumPendingWriteBytes

```
public void setMaximumPendingWriteBytes(int maximumPendingWriteBytes)
```

Set maximum number a bytes a client connection can have waiting to be sent before the connection is terminated. If set to zero this feature is turned off.

Parameters:

maximumPendingWriteBytes - maximum number a bytes a client connection can have waiting to be sent before the connection is terminated

getMaximumPendingReadBytes

```
public int getMaximumPendingReadBytes()
```

Set maximum number of bytes a client connection can have waiting to be written before the connection is terminated. If set to zero this feature is off.

Returns:

maximum number of bytes a client connection can have waiting to be written before the connection is terminated

setMaximumPendingReadBytes

```
public void setMaximumPendingReadBytes(int maximumPendingReaderBytes)
```

Get maximum number of bytes a client connection can have waiting to be written before the connection is terminated. If set to zero this feature is off.

Parameters:

maximumPendingReaderBytes - maximum number of bytes a client connection can have waiting to be written before the connection is terminated

getMaximumSetBufferTime

```
public int getMaximumSetBufferTime()
```

Get maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call. If set to zero this feature is turned off.

Returns:

maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call

setMaximumSetBufferTime

```
public void setMaximumSetBufferTime(int maximumSetBufferTime)
```

Set maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call. If set to zero this feature is turned off.

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Parameters:

maximumSetBufferTime - maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call

getApplicationLock

```
public edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock  
getApplicationLock()
```

Get the object used in synchronized statements to lock and application.

Returns:

object used in synchronized statements to lock and application

getClientIdleFrequency

```
public int getClientIdleFrequency()
```

Get default client idle frequency (milliseconds)

Returns:

default client idle frequency (milliseconds)

setClientIdleFrequency

```
public void setClientIdleFrequency(int clientIdleFrequency)
```

Set default client idle frequency (milliseconds)

Parameters:

clientIdleFrequency - default client idle frequency (milliseconds)

getRTPIdeFrequency

```
public int getRTPIdeFrequency()
```

Get default RTP idle frequency (milliseconds)

Returns:

default RTP idle frequency (milliseconds)

setRTPIdeFrequency

```
public void setRTPIdeFrequency(int rtpIdleFrequency)
```

Set default RTP idle frequency (milliseconds)

Parameters:

rtpIdleFrequency - RTP default client idle frequency (milliseconds)

getWebRTCIdleFrequency

```
public int getWebRTCIdleFrequency()
```

Get default WebRTC idle frequency (milliseconds)

Returns:

default WebRTC idle frequency (milliseconds)

setWebRTCIdeFrequency

```
public void setWebRTCIdeFrequency(int webrtcIdleFrequency)
```

Set default WebRTC idle frequency (milliseconds)

Parameters:

webrtcIdleFrequency - default WebRTC idle frequency (milliseconds)

getNetConnectionIdleFrequency

```
public int getNetConnectionIdleFrequency()
```

Get server to server idle frequency (milliseconds)

Returns:

server to server idle frequency (milliseconds)

setNetConnectionIdleFrequency

```
public void setNetConnectionIdleFrequency(int netConnectionIdleFrequency)
```

Set the server to server idle frequency (milliseconds)

Parameters:

netConnectionIdleFrequency - server to server idle frequency (milliseconds)

getIdleCheckFrequency

```
public int getIdleCheckFrequency()
```

Get idle check frequency (milliseconds)

Returns:

idle check frequency (milliseconds)

setIdleCheckFrequency

```
public void setIdleCheckFrequency(int idleCheckFrequency)
```

Set idle check frequency (milliseconds)

Parameters:

idleCheckFrequency - idle check frequency (milliseconds)

getIdleWorkerCount

```
public int getIdleWorkerCount()
```

Get number of threads used to generate idle events

Returns:

number of threads used to generate idle events

setIdleWorkerCount

```
public void setIdleWorkerCount(int idleWorkerCount)
```

(continued from last page)

Set number of threads used to generate idle events

Parameters:

`idleWorkerCount` - number of threads used to generate idle events

getKeepAliveTimeout

```
public int getKeepAliveTimeout()
```

Get the RTMPT connection keep alive timeout

Returns:

RTMPT connection keep alive timeout

setKeepAliveTimeout

```
public void setKeepAliveTimeout(int keepAliveTimeout)
```

Set the RTMPT connection keep alive timeout

Parameters:

`keepAliveTimeout` - RTMPT connection keep alive timeout

addIdleWorkerListener

```
public void addIdleWorkerListener(IIdleWorkerNotify idleWorkerListener)
```

Add idleWorker listener. An idleWorker listener will receive the following events: onIdleWorkerCreate, onIdleWorkerDestroy.

Parameters:

`idleWorkerListener` - idleWorker listener

removeIdleWorkerListener

```
public void removeIdleWorkerListener(IIdleWorkerNotify idleWorkerListener)
```

Remove idleWorker listener

Parameters:

`idleWorkerListener` - idleWorker listener

getNetConnectionHostPortConfig

```
public HostPortConfig getNetConnectionHostPortConfig()
```

Get the socket configuration for server to server connections

Returns:

socket configuration for server to server connections

getMediaCasterSettings

```
public MediaCasterSettings getMediaCasterSettings()
```

Get the media caster settings

Returns:

media caster settings

getMediaCasterList

```
public MediaCasterList getMediaCasterList()
```

Get the list of media caster definitions (MediaCaster.xml)

Returns:

list of media caster definitions

getApplicationNames

```
public java.util.List getApplicationNames()
```

Get a list of application names

Returns:

list of application names

getApplicationFolderNames

```
public java.util.List getApplicationFolderNames()
```

Get a list of application folder names

Returns:

list of application folder names

applicationExists

```
public boolean applicationExists(String name)
```

Return true if an application folder exists for this application name

Parameters:

name - application name

Returns:

true if an application folder exists for this application name

getRTPContext

```
public RTPContext getRTPContext()
```

Get the RTP (real time protocol) virtual host context

Returns:

RTP (real time protocol) virtual host context

getWebRTCContext

```
public com.wowza.wms.webrtc.model.WebRTCContext getWebRTCContext()
```

Get the WebRTC virtual host context

Returns:

WebRTC virtual host context

getHTTPStreamerContext

```
public HTTPStreamerContext getHTTPStreamerContext()
```

Get the HTTPStreamer (Cupertino Streaming and Silverlight Smooth Streaming) host context

Returns:

HTTPStreamer (Cupertino Streaming and Silverlight Smooth Streaming) host context

getRTPDatagramConfigIncoming

```
public RTPUDPDatagramConfig getRTPDatagramConfigIncoming()
```

Get the RTP Datagram Socket configuration

Returns:

RTP Datagram Socket configuration

getRTPDatagramConfigOutgoing

```
public RTPUDPDatagramConfig getRTPDatagramConfigOutgoing()
```

Get the RTP Datagram Socket configuration

Returns:

RTP Datagram Socket configuration

getAuthenticationList

```
public AuthenticationList getAuthenticationList()
```

Get the list of available authentication methods

Returns:

list of available authentication methods

getIdleMinimumWaitTime

```
public int getIdleMinimumWaitTime()
```

Get the minimum time (milliseconds) the idle worker thread will sleep before generating idle events

Returns:

minimum time (milliseconds) the idle worker thread will sleep before generating idle events

setIdleMinimumWaitTime

```
public void setIdleMinimumWaitTime(int idleMinimumWaitTime)
```

Set the minimum time (milliseconds) the idle worker thread will sleep before generating idle events

Parameters:

idleMinimumWaitTime - minimum time (milliseconds) the idle worker thread will sleep before generating idle events

getIdleWorkers

```
public IdleWorkersUtil getIdleWorkers()
```

(continued from last page)

Get the idle worker utility

Returns:

idle worker utility

isShuttingDown

```
public boolean isShuttingDown()
```

Is the VHost shutting down

Returns:

true if the vhost is shutting down

setShuttingDown

```
public void setShuttingDown(boolean shuttingDown)
```

Set VHost shutting down flag

Parameters:

shuttingDown - true if the vhost is shutting down

reparentClient

```
public void reparentClient(IClient client)
```

Move a client object to a new vhost. This can only be done right after the handshake process has completed. See `IVHostNotify.onVHostClientConnect`.

Parameters:

client - client object to move

getDynamicLogProperties

```
public java.util.Properties getDynamicLogProperties()
```

Get the dynamic log properties defined at the vhost level in `conf/log4j.properties`

Returns:

dynamic log properties defined at the vhost level

setDynamicLogProperties

```
public void setDynamicLogProperties(java.util.Properties dynamicLogProperties)
```

Set the dynamic log properties set at the vhost level

Parameters:

dynamicLogProperties - dynamic log properties defined at the vhost level

shutdownApplication

```
public void shutdownApplication(String appName)
```

Shutdown an application by name. This will disconnect all clients connected to all child application instances.

Parameters:

(continued from last page)

appName - application name

shutdownApplication

```
public void shutdownApplication(String appName,  
    boolean deleteFolder)
```

Shutdown an application by name. This will disconnect all clients connected to all child application instances.

Parameters:

appName - application name
deleteFolder - delete the application folder

unbindAllHostPorts

```
public void unbindAllHostPorts()
```

Unbind all HostPorts and drop all connections

suspendAllHostPorts

```
public void suspendAllHostPorts()
```

Suspend all HostPorts from accepting new connections. Current connections will continue to be serviced

closeHostPort

```
public void closeHostPort(HostPort hostPort,  
    boolean isSuspend)
```

Close an individual HostPort

Parameters:

hostPort - host port to close
isSuspend - if true will just suspend the HostPort from accepting new connections, if false will unbind and drop all connections

isSuspended

```
public boolean isSuspended()
```

Returns true is all HostPorts connected to this VHost are suspended

touchApplicationInstance

```
public boolean touchApplicationInstance(String appName)
```

Start an application instance if it is not already started then touch it so it stays loaded for at least 3 seconds.

Parameters:

appName - application name

Returns:

true is successful

touchApplicationInstance

```
public boolean touchApplicationInstance(String appName,  
    String appInstanceName)
```

(continued from last page)

Start an application instance if it is not already started then touch it so it stays loaded for at least 3 seconds. The default `appInstanceName_definst_` will be used.

Parameters:

`appName` - application name
`appInstanceName` - app instance name

Returns:

true is successful

startApplicationInstance

```
public boolean startApplicationInstance(String appName)
```

Start an application instance. The default `appInstanceName_definst_` will be used.

Parameters:

`appName` - application name

Returns:

true is successful

startApplicationInstance

```
public boolean startApplicationInstance(String appName,  
String appInstanceName)
```

Start an application instance.

Parameters:

`appName` - application name
`appInstanceName` - app instance name

Returns:

true is successful

getUDPTransportManager

```
public UDPTransportManager getUDPTransportManager()
```

Get the UDP transport manager.

Returns:

UDP transport manager

getHTTPStreamerList

```
public HTTPStreamerList getHTTPStreamerList()
```

Get the list of HTTPStreamers

Returns:

list of HTTPStreamers

getHTTPStreamerAdapter

```
public IHTTPStreamerAdapter getHTTPStreamerAdapter(String ID)
```

(continued from last page)

Get an HTTPStreamerAdapter by ID

Parameters:

ID - HTTPStreamerAdapter ID

Returns:

HTTPStreamerAdapter

putHTTPStreamerAdapter

```
public void putHTTPStreamerAdapter(String ID,  
    IHTTPStreamerAdapter adapter)
```

Add an HTTPStreamerAdapter

Parameters:

ID - HTTPStreamerAdapter ID
adapter - HTTPStreamerAdapter

getHTTPStreamerAdapterIDs

```
public java.util.List getHTTPStreamerAdapterIDs()
```

Get a list of HTTPStreamerAdapter IDs

Returns:

list of HTTPStreamerAdapter IDs

getLiveStreamPacketizerList

```
public LiveStreamPacketizerList getLiveStreamPacketizerList()
```

Get the LiveStreamPacketizerList

Returns:

LiveStreamPacketizerList

getLiveStreamTranscoderList

```
public LiveStreamTranscoderList getLiveStreamTranscoderList()
```

Get the LiveStreamTranscoderList

Returns:

LiveStreamTranscoderList

getTimedTextProviderConfig

```
public TimedTextProviderConfiguration getTimedTextProviderConfig()
```

Get the config of TimedTextProviders

Returns:

TimedTextProviders config

getStartupStreams

```
public java.util.List getStartupStreams()
```

(continued from last page)

Get the list of streams to start at virtual host startup

Returns:

list of streams to start at virtual host startup

addStartupStream

```
public void addStartupStream(StartupStream startupStream)
```

Add a stream to the list of streams to start and virtual host startup

Parameters:

startupStream - startup stream

isStartStarupStreams

```
public boolean isStartStarupStreams()
```

Returns true if the startup streams are to start and vhost startup

Returns:

true if the startup streams are to start and vhost startup

setStartStarupStreams

```
public void setStartStarupStreams(boolean startStarupStreams)
```

Set to true to startup startup stream as vhost startup

Parameters:

startStarupStreams - true if the startup streams are to start and vhost startup

startStartupStreams

```
public void startStartupStreams()
```

Method to start startup streams

stopStartupStreams

```
public void stopStartupStreams()
```

Method to stop startup streams

getDvrRecorderList

```
public DvrRecorderList getDvrRecorderList()
```

Get the DvrRecorderList

Returns:

list of DVR Recorders

getDvrStoreList

```
public DvrStoreList getDvrStoreList()
```

Get the list of DVR Stores

(continued from last page)

Returns:

list of DVR Stores

getLiveStreamRecordManager

```
public ILiveStreamRecordManager getLiveStreamRecordManager()
```

Returns the LiveStreamRecordManager associated with this vhost This object contains the active LiveStreamRecorders

Returns:

ILiveStreamRecordManager associated with this vhost

getPushPublishManager

```
public com.wowza.wms.pushpublish.manager.IPushPublishManager getPushPublishManager()
```

Returns the PushPublishManager associated with this vhost This object provides access to PushPublishers associated with

Returns:

IPushPublishManager associated with this vhost

getMediaReaderContentType

```
public int getMediaReaderContentType(String mediaType)
```

Get the content type of a media stream name prefix (see IMediaReader.CONTENTTYPE_*)

Parameters:

mediaType - mediaType (such as flv or smil)

Returns:

content type (see IMediaReader.CONTENTTYPE_*)

getProtocolUsage

```
public void getProtocolUsage(boolean[] protocolsInUse)
```

Get the protocols in use by this application instance (see IApplicationInstance.PROTOCOLUSAGE_*)

getTranscoderVODContext

```
public com.wowza.wms.transcoder.vod.TranscoderVODContext getTranscoderVODContext()
```

Get the VOD transcoder context

Returns:

VOD transcoder context

getThumbnailerContext

```
public com.wowza.wms.transcoder.thumbnailer.ThumbnailerContext getThumbnailerContext()
```

Get the VOD transcoder context

Returns:

VOD transcoder context

getHTTPStreamerRequestValidator

```
public IVHostHTTPStreamerRequestValidator getHTTPStreamerRequestValidator()
```

Get the HTTP streamer request validator

Returns:

HTTP streamer request validator

setHTTPStreamerRequestValidator

```
public void setHTTPStreamerRequestValidator(IVHostHTTPStreamerRequestValidator  
httpRequestValidator)
```

Set the HTTP streamer request validator

Parameters:

httpRequestValidator - HTTP streamer request validator

getHTTPStreamerMaxPathLen

```
public int getHTTPStreamerMaxPathLen()
```

Get the max HTTP streamer path length

Returns:

max HTTP streamer path length

setHTTPStreamerMaxPathLen

```
public void setHTTPStreamerMaxPathLen(int httpStreamerMaxPathLen)
```

Set the max HTTP streamer path length

Parameters:

httpStreamerMaxPathLen - max HTTP streamer path length

getRTSPRequestValidator

```
public IVHostRTSPRequestValidator getRTSPRequestValidator()
```

Get the RTSP request validator

Returns:

RTSP request validator

setRTSPRequestValidator

```
public void setRTSPRequestValidator(IVHostRTSPRequestValidator rtspRequestValidator)
```

Set the RTSP request validator

Parameters:

rtspRequestValidator - RTSP request validator

(continued from last page)

getRTSPMaxPathLen

```
public int getRTSPMaxPathLen()
```

Get the max RTSP stream path length

Returns:

max RTSP stream path length

setRTSPMaxPathLen

```
public void setRTSPMaxPathLen(int rtspStreamerMaxPathLen)
```

Set the max RTSP stream path length

Parameters:

rtspStreamerMaxPathLen - max RTSP stream path length

getLiveStreamTranscoderSessionCount

```
public long getLiveStreamTranscoderSessionCount()
```

Get the current number of live stream transcoder sessions.

Returns:

current number of live stream transcoder sessions

getPushPublishContext

```
public PushPublishContext getPushPublishContext()
```

Get the push publish context

Returns:

push publish context

getUnidentifiedSessionTimeout

```
public int getUnidentifiedSessionTimeout()
```

Get the unidentified session timeout (TCP session that we are not able to identify)

Returns:

timeout in milliseconds

setUnidentifiedSessionTimeout

```
public void setUnidentifiedSessionTimeout(int unidentifiedSessionTimeout)
```

Set the unidentified session timeout (TCP session that we are not able to identify)

Parameters:

unidentifiedSessionTimeout - timeout in milliseconds

getStartupStreamsDelayTime

```
public int getStartupStreamsDelayTime()
```

(continued from last page)

Get startup streams delay time (milliseconds). Time between items started in StartupStreams.xml.

Returns:

delay time

setStartupStreamsDelayTime

```
public void setStartupStreamsDelayTime(int startupStreamsDelayTime)
```

Set startup streams delay time (milliseconds). Time between items started in StartupStreams.xml.

Parameters:

startupStreamsDelayTime - delay time

getHTTTPersistentRejectInvalid

```
public boolean getHTTTPersistentRejectInvalid()
```

Get HTTTPersistent rejection status. Default is false.

Returns:

status

setHTTTPersistentRejectInvalid

```
public void setHTTTPersistentRejectInvalid(boolean flag)
```

Set if invalid HTTP requests should be rejected when using persistent connections

Parameters:

flag - enable/disable

isWebRTCSessionFactory

```
public boolean isWebRTCSessionFactory()
```

Is WebRTC enabled for this virtual host

Returns:

true if WebRTC is enabled

getWebRTCSessionFactory

```
public com.wowza.wms.webrtc.tcpsession.IWebRTCTCPSessionFactory  
getWebRTCSessionFactory()
```

Get WebRTC session factory

Returns:

WebRTC session factory

getWebSocketContext

```
public WebSocketContext getWebSocketContext()
```

Get the WebSocket Context

Returns:

WebSocket Context

getHTTPProviderContext

```
public HTTPProviderContext getHTTPProviderContext()
```

Get the HTTPProvider Context

Returns:

HTTPProvider Context

getWebSocketSessions

```
public java.util.List getWebSocketSessions()
```

Get a list of active WebSocket sessions

Returns:

list of active WebSocket sessions

getWebSocketSessionCount

```
public int getWebSocketSessionCount()
```

Get the total number of WebSocket sessions

Returns:

total number of WebSocket sessions

getDomainToKeyStoreMapList

```
public DomainToKeyStoreMapList getDomainToKeyStoreMapList()
```

Get the SSL certificate map list. It is a list of maps that map domain names to SSL certificates.

Returns:

SSL certificate map list

com.wowza.wms.vhost Interface IVHostHTTPStreamerRequestValidator

public interface IVHostHTTPStreamerRequestValidator
extends

Method Summary

boolean	validateHTTPStreamerRequest (RtmpRequestMessage request, HostPort hostPort, String path)
---------	--

Methods

validateHTTPStreamerRequest

```
public boolean validateHTTPStreamerRequest(RtmpRequestMessage request,  
      HostPort hostPort,  
      String path)
```

com.wowza.wms.vhost Interface IVHostItemNotify

public interface **IVHostItemNotify**
extends

IVHostItemNotify: listener interface used by VHostList addVHostItemListener

VHostList is the list vHost definitions in VHosts.xml not the vHosts themselves. With this listener interface you can monitor the vHost definition changes.

Method Summary

void	onVHostItemCreate (VHostItem vhostItem) Triggered when vHostItem created
void	onVHostItemDestroy (VHostItem vhostItem) Triggered when vHostItem destroyed
void	onVHostItemUpdate (VHostItem vhostItem) Triggered when vHostItem updated

Methods

onVHostItemCreate

public void **onVHostItemCreate**([VHostItem](#) vhostItem)

Triggered when vHostItem created

Parameters:

vhostItem - vhostItem

onVHostItemUpdate

public void **onVHostItemUpdate**([VHostItem](#) vhostItem)

Triggered when vHostItem updated

Parameters:

vhostItem - vhostItem

onVHostItemDestroy

public void **onVHostItemDestroy**([VHostItem](#) vhostItem)

Triggered when vHostItem destroyed

Parameters:

vhostItem - vhostItem

com.wowza.wms.vhost Interface IVHostNotify

All Known Implementing Classes:

[VHostNotifyBase](#), [ServerListenerStreamDemoPublisher](#)

public interface **IVHostNotify**
extends

IVHostNotify: listener interface used by VHostSingleton addVHostListener

Method Summary

void	onVHostClientConnect (IVHost vhost, IClient inClient, com.wowza.wms.request.RequestFunction function, AMFDataList params) Triggered before a client connects to this virtual host.
void	onVHostCreate (IVHost vhost) Triggered when vHost created
void	onVHostInit (IVHost vhost) Triggered when vHost initialized
void	onVHostShutdownComplete (IVHost vhost) Triggered at the end of vhost shutdown
void	onVHostShutdownStart (IVHost vhost) Triggered at the beginning of vhost shutdown

Methods

onVHostCreate

public void **onVHostCreate**([IVHost](#) vhost)

Triggered when vHost created

Parameters:

vhost

onVHostInit

public void **onVHostInit**([IVHost](#) vhost)

Triggered when vHost initialized

Parameters:

vhost - vhost

onVHostShutdownStart

public void **onVHostShutdownStart**([IVHost](#) vhost)

(continued from last page)

Triggered at the beginning of vhost shutdown

Parameters:

vhost - vhost

onVHostShutdownComplete

```
public void onVHostShutdownComplete(IVHost vhost)
```

Triggered at the end of vhost shutdown

Parameters:

vhost - vhost

onVHostClientConnect

```
public void onVHostClientConnect(IVHost vhost,  
    IClient inClient,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Triggered before a client connects to this virtual host. Provides an opportunity to rewrite the information that is being used to connect.

Parameters:

vhost

inClient - client object of the connection

function - function

params - parameters

com.wowza.wms.vhost Interface IVHostRTSPRequestValidator

public interface **IVHostRTSPRequestValidator**
extends

Method Summary

boolean	validateRTSPRequest (com.wowza.wms.rtsp.RTSPRequestMessage req)
---------	---

Methods

validateRTSPRequest

public boolean **validateRTSPRequest**(com.wowza.wms.rtsp.RTSPRequestMessage req)

com.wowza.wms.vhost Interface IWorkerThreadClear

public interface **IWorkerThreadClear**
extends

IWorkerThreadClear: Internal use.

Method Summary

void	clear()
void	reset()

Methods

reset

public void **reset**()

clear

public void **clear**()

com.wowza.wms.vhost Class StreamItem

java.lang.Object

└─com.wowza.wms.vhost.StreamItem

public class **StreamItem**
extends Object

StreamItem: data object that defines a streamType.

Constructor Summary

public	StreamItem (String name, String baseClass, String playClass) Create a new streamItem
--------	---

Method Summary

void	clearProperty (String name) Clear property.
String	getBaseClass () Get base class path.
String	getDescription () Get streamType description.
String	getName () Get streamType name.
String	getPlayClass () Get play class path.
WMSProperties	getProperties () Get properties.
String	getProperty (String name) Get property by name.
void	setBaseClass (String baseClass) Set base class path.
void	setDescription (String description) Set streamType description.
void	setName (String name) Set streamType name.
void	setPlayClass (String playClass) Set play class path.
void	setProperty (String name, String value) Set property value.

String	toString()
--------	----------------------------

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

StreamItem

```
public StreamItem(String name,  
                  String baseClass,  
                  String playClass)
```

Create a new streamItem

Parameters:

name - streamType name
baseClass - base class path
playClass - play class path

Methods

getBaseClass

```
public String getBaseClass()
```

Get base class path.

Returns:

base clas path

setBaseClass

```
public void setBaseClass(String baseClass)
```

Set base class path.

Parameters:

baseClass - base class path

getName

```
public String getName()
```

Get streamType name.

Returns:

streamType name

setName

```
public void setName(String name)
```

(continued from last page)

Set streamType name.

Parameters:

name - streamType name

getPlayClass

```
public String getPlayClass()
```

Get play class path.

Returns:

play class path

setPlayClass

```
public void setPlayClass(String playClass)
```

Set play class path.

Parameters:

playClass - play class path

setProperty

```
public void setProperty(String name,  
String value)
```

Set property value.

Parameters:

name - property name

value - property value

clearProperty

```
public void clearProperty(String name)
```

Clear property.

Parameters:

name - property name

getProperty

```
public String getProperty(String name)
```

Get property by name.

Parameters:

name - property name

Returns:

property value

getProperties

```
public WMSProperties getProperties()
```

(continued from last page)

Get properties.

Returns:

properties

getDescription

```
public String getDescription()
```

Get streamType description.

Returns:

streamType description

setDescription

```
public void setDescription(String description)
```

Set streamType description.

Parameters:

description - streamType description

toString

```
public String toString()
```

com.wowza.wms.vhost Class StreamList

java.lang.Object

└─com.wowza.wms.vhost.StreamList

```
public class StreamList
extends Object
```

StreamList: collection of StreamItems

Constructor Summary

public	StreamList() Create empty StreamList
--------	---

Method Summary

StreamItem	getStreamDef(String name) Get streamItem by streamType name.
java.util.Map	getStreamDefs() Get Map of streamItems (by streamType names).
java.util.List	getStreamTypeNames() Get list of streamType names.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

StreamList

```
public StreamList()
```

Create empty StreamList

Methods

getStreamDefs

```
public java.util.Map getStreamDefs()
```

Get Map of streamItems (by streamType names).

Returns:

Map of streamItems

getStreamTypeNames

```
public java.util.List getStreamTypeNames()
```

Get list of streamType names. Returns shallow copy of list.

Returns:

list of streamType names

getStreamDef

```
public StreamItem getStreamDef(String name)
```

Get streamItem by streamType name.

Parameters:

name - streamType name

Returns:

streamItem

com.wowza.wms.vhost Class ThreadPool

java.lang.Object

└─com.wowza.wms.vhost.ThreadPool

public class **ThreadPool**
extends Object

ThreadPool: class for managing a pool of threads.

Constructor Summary

public	ThreadPool (IVHost vhost, String name) Create a new thread pool attached to a vHost.
--------	--

Method Summary

void	execute (Runnable command) Execute a runnable object.
int	getActiveCount () Get number of active threads.
java.util.concurrent. Executor	getExecutor () Get the underlying Executor pool.
int	getQueueSize () Get the number of command objects in the <code>LinkedBlockingQueue</code> .
void	init (int corePoolSize) Initialize threadPool.
void	terminate () Terminate all threads and cleanup threadPool.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ThreadPool

public **ThreadPool**([IVHost](#) vhost,
[String](#) name)

Create a new thread pool attached to a vHost.

Parameters:

(continued from last page)

vhost - vHost

Methods

init

```
public void init(int corePoolSize)
```

Initialize threadPool.

Parameters:

corePoolSize - core pool size

terminate

```
public void terminate()
```

Terminate all threads and cleanup threadPool.

execute

```
public void execute(Runnable command)
```

Execute a runnable object. If the threadPool is at the corePool size, the object will be added to a LinkedBlockingQueue in the order it was received.

Parameters:

command

getExecutor

```
public java.util.concurrent.Executor getExecutor()
```

Get the underlying Executor pool.

Returns:

Executor pool

getActiveCount

```
public int getActiveCount()
```

Get number of active threads.

Returns:

number of active threads

getQueueSize

```
public int getQueueSize()
```

Get the number of command objects in the LinkedBlockingQueue.

Returns:

number of command objects in the LinkedBlockingQueue

com.wowza.wms.vhost Class VHostItem

java.lang.Object

└─com.wowza.wms.vhost.VHostItem

```
public class VHostItem
extends Object
```

VHostItem: data class that hold definition of a virtual host.

Constructor Summary

public	VHostItem() Create empty vHostItem
--------	---

Method Summary

String	getConfigDir() Get configuration path for vHost.
int	getConnectionLimit() Get connection limit of this vHost item.
String	getName() Get vHost name
WMSProperties	getProperties() Get properties
boolean	isVisited() Has this vHostItem been visited during load of VHosts.xml file.
void	reset() Reset vHostItem to empty state
void	setConfigDir(String configDir) Set configuration path for vHost.
void	setConnectionLimit(int connectionLimit) Set connection limit of this vHost item.
void	setName(String name) Set vHost name
void	setProperties(WMSProperties properties) Set properties
void	setVisited(boolean visited) Set is visited.
String	toString() Format vHost item

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

VHostItem

```
public VHostItem()
```

Create empty vHostItem

Methods

reset

```
public void reset()
```

Reset vHostItem to empty state

getConfigDir

```
public String getConfigDir()
```

Get configuration path for vHost.

Returns:

configuration path for vHost

setConfigDir

```
public void setConfigDir(String configDir)
```

Set configuration path for vHost.

Parameters:

configDir - configuration path for vHost

getName

```
public String getName()
```

Get vHost name

Returns:

vHost name

setName

```
public void setName(String name)
```

Set vHost name

Parameters:

(continued from last page)

name - vHost name

getProperties

```
public WMSProperties getProperties()
```

Get properties

Returns:

properties

setProperties

```
public void setProperties(WMSProperties properties)
```

Set properties

Parameters:

properties - properties

isVisited

```
public boolean isVisited()
```

Has this vHostItem been visited during load of VHosts.xml file. Internally used to track and delete vHost definitions on reload of VHosts.xml.

Returns:

Has this vHostItem been visited during load

setVisited

```
public void setVisited(boolean visited)
```

Set is visited.

Parameters:

visited - is visited

getConnectionLimit

```
public int getConnectionLimit()
```

Get connection limit of this vHost item.

Returns:

connection limit of this vHost item

setConnectionLimit

```
public void setConnectionLimit(int connectionLimit)
```

Set connection limit of this vHost item.

Parameters:

connectionLimit - connection limit of this vHost item

(continued from last page)

toString

```
public String toString()
```

Format vHost item

com.wowza.wms.vhost Class VHostList

java.lang.Object

└─com.wowza.wms.vhost.VHostList

public class **VHostList**
extends Object

VHostList: list of VHost items. Result of parsing VHosts.xml at server startup or VHosts.xml reload. This interface can keep track of reloads and carefully mark items for deletion.

Constructor Summary

public	VHostList() Create empty vHostList
--------	---

Method Summary

void	addVHostItemListener(IVHostItemNotify vHostItemListener) Add vHostItem listener.
java.util.List	getVHostItems() Get a list of vHostItems.
java.util.Map	getVHostMap() Get the Map of vHostItem defintions.
java.util.List	getVHostNames() Get a list of vHost names.
void	loadConfig()
void	notifyVHostItemCreate(VHostItem vhostItem) Notify vHostItem listener of item create.
void	notifyVHostItemDestroy(VHostItem vhostItem) Notify vHostItem listener of item destroy.
void	notifyVHostItemUpdate(VHostItem vhostItem) Notify vHostItem listener of item update.
void	reloadConfig() Reload VHosts.xml file.
void	removeVHostItemListener(IVHostItemNotify vHostItemListener) Remove vHostItem listener.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

VHostList

```
public VHostList()
```

Create empty vHostList

Methods

loadConfig

```
public void loadConfig()
```

reloadConfig

```
public void reloadConfig()
```

Reload VHosts.xml file.

getVHostMap

```
public java.util.Map getVHostMap()
```

Get the Map of vHostItem defintions.

Returns:

Map of vHostItem defintions

addVHostItemListener

```
public void addVHostItemListener(IVHostItemNotify vHostItemListener)
```

Add vHostItem listener. vHostItem listeners will receive the following events: onVHostItemCreate, onVHostItemUpdate, onVHostItemDestroy.

Parameters:

vHostItemListener - vHostItem listener

removeVHostItemListener

```
public void removeVHostItemListener(IVHostItemNotify vHostItemListener)
```

Remove vHostItem listener.

Parameters:

vHostItemListener - vHostItem listener

notifyVHostItemCreate

```
public void notifyVHostItemCreate(VHostItem vhostItem)
```

Notify vHostItem listener of item create.

(continued from last page)

Parameters:

vhostItem - vHostItem

notifyVHostItemUpdate

```
public void notifyVHostItemUpdate(VHostItem vhostItem)
```

Notify vHostItem listener of item update.

Parameters:

vhostItem - vHostItem

notifyVHostItemDestroy

```
public void notifyVHostItemDestroy(VHostItem vhostItem)
```

Notify vHostItem listener of item destroy.

Parameters:

vhostItem - vHostItem

getVHostNames

```
public java.util.List getVHostNames()
```

Get a list of vHost names. Creates a copy of list.

Returns:

list of vHost names

getVHostItems

```
public java.util.List getVHostItems()
```

Get a list of vHostItems. Create a shallow copy of list.

Returns:

list of vHostItems

com.wowza.wms.vhost Class VHostNotifyBase

java.lang.Object

└─ com.wowza.wms.vhost.VHostNotifyBase

All Implemented Interfaces:

[IVHostNotify](#)

```
public class VHostNotifyBase
extends Object
implements IVHostNotify
```

Constructor Summary

public	VHostNotifyBase()
--------	-----------------------------------

Method Summary

void	onVHostClientConnect (IVHost vhost, IClient inClient, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onVHostCreate (IVHost vhost)
void	onVHostInit (IVHost vhost)
void	onVHostShutdownComplete (IVHost vhost)
void	onVHostShutdownStart (IVHost vhost)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.vhost.IVHostNotify](#)

[onVHostClientConnect](#), [onVHostCreate](#), [onVHostInit](#), [onVHostShutdownComplete](#), [onVHostShutdownStart](#)

Constructors

VHostNotifyBase

```
public VHostNotifyBase()
```

(continued from last page)

Methods

onVHostCreate

```
public void onVHostCreate(IVHost vhost)
```

onVHostInit

```
public void onVHostInit(IVHost vhost)
```

onVHostShutdownStart

```
public void onVHostShutdownStart(IVHost vhost)
```

onVHostShutdownComplete

```
public void onVHostShutdownComplete(IVHost vhost)
```

onVHostClientConnect

```
public void onVHostClientConnect(IVHost vhost,  
    IClient inClient,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

com.wowza.wms.vhost Class VHostSingleton

java.lang.Object

└-com.wowza.wms.vhost.VHostSingleton

```
public class VHostSingleton
extends Object
```

VHostSingleton: singleton that provide access to running vHosts.

Constructor Summary

public	VHostSingleton()
--------	----------------------------------

Method Summary

static void	addVHostListener (IVHostNotify vhostListener) Add a vHost listener.
static IVHost	getInstance (String vhostName) Get vHost by name.
static IVHost	getInstance (String vhostName, boolean doCreate) Get vHost by name.
static java.util.List	getVHostNames () Get a list of vHost names.
static void	init (String vhostName, String configHome) Initialize vhost by name.
static void	notifyVHostClientConnect (IVHost vhost, IClient inClient, com.wowza.wms.request.RequestFunction function, AMFDataList params) Notify vhost client connect
static void	notifyVHostCreate (IVHost vhost) Notify vHost listener of create.
static void	notifyVHostInit (IVHost vhost) Notify vHost listener of ini.
static void	notifyVHostShutdownComplete (IVHost vhost) Notify vHost listener of destruction.
static void	notifyVHostShutdownStart (IVHost vhost) Notify vHost listener of destruction.
static void	remove (String vhostName) Remove a vHost from list of running vHosts.
static void	removeApplicationListener (IVHostNotify vhostListener) Remove vHost listener

static void	setServer (IServer server) Set a reference to the current running server.
static void	shutdown (String vhostName) Shutdown a vHost by name.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

VHostSingleton

```
public VHostSingleton()
```

Methods

getInstance

```
public static IVHost getInstance(String vhostName)
```

Get vHost by name. Do NOT create if does not exist.

Parameters:

vhostName - vHost name

Returns:

vHost

getInstance

```
public static IVHost getInstance(String vhostName,  
boolean doCreate)
```

Get vHost by name. Create if does not exist.

Parameters:

vhostName - vhost name

doCreate - if true, create if does not exist

Returns:

vHost

init

```
public static void init(String vhostName,  
String configHome)
```

Initialize vhost by name.

Parameters:

vhostName - vHost name

(continued from last page)

configHome - configuration path, path to VHost.xml

setServer

```
public static void setServer(IServer server)
```

Set a reference to the current running server.

Parameters:

server - server

shutdown

```
public static void shutdown(String vhostName)
```

Shutdown a vHost by name.

Parameters:

vhostName - vhost name

getVHostNames

```
public static java.util.List getVHostNames()
```

Get a list of vHost names. Return copy of list.

Returns:

vHost names

remove

```
public static void remove(String vhostName)
```

Remove a vHost from list of running vHosts.

Parameters:

vhostName - vhost name

addVHostListener

```
public static void addVHostListener(IVHostNotify vhostListener)
```

Add a vHost listener. A vHost listener receives the following events: onVHostCreate, onVHostInit, onVHostDestroy

Parameters:

vhostListener - vHost listener

removeApplicationListener

```
public static void removeApplicationListener(IVHostNotify vhostListener)
```

Remove vHost listener

Parameters:

vhostListener - vHost listener

(continued from last page)

notifyVHostClientConnect

```
public static void notifyVHostClientConnect(IVHost vhost,  
      IClient inClient,  
      com.wowza.wms.request.RequestFunction function,  
      AMFDataList params)
```

Notify vhost client connect

Parameters:

vhost - vHost
inClient - client
function - function
params - parameters

notifyVHostCreate

```
public static void notifyVHostCreate(IVHost vhost)
```

Notify vHost listener of create.

Parameters:

vhost - vHost

notifyVHostInit

```
public static void notifyVHostInit(IVHost vhost)
```

Notify vHost listener of ini.

Parameters:

vhost - vHost

notifyVHostShutdownStart

```
public static void notifyVHostShutdownStart(IVHost vhost)
```

Notify vHost listener of destruction.

Parameters:

vhost - vHost

notifyVHostShutdownComplete

```
public static void notifyVHostShutdownComplete(IVHost vhost)
```

Notify vHost listener of destruction.

Parameters:

vhost - vHost

Package

com.wowza.wms.websocket.model

com.wowza.wms.websocket.model Interface IWebSocketEventNotify

All Subinterfaces:

[IWebSocketEventNotify2](#)

public interface **IWebSocketEventNotify**
extends

Method Summary

void	onCreate (IWebSocketSession websocketSession) Triggered when WebSocket session is created
void	onDestroy (IWebSocketSession websocketSession) Triggered when WebSocket session is destroyed
void	onMessage (IWebSocketSession websocketSession, WebSocketMessage message) Triggered when WebSocket message (binary or text) is received (control messages are not included).

Methods

onCreate

public void **onCreate**([IWebSocketSession](#) websocketSession)

Trigger when WebSocket session is created

Parameters:

websocketSession - WebSocket session

onDestroy

public void **onDestroy**([IWebSocketSession](#) websocketSession)

Triggered when WebSocket session is destroyed

Parameters:

websocketSession - WebSocket session

onMessage

public void **onMessage**([IWebSocketSession](#) websocketSession,
[WebSocketMessage](#) message)

Triggered when WebSocket message (binary or text) is received (control messages are not included).

Parameters:

websocketSession - WebSocket session

message - WebSocket message

com.wowza.wms.websocket.model Interface IWebSocketEventNotify2

All Superinterfaces:

[IWebSocketEventNotify](#)

All Known Implementing Classes:

[WebSocketEventNotifyBase](#)

```
public interface IWebSocketEventNotify2
extends IWebSocketEventNotify
```

Method Summary

void	onIdle (IWebSocketSession websocketSession)
------	--

Methods inherited from interface [com.wowza.wms.websocket.model.IWebSocketEventNotify](#)

[onCreate](#), [onDestroy](#), [onMessage](#)

Methods

onIdle

```
public void onIdle(IWebSocketSession websocketSession)
```

com.wowza.wms.websocket.model Interface IWebSocketPingResult

public interface **IWebSocketPingResult**
extends

Method Summary

void	onResult(IWebSocketSession websocketSession, long pingTime, long pingId, boolean result) Triggered when WebSocket pong is received or pong is not received within ping timeout
------	---

Methods

onResult

```
public void onResult(IWebSocketSession websocketSession,  
    long pingTime,  
    long pingId,  
    boolean result)
```

Triggered when WebSocket pong is received or pong is not received within ping timeout

Parameters:

websocketSession - WebSocket session
pingTime - elapsed time for ping response
pingId - ping ID
result - true, if pong received, false if timeout

com.wowza.wms.websocket.model Interface IWebSocketSession

public interface **IWebSocketSession**
extends

Field Summary

public static final	CHARENCODING Value: UTF-8
public static final	CLOSECODE_ABNORMAL Value: 1006
public static final	CLOSECODE_GOINGAWAY Value: 1001
public static final	CLOSECODE_INTERNALSERVER Value: 1011
public static final	CLOSECODE_INVALIDFRAME Value: 1007
public static final	CLOSECODE_MANDATORYEXT Value: 1010
public static final	CLOSECODE_MESSAGETOOBIG Value: 1009
public static final	CLOSECODE_NORMAL Value: 1000
public static final	CLOSECODE_NOSTATUSRECEIVED Value: 1005
public static final	CLOSECODE_POLICYVIOLATION Value: 1008
public static final	CLOSECODE_PROTOCOLERROR Value: 1002
public static final	CLOSECODE_RESERVED Value: 1004
public static final	CLOSECODE_TLSHANDSHAKE Value: 1015

public static final	CLOSECODE_UNSUPPORTEDDATA Value: 1003
public static final	CLOSESTR_ABNORMAL Value: Abnormal Closure
public static final	CLOSESTR_GOINGAWAY Value: Going Away
public static final	CLOSESTR_INTERNALSERVER Value: Internal Server Error
public static final	CLOSESTR_INVALIDFRAME Value: Invalid frame
public static final	CLOSESTR_MANDATORYEXT Value: Mandatory Ext.
public static final	CLOSESTR_MESSAGETOOBIG Value: Message Too Big
public static final	CLOSESTR_NORMAL Value: Normal Closure
public static final	CLOSESTR_NOSTATUSRECEIVED Value: No Status Rcvd
public static final	CLOSESTR_POLICYVIOLATION Value: Policy Violation
public static final	CLOSESTR_PROTOCOLERROR Value: Protocol error
public static final	CLOSESTR_RESERVED Value: Reserved
public static final	CLOSESTR_TLSHANDSHAKE Value: TLS handshake
public static final	CLOSESTR_UNSUPPORTEDDATA Value: Unsupported Data
public static final	CLOSETIMEOUT Value: 1500
public static final	HTTPHEADER_NAME Value: websocket

public static final	HTTPHEADER_SECACCEPT Value: Sec-WebSocket-Accept
public static final	HTTPHEADER_SECKEY Value: Sec-WebSocket-Key
public static final	PINGWOWZAID Value: 1464817498
public static final	SECURITY_DIGEST_ALGORITHM Value: SHA-1
public static final	SECURITY_GUID Value: 258EAF5-E914-47DA-95CA-C5AB0DC85B11

Method Summary

void	close (boolean immediately, int reasonCode, String reasonStr) Close the WebSocket session
String	getContextStr () Get context string for logging
ElapsedTimer	getElapsedTime () Get the time the WebSocket session has been alive
IWebSocketEventNotify	getEventListener () Get the listener object that receives WebSockets events
java.util.Map	getHeaderMap () Get map of HTTP headers from original upgrade HTTP request
IHTTPProvider	getHTTPProvider () Get the HTTPProvider that is the parent of this WebSocket session
int	getIdleFrequency () Get time in milliseconds between idle events
IOPerformanceCounter	getIOPerformanceCounter () Get IO performance counter that tracks incoming and outgoing TCP traffic
org.apache.mina.commo n.IoSession	getIoSession () Get the low level IoSession for this websocket
Object	getLock () Get the internal synchronization lock for this session
long	getMaximumMessageSize () Get the maximum WebSocket message size for a single message (0 = no limit)
int	getMaximumPendingWriteBytes () Get the number of bytes that can be pending waiting to be sent before messages are no longer send (0 turns off this feature)
long	getPacketFragmentationSize () Not being used currently

java.util.Map	getParameterMap() Get map of HTTP parameters from original upgrade HTTP request
int	getPingTimeout() Get the timeout (milliseconds) that we wait for a response (pong) to a ping message
WMSProperties	getProperties() Get user properties
String	getQueryString() Get query string from original upgrade HTTP request
String	getRemoteHost() Get remote host
String	getRemoteIpAddress() Get the remote Ip address
String	getReqURI() Get request URI from original upgrade HTTP request
String	getReqURL() Get request URL from original upgrade HTTP request
int	getSessionId() Get WebSocket session Id
int	getValidationFrequency() Get time in milliseconds between validation messages (ping from server to client).
boolean	isActive() True if WebSocket session is still active, false if close has been called but session is still connected (waiting to close)
boolean	isMaskOutgoingMessages() Should outgoing messages be masked (many browsers do not support masked outgoing messages)
void	ping(IWebSocketPingResult pingResult) Send a ping message from server to client
void	sendMessage(WebSocketMessage message) Send a WebSocket message from server to client
void	setIdleFrequency(int idleFrequency) Set time in milliseconds between idle events
void	setMaskOutgoingMessages(boolean maskOutgoingMessages) Should outgoing messages be masked (many browsers do not support masked outgoing messages)
void	setMaximumMessageSize(long maxMessageSize) Set the maximum WebSocket message size for a single message (0 = no limit)
void	setMaximumPendingWriteBytes(int maximumPendingWriteBytes) Set the number of bytes that can be pending waiting to be sent before messages are no longer send (0 turns off this feature)
void	setPacketFragmentationSize(long packetFragmentationSize) Not being used currently

void	setPingTimeout (int pingTimeout) Set the timeout (milliseconds) that we wait for a response (pong) to a ping message
void	setRemoteHost (String remoteHost) Set remote host
void	setRemoteIpAddress (String remoteIpAddress) Set remote Ip address
void	setValidationFrequency (int validationFrequency) Set time in milliseconds between validation messages (ping from server to client).

Fields

SECURITY_GUID

```
public static final java.lang.String SECURITY_GUID
```

Constant value: **258EAF5-E914-47DA-95CA-C5AB0DC85B11**

SECURITY_DIGEST_ALGORITHM

```
public static final java.lang.String SECURITY_DIGEST_ALGORITHM
```

Constant value: **SHA-1**

CHARENCODING

```
public static final java.lang.String CHARENCODING
```

Constant value: **UTF-8**

PINGWOWZAIID

```
public static final int PINGWOWZAIID
```

Constant value: **1464817498**

CLOSETIMEOUT

```
public static final int CLOSETIMEOUT
```

Constant value: **1500**

HTTPHEADER_NAME

```
public static final java.lang.String HTTPHEADER_NAME
```

Constant value: **websocket**

(continued from last page)

HTTPHEADER_SECKEY

```
public static final java.lang.String HTTPHEADER_SECKEY
```

Constant value: **Sec-WebSocket-Key**

HTTPHEADER_SECACCEPT

```
public static final java.lang.String HTTPHEADER_SECACCEPT
```

Constant value: **Sec-WebSocket-Accept**

CLOSECODE_NORMAL

```
public static final int CLOSECODE_NORMAL
```

Constant value: **1000**

CLOSESTR_NORMAL

```
public static final java.lang.String CLOSESTR_NORMAL
```

Constant value: **Normal Closure**

CLOSECODE_GOINGAWAY

```
public static final int CLOSECODE_GOINGAWAY
```

Constant value: **1001**

CLOSESTR_GOINGAWAY

```
public static final java.lang.String CLOSESTR_GOINGAWAY
```

Constant value: **Going Away**

CLOSECODE_PROTOCOLERROR

```
public static final int CLOSECODE_PROTOCOLERROR
```

Constant value: **1002**

CLOSESTR_PROTOCOLERROR

```
public static final java.lang.String CLOSESTR_PROTOCOLERROR
```

Constant value: **Protocol error**

CLOSECODE_UNSUPPORTEDDATA

```
public static final int CLOSECODE_UNSUPPORTEDDATA
```

(continued from last page)

Constant value: **1003**

CLOSESTR_UNSUPPORTEDDATA

```
public static final java.lang.String CLOSESTR_UNSUPPORTEDDATA
```

Constant value: **Unsupported Data**

CLOSECODE_RESERVED

```
public static final int CLOSECODE_RESERVED
```

Constant value: **1004**

CLOSESTR_RESERVED

```
public static final java.lang.String CLOSESTR_RESERVED
```

Constant value: **Reserved**

CLOSECODE_NOSTATUSRECEIVED

```
public static final int CLOSECODE_NOSTATUSRECEIVED
```

Constant value: **1005**

CLOSESTR_NOSTATUSRECEIVED

```
public static final java.lang.String CLOSESTR_NOSTATUSRECEIVED
```

Constant value: **No Status Rcvd**

CLOSECODE_ABNORMAL

```
public static final int CLOSECODE_ABNORMAL
```

Constant value: **1006**

CLOSESTR_ABNORMAL

```
public static final java.lang.String CLOSESTR_ABNORMAL
```

Constant value: **Abnormal Closure**

CLOSECODE_INVALIDFRAME

```
public static final int CLOSECODE_INVALIDFRAME
```

Constant value: **1007**

CLOSESTR_INVALIDFRAME

```
public static final java.lang.String CLOSESTR_INVALIDFRAME
```

Constant value: **Invalid frame**

CLOSECODE_POLICYVIOLATION

```
public static final int CLOSECODE_POLICYVIOLATION
```

Constant value: **1008**

CLOSESTR_POLICYVIOLATION

```
public static final java.lang.String CLOSESTR_POLICYVIOLATION
```

Constant value: **Policy Violation**

CLOSECODE_MESSAGETOOBIG

```
public static final int CLOSECODE_MESSAGETOOBIG
```

Constant value: **1009**

CLOSESTR_MESSAGETOOBIG

```
public static final java.lang.String CLOSESTR_MESSAGETOOBIG
```

Constant value: **Message Too Big**

CLOSECODE_MANDATORYEXT

```
public static final int CLOSECODE_MANDATORYEXT
```

Constant value: **1010**

CLOSESTR_MANDATORYEXT

```
public static final java.lang.String CLOSESTR_MANDATORYEXT
```

Constant value: **Mandatory Ext.**

CLOSECODE_INTERNALSERVER

```
public static final int CLOSECODE_INTERNALSERVER
```

Constant value: **1011**

(continued from last page)

CLOSESTR_INTERNALSERVER

```
public static final java.lang.String CLOSESTR_INTERNALSERVER
```

Constant value: **Internal Server Error**

CLOSECODE_TLSHANDSHAKE

```
public static final int CLOSECODE_TLSHANDSHAKE
```

Constant value: **1015**

CLOSESTR_TLSHANDSHAKE

```
public static final java.lang.String CLOSESTR_TLSHANDSHAKE
```

Constant value: **TLS handshake**

Methods

getContextStr

```
public String getContextStr()
```

Get context string for logging

Returns:

context string for logging

close

```
public void close(boolean immediately,  
                 int reasonCode,  
                 String reasonStr)
```

Close the WebSocket session

Parameters:

`immediately` - if true, session will be terminated immediately by closing TCP connection, if false close command will be sent

`reasonCode` - reason for close, see `CLOSECODE_*`

`reasonStr` - reason string for close, see `CLOSESTR_*`

getHeaderMap

```
public java.util.Map getHeaderMap()
```

Get map of HTTP headers from original upgrade HTTP request

Returns:

HTTP headers

getParameterMap

```
public java.util.Map getParameterMap()
```

(continued from last page)

Get map of HTTP parameters from original upgrade HTTP request

Returns:

HTTP parameters

getQueryString

```
public String getQueryString()
```

Get query string from original upgrade HTTP request

Returns:

query string

getReqURI

```
public String getReqURI()
```

Get request URI from original upgrade HTTP request

Returns:

request URI

getReqURL

```
public String getReqURL()
```

Get request URL from original upgrade HTTP request

Returns:

request URL

getMaximumMessageSize

```
public long getMaximumMessageSize()
```

Get the maximum WebSocket message size for a single message (0 = no limit)

Returns:

maximum WebSocket message size

setMaximumMessageSize

```
public void setMaximumMessageSize(long maxMessageSize)
```

Set the maximum WebSocket message size for a single message (0 = no limit)

Parameters:

maxMessageSize - maximum WebSocket message size

isMaskOutgoingMessages

```
public boolean isMaskOutgoingMessages()
```

Should outgoing messages be masked (many browsers do not support masked outgoing messages)

Returns:

true, if messages are masked

setMaskOutgoingMessages

```
public void setMaskOutgoingMessages(boolean maskOutgoingMessages)
```

Should outgoing messages be masked (many browsers do not support masked outgoing messages)

Parameters:

maskOutgoingMessages - true, if messages are masked

isActive

```
public boolean isActive()
```

True if WebSocket session is still active, false if close has been called but session is still connected (waiting to close)

Returns:

true if WebSocket session is still active

getPacketFragmentationSize

```
public long getPacketFragmentationSize()
```

Not being used currently

Returns:

not being used

setPacketFragmentationSize

```
public void setPacketFragmentationSize(long packetFragmentationSize)
```

Not being used currently

Parameters:

packetFragmentationSize - not being used

getIdleFrequency

```
public int getIdleFrequency()
```

Get time in milliseconds between idle events

Returns:

idle time (milliseconds)

setIdleFrequency

```
public void setIdleFrequency(int idleFrequency)
```

Set time in milliseconds between idle events

Parameters:

idleFrequency - idle time (milliseconds)

sendMessage

```
public void sendMessage(WebSocketMessage message)
```

(continued from last page)

Send a WebSocket message from server to client

Parameters:

message - WebSocket message

getValidationFrequency

```
public int getValidationFrequency()
```

Get time in milliseconds between validation messages (ping from server to client). Value of zero turns off validation.

Returns:

validation time (milliseconds)

setValidationFrequency

```
public void setValidationFrequency(int validationFrequency)
```

Set time in milliseconds between validation messages (ping from server to client). Value of zero turns off validation.

Parameters:

validationFrequency - validation time (milliseconds)

getMaximumPendingWriteBytes

```
public int getMaximumPendingWriteBytes()
```

Get the number of bytes that can be pending waiting to be sent before messages are no longer send (0 turns off this feature)

Returns:

number of bytes that can be pending waiting

setMaximumPendingWriteBytes

```
public void setMaximumPendingWriteBytes(int maximumPendingWriteBytes)
```

Set the number of bytes that can be pending waiting to be sent before messages are no longer send (0 turns off this feature)

Parameters:

maximumPendingWriteBytes - number of bytes that can be pending waiting

ping

```
public void ping(IWebSocketPingResult pingResult)
```

Send a ping message from server to client

Parameters:

pingResult - callback object when pong messages is received or ping message timeout

getLock

```
public Object getLock()
```

Get the internal synchronization lock for this session

Returns:

internal synchronization lock

getEventListener

```
public IWebSocketEventNotify getEventListener()
```

Get the listener object that receives WebSockets events

Returns:
listener object

getSessionId

```
public int getSessionId()
```

Get WebSocket session Id

Returns:
WebSocket session Id

getHTTPProvider

```
public IHTTPProvider getHTTPProvider()
```

Get the HTTPProvider that is the parent of this WebSocket session

Returns:
HTTPProvider

getIOPerformanceCounter

```
public IOPerformanceCounter getIOPerformanceCounter()
```

Get IO performance counter that tracks incoming and outgoing TCP traffic

Returns:
IO performance counter

getElapsedTime

```
public ElapsedTimer getElapsedTime()
```

Get the time the WebSocket session has been alive

Returns:
time the WebSocket session has been alive

getPingTimeout

```
public int getPingTimeout()
```

Get the timeout (milliseconds) that we wait for a response (pong) to a ping message

Returns:
timeout (milliseconds)

setPingTimeout

```
public void setPingTimeout(int pingTimeout)
```

(continued from last page)

Set the timeout (milliseconds) that we wait for a response (pong) to a ping message

Parameters:

pingTimeout - timeout (milliseconds)

getProperties

```
public WMSProperties getProperties()
```

Get user properties

Returns:

user properties

getRemoteIpAddress

```
public String getRemoteIpAddress()
```

Get the remote Ip address

Returns:

remote Ip address

setRemoteIpAddress

```
public void setRemoteIpAddress(String remoteIpAddress)
```

Set remote Ip address

Parameters:

remoteIpAddress - remote Ip address

getRemoteHost

```
public String getRemoteHost()
```

Get remote host

Returns:

remote host

setRemoteHost

```
public void setRemoteHost(String remoteHost)
```

Set remote host

Parameters:

remoteHost - remote host

getIoSession

```
public org.apache.mina.common.IoSession getIoSession()
```

Get the low level IoSession for this websocket

Returns:

low level IoSession

com.wowza.wms.websocket.model Class WebSocketContext

java.lang.Object

└─com.wowza.wms.websocket.model.WebSocketContext

```
public class WebSocketContext
extends Object
```

Field Summary

public static final	DEFAULT_IDLEFREQUENCY Value: 250
public static final	DEFAULT_MASKOUTGOINGMESSAGES Value: false
public static final	DEFAULT_MAXIMUMPENDINGWRITEBYTES Value: 0
public static final	DEFAULT_MAXMESSAGE_SIZE Value: 524288
public static final	DEFAULT_PACKETFRAGMENTATIONSIZE Value: 0
public static final	DEFAULT_PINGTIMEOUT Value: 12000
public static final	DEFAULT_VALIDATIONFREQUENCY Value: 20000

Constructor Summary

public	WebSocketContext()
--------	------------------------------------

Method Summary

int	getIdleFrequency() Get time in milliseconds between idle events
long	getMaximumMessageSize() Get the maximum WebSocket message size for a single message (0 = no limit)
int	getMaximumPendingWriteBytes() Get the number of bytes that can be pending waiting to be sent before messages are no longer send (0 turns off this feature)

long	getPacketFragmentationSize() Not being used currently
int	getPingTimeout() Get the timeout (milliseconds) that we wait for a response (pong) to a ping message
int	getValidationFrequency() Get time in milliseconds between validation messages (ping from server to client).
boolean	isMaskOutgoingMessages() Should outgoing messages be masked (many browsers do not support masked outgoing messages)
void	setIdleFrequency(int idleFrequency) Set time in milliseconds between idle events
void	setMaskOutgoingMessages(boolean maskOutgoingMessages) Should outgoing messages be masked (many browsers do not support masked outgoing messages)
void	setMaximumMessageSize(long maxMessageSize) Set the maximum WebSocket message size for a single message (0 = no limit)
void	setMaximumPendingWriteBytes(int maximumPendingWriteBytes) Set the number of bytes that can be pending waiting to be sent before messages are no longer send (0 turns off this feature)
void	setPacketFragmentationSize(long packetFragmentationSize) Not being used currently
void	setPingTimeout(int pingTimeout) Set the timeout (milliseconds) that we wait for a response (pong) to a ping message
void	setValidationFrequency(int validationFrequency) Set time in milliseconds between validation messages (ping from server to client).

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

DEFAULT_MAXMESSAGE_SIZE

```
public static final long DEFAULT_MAXMESSAGE_SIZE
```

Constant value: **524288**

DEFAULT_PACKETFRAGMENTATIONSIZE

```
public static final long DEFAULT_PACKETFRAGMENTATIONSIZE
```

Constant value: **0**

DEFAULT_IDLEFREQUENCY

```
public static final int DEFAULT_IDLEFREQUENCY
```

Constant value: **250**

DEFAULT_VALIDATIONFREQUENCY

```
public static final int DEFAULT_VALIDATIONFREQUENCY
```

Constant value: **20000**

DEFAULT_MASKOUTGOINGMESSAGES

```
public static final boolean DEFAULT_MASKOUTGOINGMESSAGES
```

Constant value: **false**

DEFAULT_MAXIMUMPENDINGWRITEBYTES

```
public static final int DEFAULT_MAXIMUMPENDINGWRITEBYTES
```

Constant value: **0**

DEFAULT_PINGTIMEOUT

```
public static final int DEFAULT_PINGTIMEOUT
```

Constant value: **12000**

Constructors

WebSocketContext

```
public WebSocketContext()
```

Methods

getMaximumMessageSize

```
public long getMaximumMessageSize()
```

Get the maximum WebSocket message size for a single message (0 = no limit)

Returns:

maximum WebSocket message size

setMaximumMessageSize

```
public void setMaximumMessageSize(long maxMessageSize)
```

Set the maximum WebSocket message size for a single message (0 = no limit)

(continued from last page)

Parameters:

maxMessageSize - maximum WebSocket message size

isMaskOutgoingMessages

```
public boolean isMaskOutgoingMessages()
```

Should outgoing messages be masked (many browsers do not support masked outgoing messages)

Returns:

true, if messages are masked

setMaskOutgoingMessages

```
public void setMaskOutgoingMessages(boolean maskOutgoingMessages)
```

Should outgoing messages be masked (many browsers do not support masked outgoing messages)

Parameters:

maskOutgoingMessages - true, if messages are masked

getIdleFrequency

```
public int getIdleFrequency()
```

Get time in milliseconds between idle events

Returns:

idle time (milliseconds)

setIdleFrequency

```
public void setIdleFrequency(int idleFrequency)
```

Set time in milliseconds between idle events

Parameters:

idleFrequency - idle time (milliseconds)

getPacketFragmentationSize

```
public long getPacketFragmentationSize()
```

Not being used currently

Returns:

not being used

setPacketFragmentationSize

```
public void setPacketFragmentationSize(long packetFragmentationSize)
```

Not being used currently

Parameters:

packetFragmentationSize - not being used

getValidationFrequency

```
public int getValidationFrequency()
```

Get time in milliseconds between validation messages (ping from server to client). Value of zero turns off validation.

Returns:

validation time (milliseconds)

setValidationFrequency

```
public void setValidationFrequency(int validationFrequency)
```

Set time in milliseconds between validation messages (ping from server to client). Value of zero turns off validation.

Parameters:

validationFrequency - validation time (milliseconds)

getMaximumPendingWriteBytes

```
public int getMaximumPendingWriteBytes()
```

Get the number of bytes that can be pending waiting to be sent before messages are no longer send (0 turns off this feature)

Returns:

number of bytes that can be pending waiting

setMaximumPendingWriteBytes

```
public void setMaximumPendingWriteBytes(int maximumPendingWriteBytes)
```

Set the number of bytes that can be pending waiting to be sent before messages are no longer send (0 turns off this feature)

Parameters:

maximumPendingWriteBytes - number of bytes that can be pending waiting

getPingTimeout

```
public int getPingTimeout()
```

Get the timeout (milliseconds) that we wait for a response (pong) to a ping message

Returns:

timeout (milliseconds)

setPingTimeout

```
public void setPingTimeout(int pingTimeout)
```

Set the timeout (milliseconds) that we wait for a response (pong) to a ping message

Parameters:

pingTimeout - timeout (milliseconds)

com.wowza.wms.websocket.model Class WebSocketEventNotifyBase

java.lang.Object

└─ com.wowza.wms.websocket.model.WebSocketEventNotifyBase

All Implemented Interfaces:

[IWebSocketEventNotify2](#)

public class **WebSocketEventNotifyBase**
 extends Object
 implements [IWebSocketEventNotify2](#)

Constructor Summary

public	WebSocketEventNotifyBase()
--------	--

Method Summary

void	onCreate(IWebSocketSession webSocketSession) Trigger when WebSocket session is created
void	onDestroy(IWebSocketSession webSocketSession) Triggered when WebSocket session is destroyed
void	onIdle(IWebSocketSession webSocketSession) Triggered for idle events
void	onMessage(IWebSocketSession webSocketSession, WebSocketMessage message) Triggered when WebSocket message (binary or text) is received (control messages are not included).

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.websocket.model.IWebSocketEventNotify2](#)

[onIdle](#)

Methods inherited from interface [com.wowza.wms.websocket.model.IWebSocketEventNotify](#)

[onCreate](#), [onDestroy](#), [onMessage](#)

Constructors

(continued from last page)

WebSocketEventNotifyBase

```
public WebSocketEventNotifyBase()
```

Methods

onCreate

```
public void onCreate(IWebSocketSession websocketSession)
```

Trigger when WebSocket session is created

Parameters:

websocketSession - WebSocket session

onDestroy

```
public void onDestroy(IWebSocketSession websocketSession)
```

Triggered when WebSocket session is destroyed

Parameters:

websocketSession - WebSocket session

onMessage

```
public void onMessage(IWebSocketSession websocketSession,  
    WebSocketMessage message)
```

Triggered when WebSocket message (binary or text) is received (control messages are not included).

Parameters:

websocketSession - WebSocket session

message - WebSocket message

onIdle

```
public void onIdle(IWebSocketSession websocketSession)
```

Triggered for idle events

Parameters:

websocketSession - WebSocket session

com.wowza.wms.websocket.model Class WebSocketMessage

java.lang.Object

└─com.wowza.wms.websocket.model.WebSocketMessage

```
public class WebSocketMessage
extends Object
```

Field Summary

public static final	DEFAULT_CLOSE_REASON Value: unknown
public static final	HEADER_SIZE_CONTROLFRAME Value: 2
public static final	MASK_SIZE Value: 4
public static final	OPCODE_BINARY Value: 2
public static final	OPCODE_CLOSE Value: 8
public static final	OPCODE_CONTINUATION Value: 0
public static final	OPCODE_PING Value: 9
public static final	OPCODE_PONG Value: 10
public static final	OPCODE_TEXT Value: 1
public static final	OPCODE_UNKNOWN Value: -1

Constructor Summary

public	WebSocketMessage()
public	WebSocketMessage(int type)

public	WebSocketMessage (int type, boolean bufferIncludesHeader, byte[] buffer)
public	WebSocketMessage (int type, boolean bufferIncludesHeader, byte[] buffer, int offset, int len)

Method Summary

void	addBuffer (byte[] buffer, int offset, int len, boolean fragmented) Used internally to add read TCP bytes into current pending message
static WebSocketMessage	createMessageBinary (boolean mask, byte[] buffer) Create binary message
static WebSocketMessage	createMessageBinary (boolean mask, byte[] buffer, int offset, int len) Create binary message
static WebSocketMessage	createMessageBinary (boolean mask, IFasterByteArrayOutputStream buffer, int offset, int len) Create binary message
static WebSocketMessage	createMessageClose (boolean mask, int reasonCode, String reasonStr) Create a close message
static WebSocketMessage	createMessagePing (boolean mask) Create a ping message (body will be 8-byte UTC in milliseconds)
static WebSocketMessage	createMessagePing (boolean mask, byte[] body) Create ping message
static WebSocketMessage	createMessagePong (boolean mask, WebSocketMessage messagePing) Create pong message
static WebSocketMessage	createMessageText (boolean mask, String messageStr) Create text message
byte[]	getBuffer () Get the raw binary message data (also need offset and len)
int	getCloseReason () If close message, get the close reason
String	getCloseReasonStr () If close message, get the close reason str
int	getLen () Get len of message buffer data
int	getOffset () Get offset into message buffer
int	getType () Get message type, see OP*_*
String	getValueString () If text message, get body as string
boolean	isBinary () Is binary message

boolean	isControlMessage() Is message a control message
boolean	isText() Is message text message
long	sendMessage(IFasterByteArrayWriteReference out) Internal method to send message over TCP connection
void	setType(int type) Set message type, see OPCODE_*
String	toString() Get message as a string (use getValueString() to get the body value of text messages)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

DEFAULT_CLOSE_REASON

```
public static final java.lang.String DEFAULT_CLOSE_REASON
```

Constant value: **unknown**

HEADER_SIZE_CONTROLFRAME

```
public static final int HEADER_SIZE_CONTROLFRAME
```

Constant value: **2**

MASK_SIZE

```
public static final int MASK_SIZE
```

Constant value: **4**

OPCODE_UNKNOWN

```
public static final int OPCODE_UNKNOWN
```

Constant value: **-1**

OPCODE_CONTINUATION

```
public static final int OPCODE_CONTINUATION
```

Constant value: **0**

OPCODE_TEXT

```
public static final int OPCODE_TEXT
```

Constant value: **1**

OPCODE_BINARY

```
public static final int OPCODE_BINARY
```

Constant value: **2**

OPCODE_CLOSE

```
public static final int OPCODE_CLOSE
```

Constant value: **8**

OPCODE_PING

```
public static final int OPCODE_PING
```

Constant value: **9**

OPCODE_PONG

```
public static final int OPCODE_PONG
```

Constant value: **10**

Constructors

WebSocketMessage

```
public WebSocketMessage()
```

WebSocketMessage

```
public WebSocketMessage(int type)
```

WebSocketMessage

```
public WebSocketMessage(int type,  
                        boolean bufferIncludesHeader,  
                        byte[] buffer)
```

(continued from last page)

WebSocketMessage

```
public WebSocketMessage(int type,  
                        boolean bufferIncludesHeader,  
                        byte[] buffer,  
                        int offset,  
                        int len)
```

Methods

createMessagePing

```
public static WebSocketMessage createMessagePing(boolean mask)
```

Create a ping message (body will be 8-byte UTC in milliseconds)

Parameters:

mask - true, to mask message

Returns:

WebSocketMessage

createMessagePing

```
public static WebSocketMessage createMessagePing(boolean mask,  
                                                  byte[] body)
```

Create ping message

Parameters:

mask - true, to mask message

body - bytes to include as body of message

Returns:

WebSocketMessage

createMessagePong

```
public static WebSocketMessage createMessagePong(boolean mask,  
                                                  WebSocketMessage messagePing)
```

Create pong message

Parameters:

mask - true, to mask message

messagePing - ping message that is source of pong (body copied to pong message)

Returns:

WebSocketMessage

createMessageClose

```
public static WebSocketMessage createMessageClose(boolean mask,  
                                                  int reasonCode,  
                                                  String reasonStr)
```

Create a close message

(continued from last page)

Parameters:

mask - true, to mask message
reasonCode - reason code, see IWebSocketSession.CLOSECODE_*
reasonStr - reason string, see IWebSocketSession.CLOSESTR_*

Returns:

WebSocketMessage

createMessageText

```
public static WebSocketMessage createMessageText(boolean mask,  
String messageStr)
```

Create text message

Parameters:

mask - true, to mask message
messageStr - string data

Returns:

WebSocketMessage

createMessageBinary

```
public static WebSocketMessage createMessageBinary(boolean mask,  
byte[] buffer,  
int offset,  
int len)
```

Create binary message

Parameters:

mask - true, to mask message
buffer - body buffer
offset - offset into body buffer
len - len of message

Returns:

WebSocketMessage

createMessageBinary

```
public static WebSocketMessage createMessageBinary(boolean mask,  
IFasterByteArrayOutputStream buffer,  
int offset,  
int len)
```

Create binary message

Parameters:

mask - true, to mask message
buffer - body buffer
offset - offset into body buffer
len - len of message

Returns:

WebSocketMessage

(continued from last page)

createMessageBinary

```
public static WebSocketMessage createMessageBinary(boolean mask,  
byte[] buffer)
```

Create binary message

Parameters:

mask - true, to mask message
buffer - body buffer

Returns:

WebSocketMessage

isControlMessage

```
public boolean isControlMessage()
```

Is message a control message

Returns:

true if control message (ping, ping, close...)

addBuffer

```
public void addBuffer(byte[] buffer,  
int offset,  
int len,  
boolean fragmented)
```

Used internally to add read TCP bytes into current pending message

Parameters:

buffer - buffer
offset - offset
len - len
fragmented - true, if fragmented

getType

```
public int getType()
```

Get message type, see OPCODE_*

Returns:

message type

isText

```
public boolean isText()
```

Is message text message

Returns:

true if text message

isBinary

```
public boolean isBinary()
```

(continued from last page)

Is binary message

Returns:

true if binary message

getCloseReason

```
public int getCloseReason()
```

If close message, get the close reason

Returns:

close reason (-1 if not close message or no reason)

getCloseReasonStr

```
public String getCloseReasonStr()
```

If close message, get the close reason str

Returns:

close reason str (null if not close message or no reason)

getValueString

```
public String getValueString()
```

If text message, get body as string

Returns:

get body as string

getBuffer

```
public byte[] getBuffer()
```

Get the raw binary message data (also need offset and len)

Returns:

raw binary message data

getOffset

```
public int getOffset()
```

Get offset into message buffer

Returns:

offset into message buffer

getLen

```
public int getLen()
```

Get len of message buffer data

Returns:

len of message buffer data

setType

```
public void setType(int type)
```

Set message type, see OPCODE_*

Parameters:

type - message type

sendMessage

```
public long sendMessage(IFasterByteArrayWriteReference out)
```

Internal method to send message over TCP connection

Parameters:

out - writer

Returns:

number of bytes written

toString

```
public String toString()
```

Get message as a string (use getValueString() to get the body value of text messages)

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