Learn about and find your way to articles about employing the many security options available for Wowza Streaming Engine™ media server software.

**Security in Wowza Streaming Engine Manager**

Wowza Streaming Engine Manager lets you control basic security for source and playback connections. For example, you can require encoders or cameras that connect to Wowza Streaming Engine to use authentication, and you can control which IP addresses can connect to Wowza Streaming Engine for both publishing and playback.

For more information, see:

- [Configure security using Wowza Streaming Engine Manager](#)

**SSL and StreamLock**

StreamLock, Secure Sockets Layer (SSL), secure HTTP (HTTPS), secure RTMP (RTMPS), and encrypted RTMP (RTMPE) are methods for protecting streams as they’re transmitted across a network. All traffic that flows over a protected connection is encrypted during transit.

- **StreamLock** – Wowza StreamLock™ AddOn provides near-instant provisioning of free, 256-bit SSL certificates to verified Wowza customers for use with Wowza Streaming Engine. StreamLock-provisioned SSL certificates provide the best security when used with RTMP. The certificates can also be used for secure HTTP streaming.
- **HTTPS** – HTTPS secures HTTP-based stream including Apple HLS, Adobe HDS, and Microsoft Smooth Streaming. HTTPS by itself doesn’t secure media streams but when used in conjunction with some type of token-based authentication system, it can more fully protect streaming.
- **RTMPS** – RTMPS secures Adobe Flash RTMP streaming and can be used with Wowza Streaming Engine SecureToken for playback protection.
- **RTMPE** – RTMPE also secures Flash RTMP streaming and can be used with SecureToken for playback protection. RTMPE is less secure than RTMPS. For the best security for RTMP streaming, we recommend the Wowza StreamLock AddOn.

For more information, see:

- Get SSL certificates from the Wowza Streaming Engine StreamLock service
- Request an SSL certificate for Wowza Streaming Engine from a certificate authority
- Create a self-signed SSL certificate for Wowza Streaming Engine
- Improve SSL configuration for Wowza Streaming Engine
- Connect to Wowza Streaming Engine Manager using SSL
- Set up Adobe HDS playback over SSL from Wowza Streaming Engine
- Set up Microsoft Smooth Streaming playback over SSL from Wowza Streaming Engine
- Configure multiple SSL certificates on one Wowza Streaming Engine host port
- Import an existing SSL certificate and private key for Wowza Streaming Engine
- Troubleshoot SSL certificate configuration for Wowza Streaming Engine

**Digital rights management**

Digital rights management (DRM) is a protection mechanism for securing streaming media. There are many third-party DRM technologies, such as Microsoft PlayReady and Verimatrix Video Content Authority System (VCAS).

For more information, see:

- Wowza DRM overview
- Use BuyDRM KeyOS DRM with Wowza Streaming Engine
- Use EZDRM PlayReady DRM with Wowza Streaming Engine
- Use Verimatrix VCAS DRM with Wowza Streaming Engine
- Set up castLabs DRMtoday secure video delivery in Wowza Streaming Engine
- Secure Apple HLS streaming using DRM encryption with Wowza Streaming Engine
- Secure Apple HLS with AES-128 external encryption in Wowza Streaming Engine
- Test AES encryption for Apple HLS streams from Wowza Streaming Engine
- Secure Smooth Streaming using PlayReady DRM in Wowza Streaming Engine
- Decrypt PlayReady-encrypted VOD content using the Wowza Streaming Engine Java API
- Secure MPEG-DASH streams using Common Encryption in Wowza Streaming Engine

**SecureToken playback protection**

SecureToken is a challenge/response system that helps to protect content against spoofing threats. Each connection is protected by a random single-use key and a password (shared secret). Wowza Streaming Engine 4.0 and Wowza Media Server software provide SecureToken playback protection for Flash RTMP streams. Wowza Streaming Engine 4.1 software extends SecureToken playback protection to all streaming protocols supported by the server and includes new hashing options for generating the security token that’s exchanged between the server and clients.

For more information, see:

- Protect streaming using SecureToken in Wowza Streaming Engine
- Add SecureToken protection to JW Player with Wowza Streaming Engine

**Note:** Some software can defeat the SecureToken security mechanism and record Flash content over RTMP. To protect your Flash content over RTMP, combine SecureToken with Wowza StreamLock AddOn, RTMPS, or RTMPE.

**RTMP and RTSP authentication**

RTMP and RTSP user name and password authentication is described in the following articles:

- Enable username/password authentication for RTMP/RTSP publishing to Wowza Streaming Engine
- Publish securely from an RTMP encoder that does not support authentication with a Wowza Streaming Engine Java module
- Integrate Wowza Streaming Engine user authentication with external systems using a Wowza Streaming Engine Java module
Use per-application password files in Wowza Streaming Engine
Do file-based RTMP authentication with NetConnection connect using a Wowza Streaming Engine Java module
Do file-based RTMP authentication with URL query strings using a Wowza Streaming Engine Java module

Wowza Streaming Engine Java API security options

The Wowza Streaming Engine Java API provides several methods for controlling access to RTMP, Adobe HDS, Apple HLS, and Smooth Streaming. When used with transport protection mechanisms such as Wowza StreamLock AddOn, SSL, HTTP, RTMPS, or RTMPE, they can provide a secure way to control access to streaming. The Java API can also be used to develop custom authentication systems.

For examples, see:

- Control access to HTTP streams with the Wowza Streaming Engine Java API
- Control access to RTSP/RTP streams with the Wowza Streaming Engine Java API
- Control access to Apple HLS streaming with the Wowza Streaming Engine Java API
- Control access to Microsoft Smooth Streaming with the Wowza Streaming Engine Java API
- Control access to Adobe HDS streaming with the Wowza Streaming Engine Java API
- Override publish to remap a stream name with the Wowza Streaming Engine Java API
- Modify or control a stream by overriding playback with the Wowza Streaming Engine Java API

Stream name aliasing

Stream name aliasing is way to intercept and redirect content requests. Aliasing is another method that can be used to protect streaming media by controlling access to certain content based on user credentials.

For more information, see:
• Get the StreamNameAlias AddOn for Wowza Streaming Engine
• Use IMediaStreamNameAliasProvider2 interface with the Wowza Streaming Engine Java API