Control HTTP origin session creation with the Wowza Streaming Engine Java API

Wowza Streaming Engine™ media server software can be configured as an HTTP origin for stream delivery. When in HTTP origin mode, Wowza Streaming Engine combines all sessions with a given stream name into a single session by default. This is problematic if you’re using certain features, such as `wowzaplaystart` and `wowzaplayduration` query parameters, to control playback because while these features are in use, the proper start and duration aren’t tracked in the single session for viewers that are using different values. However, the `IHTTPStreamerHTTPOriginSessionIdProvider` API hook enables you to control the `httpOriginId`, which is used to combine sessions and determine if a session is unique. This article demonstrates how to create unique sessions for an Apple HLS (cupertino) stream using the `IHTTPStreamerHTTPOriginSessionIdProvider` API hook and the `wowzaplaystart` and `wowzaplayduration` query parameters.

Notes:
- Wowza Streaming Engine 4.4.0 or later is required to use the `IHTTPStreamerHTTPOriginSessionIdProvider` API hook to control HTTP origin session creation and combination.
- The `IHTTPStreamerHTTPOriginSessionIdProvider` API hook won’t work properly if you require different behaviors based on the query parameter, such as `wowzaplaystart` or `wowzaplayduration`. 
public MyHTTPOriginSessionIdProvider(HTTPStreamerApplicationContext CupertinoStreamer appContextCupertino, HTTPStreamerAdapter CupertinoStreamer streamAdapterCupertino)
{
    this.appContextCupertino = appContextCupertino;
    this.streamAdapterCupertino = streamAdapterCupertino;
}

public String getHTTPOriginId(String httpOriginId, IHTTPRequest req, IHTTPStreamerApplicationContext appContext, String oldSessionId, String streamDomainStr, boolean isHTTPOrigin, boolean isDvr, long currTime)
{
    long playStart = 0;
    long playDuration = -1;
    String queryStr = req.getQueryString();
    if (queryStr != null)
    {
        Map queryMap = HTTPUtils.splitQueryStr(queryStr);
        String playStartStr = queryMap.get(streamAdapterCupertino.getPlayStartQueryParameter());
        if (playStartStr != null)
        {
            try
            {
                playStart = Long.parseLong(playStartStr);
            }
            catch(Exception e)
            {
            }
        }
        String playDurationStr = queryMap.get(streamAdapterCupertino.getPlayDurationQueryParameter());
        if (playDurationStr != null)
        {
            try
            {
                playDuration = Long.parseLong(playDurationStr);
            }
            catch(Exception e)
            {
            }
        }
    }
    httpOriginId = httpOriginId + "|playStart=\d+|playDuration=\d+";
More resources

- Configure Wowza Streaming Engine as an HTTP caching origin
- Scaling with Wowza HTTP Origin applications