Manage secure playback in Wowza Player for Wowza Streaming Cloud ultra low latency streams

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The Wowza Streaming Cloud™ service with Ultra Low Latency allows you to deliver ultra low latency streams for secure playback over WSS (WebSocket secure). WSS uses SSL (Secure Socket Layer) to create a handshake between a server and client to exchange encrypted data. Meanwhile, backup HLS streams associated with an ultra low latency stream target are available over HTTPS, a secure protocol that also uses SSL to establish a secure connection. By default, streams are available over both encrypted WSS and HTTPS connections or unencrypted WS and HTTP connections. To ensure that an ultra low latency stream and backup HLS stream are played over a secure connection, you can embed Wowza Player configured with secure playback URLs into a webpage hosted over HTTPS.

This article shows you how to create an ultra low latency stream and backup HLS stream with the Wowza Streaming Cloud web manager, configure a source, and then configure Wowza Player for secure playback using WSS and HTTPS.

Add an ultra low latency stream target

In the Wowza Streaming Cloud web manager, create an ultra low latency stream target with HLS enabled. Although HLS is optional, it is used by mobile devices for playback or in the event that WebSocket connection attempts fail.

1. Click Advanced on the menu bar, and then click Stream Targets.
2. Click Add Target, select Wowza CDN - Ultra Low Latency, and then click Add.
3. On the Add a Wowza CDN - ULL target page, specify the following:
   - Target Name – A short, descriptive identifier for the target that differentiates it from other targets in Wowza Streaming Cloud. A Target Name is required, doesn't have to be unique, and can’t exceed 255 characters.
   - Source Delivery Method – Select Push for the source to push the stream to the target. Select Pull for the target to pull the stream from the source.
   - Source URL – Only for ultra low latency stream targets whose Source Delivery Method is Pull. The URL of the source IP camera or encoder connecting to the stream target. The hostname or IP address used in the Source URL must be publicly accessible. For help determining the correct Source URL, see the encoder or IP camera’s documentation.
- **Apple HLS Playback Stream** – (Optional) Select **Enable HLS Fallback Stream** to create an Apple HLS playback URL that can be used to view the stream on mobile devices or to provide redundancy in the event that WebSocket connection attempts fail.

- **Enabled?** – Select **Enable this target** to allow the source stream to be immediately ingested by the target’s origin server. Select **Do NOT enable** if you prefer to set up the target and encoder first, then enable ingest at a later time.

4. Click **Add**.

**Configure a source**

Configure a source for your ultra low latency stream. See these articles for more information:

- [Connect an RTMP encoder to Wowza Streaming Cloud with Ultra Low Latency](#)
- [Connect an RTSP encoder to Wowza Streaming Cloud with Ultra Low Latency](#)

**Configure secure playback**

Using Wowza Player Builder for Ultra Low Latency, configure Wowza Player using secure playback URLs.

1. Choose one of the following.
   - You can prepopulate the **License Key**, **Stream Source**, and **Backup Stream Source** information by navigating to the Wowza Player Builder for Ultra Low Latency from within the Wowza Streaming Cloud web manager:
     a. In Wowza Streaming Cloud, click **Advanced** on the menu bar, and then click **Stream Targets**.
     b. Select an ultra low latency target on the **Stream Targets** page.
     c. Click **Test player for Wowza ultra low latency targets** to launch Wowza Player for Ultra Low Latency with prepopulated fields.
   - Alternatively, go straight to **Wowza Player Builder for Ultra Low Latency**.
     a. For **License Key**, enter the license key for your Wowza services and then click **Apply**.
     b. In the **Source Stream Information** area, for **Stream Source**, enter the WebSocket secure playback URL for your ultra low latency stream target. For example:

     ```
     wss://edge.cdn.wowza.com/live/_definst_/0P1q1UHJEN1RzbXdRVGszMHoxWm15f33/stream.ws
     ```
c. Enter a **Backup Stream Source** HLS playback URL to be used by mobile devices or in the event that WebSocket connection attempts fail. The HLS playback URL is only available if you enable HLS when creating the ultra low latency stream target with the Wowza Streaming Cloud REST API. Be sure to use HTTPS instead of HTTP. For example:

https://[wowzasubdomain]-i.akamaihd.net/hls/live/507400/0P1q1UHJEN1RzbXdRVGszMHoxWm15f33/playlist.m3u8

2. Configure other settings for Wowza Player as needed. See [Configure Wowza Player for Wowza Streaming Cloud ultra low latency streams](#) for information about additional configuration options.

3. Click **Get Embed Code**.

4. Enter the embed code information into a webpage.
   a. Copy the JavaScript from the first field, **JS Includes**, and paste it into the HEAD section of your webpage.
   b. Copy the HTML DIV element from the second field, **Create an HTML element to contain your video**, and paste it at the top of the BODY section of your webpage.
   c. Copy the code from the third field, **Embed the Wowza Player**, into the BODY section of your webpage after the HTML player element DIV element.

5. Ensure that your website containing Wowza Player is hosted over an HTTPS connection using a certificate for use with SSL and TLS.