Manage user authentication for ultra low latency streams in Wowza Streaming Cloud

When you broadcast an ultra low latency stream that is pulled into the Wowza Streaming Cloud™ service, you have control over whether or not the source encoder or IP camera must use user authentication in order to publish the stream. User authentication provides a secure connection from the source encoder into the ingest origin server for Wowza Streaming Cloud and prevents third parties from connecting to and altering your stream.

This article shows you how to create an ultra low latency stream target that accepts an authenticated connection from a source encoder or IP camera’s RTMP or RTSP stream. It also suggests next steps to secure ultra low latency streams during playback.

Notes:
- Ultra low latency streaming is available through subscription to Wowza Streaming Cloud with Ultra Low Latency. For more information see About ultra low latency streaming with Wowza Streaming Cloud.
- For ultra low latency streams, user authentication is available for pull connections, where Wowza Streaming Cloud pulls your stream from the encoder or IP camera. This feature is dependent on the user authentication functionality of your source encoder or camera. User authentication is not currently available for push connections for ultra low latency streams.

Configure your source encoder or IP camera for user authentication

1. Refer to documentation for your source encoder or IP camera to determine available methods for user authentication, such as defining a username and password.
2. Implement authentication on the source encoder or camera. Your authentication information must fit into the source URL value described in the next section. Authentication information included in the source URL can only contain alphanumeric, period (.), underscore (_), and hyphen (-) characters.

Add an ultra low latency stream target
Using the Wowza Streaming Cloud web manager, add an ultra low latency stream target with a pull connection and a Source URL that contains authentication information.

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 **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. Authentication information from the source encoder or camera must fit into the Source URL value. For help determining the Source URL, see the encoder or IP camera’s documentation.
   - **HLS Playback Stream** – (Optional) Select **Enable HLS Fallback Stream** to create an 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**.

**Test the connection**

1. Start the source encoder and camera to provide a stream for Wowza Streaming Cloud to pull.
2. Use Wowza Player Builder for Ultra Low Latency to preview your stream. See [Configure Wowza Player for Wowza Streaming Cloud ultra low latency streams](#) for instructions.

**Configure secure playback**

To increase security on the playback side, see [Manage secure playback in Wowza Player for Wowza Streaming Cloud ultra low latency streams](#).