Connect an RTMP encoder to Wowza Streaming Cloud with Ultra Low Latency

The Wowza Streaming Cloud™ service with Ultra Low Latency can connect to any H.264 encoder that supports the RTMP network protocol. This article describes how to use the Wowza Streaming Cloud web manager to add an ultra low latency stream target and configure an RTMP-based encoder as the video source for a Wowza Streaming Cloud ultra low latency stream.

Add an ultra low latency stream target

First, add an ultra low latency target in Wowza Streaming Cloud.

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 the source

Make sure you have the latest firmware for a hardware encoder installed. See the encoder’s
user guide for details about how to update firmware as well as how to operate the device or
software and how to specify settings such as resolution, bitrate, and frame rate.

**RTMP encoder with push source delivery method**

1. For an RTMP encoder delivering a stream into Wowza Streaming Cloud over a push
connection, use the **Primary URL** in the target details page to configure the source. The
primary URL is the ingest location for the stream. For example:
   
   `rtmp://origin.cdn.wowza.com:1935/live/\[stream_name\]`

   Where `\[stream_name\]` is the alphanumeric stream name generated by Wowza
   Streaming Cloud to identify the specific stream.

2. Refer to documentation for your specific encoder to note where to input the stream
settings. Encoders may require the stream name value to be separated from the primary
URL.

   For example, **Address** or **URL** might be:
   `rtmp://origin.cdn.wowza.com:1935/live/`

   While **Stream** or **Stream key** might be:
   `0I0q1NXZhvMnvjUVWWhaW3SM8LfhN5d03`

**RTMP encoder with pull source delivery method**

For an RTMP encoder delivering a stream with a pull connection, you configure the source by
determining and providing the **Source URL** value when adding the ultra low latency stream
target. The **Source URL** must be an RTMP URL with a publicly accessible hostname or IP
address.

**Start streaming**

**Play a push stream**

Start sending video from the video source and RTMP encoding device, and the ultra low
latency steam starts.
Play a pull stream

When someone requests the stream by accessing the playback URL, the ultra low latency target will ingest the stream and it will start playing. After about a minute of no requests, Wowza Streaming Cloud stops ingesting the stream.

More Resources

- Configure Wowza Player for Wowza Streaming Cloud ultra low latency streams
- Play a Wowza Streaming Cloud ultra low latency stream with Wowza GoCoder SDK for iOS
- Play a Wowza Streaming Cloud ultra low latency stream with Wowza GoCoder SDK for Android