Connect a UDP encoder to Wowza Streaming Cloud

The Wowza Streaming Cloud™ service can connect to any H.264 encoder that supports the User Datagram Protocol (UDP). UDP is a connectionless protocol that makes it easier to transmit information quickly, but is also more prone to network issues, packet loss, and packets arriving out of order.

**Note:** Source Security isn’t available for UDP.

Create a live stream

**Note:** The Live Stream Type and Billing Mode can’t be changed after the live stream is created.

1. Sign in to Wowza Streaming Cloud.
2. Click the Live Streams menu, and then click Add Live Stream.
3. On the Live Stream Setup page, enter a Live Stream Name, choose a Broadcast Location, and then click Next.
4. On the Video Source and Transcoder Settings page, select Other UDP as the video source you want to use to connect to Wowza Streaming Cloud.
5. For **Live Stream Type**, select **Adaptive bitrate**. Alternatively, select **Passthrough** to send the source video directly to the hosted page or other target without performing transcoding.
6. For **Closed Captions**, choose **None**, **CEA-608**, **onTextData**, or **CEA-608 and onTextData**.
7. Specify the other video source settings, and then click **Next**.
8. Complete the steps to finish creating the live stream.

**Note:** For more information about live stream settings, see the **Help** panel on the right side of each page.

Wowza Streaming Cloud creates the live stream and displays the **Overview** tab of the live stream detail page.

**Set up the UDP encoder for the live stream**

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

See the **Source Connection Information** values on the **Overview** tab of the live stream detail page for the information that your encoder needs to connect to Wowza Streaming Cloud.

**Test the live stream connection**

1. In Wowza Streaming Cloud, select the live stream that uses the UDP encoder as its video source.
2. Click **Start Live Stream** at the top of the live stream detail page.
3. Click **Start** to confirm that you want to start the stream.
4. Start the encoder.
5. In Wowza Streaming Cloud, confirm that the stream is working by looking at the **Video Thumbnail** on the **Overview** tab of the live stream detail page.

The **Video Thumbnail** displays a frame from the stream every five seconds. The started date and time appear at the bottom of the thumbnail. Connection, transcoding, and delivery metrics begin to update in the **Statistics** panel.

6. Click **Stop Live Stream** at the top of the live stream detail page to end your test stream, and then stop the encoder.

Create a transcoder

**Note:** The **Transcoder Type** and **Billing Mode** can’t be changed after the transcoder is created.

1. Sign in to Wowza Streaming Cloud.
2. Click **Advanced** on the menu bar, click **Transcoders**, and then click **Add Transcoder**.
3. On the **Transcoder Setup** page, enter a descriptive **Transcoder Name**.
4. For **Transcoder Type**, choose **Adaptive bitrate**. Alternatively, select **Passthrough** to send the source video directly to the hosted page or other
5. For **Closed Captions**, choose **None, CEA-608, onTextData, or CEA-608 and onTextData**.
6. For **Source Protocol**, select **UDP**.
7. For **Source Delivery Method**, select **Push to Wowza Streaming Cloud** to send the stream to the transcoder at its **Broadcast Location**. **Pull from a source URL** and **Push to an existing stream source** aren't available for UDP.
8. Specify other transcoder setup options. For more information on the options, see the **Help** panel on the right side of the page.
9. Click **Add**.

Wowza Streaming Cloud creates the transcoder and displays the **Outputs & Targets** tab of the transcoder detail page.
10. Complete the transcoder by adding output renditions and stream targets. For instructions, see one of the following articles, depending on whether you’re creating an adaptive bitrate or passthrough transcoder:

   - Create a custom transcoder with many outputs and targets in Wowza Streaming Cloud
   - Create a passthrough live stream or transcoder in Wowza Streaming Cloud

### Set up the UDP encoder for the transcoder

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

See the **Host Server** and **Host Port** values on the **Transcoder Setup** tab of the transcoder detail page for the information that your encoder needs to connect to Wowza Streaming Cloud.

### Test the transcoder connection

1. In Wowza Streaming Cloud, select the transcoder that uses the UDP encoder
as its video source.

2. Click **Start Transcoder** at the top of the transcoder detail page.

3. Click **Start** to confirm that you want to start the stream.

4. Start the encoder.

5. In Wowza Streaming Cloud, confirm that the stream is working by looking at the **Video Thumbnail** on the **Overview** tab of the transcoder detail page.

   The **Video Thumbnail** displays a frame from the stream every five seconds. The started date and time appear at the bottom of the thumbnail. Connection, transcoding, and delivery metrics begin to update in the **Statistics** panel.

6. Click **Stop Transcoder** at the top of the transcoder detail page to end your test stream, and then stop the encoder.

**More resources**

- **Get started with Wowza Streaming Cloud**
- **Wowza Streaming Cloud user guide**
- **Encoding best practices for Wowza Streaming Cloud**