With the Wowza Streaming Cloud™ service you can send live streams to YouTube Live, where your audience can watch your live event. Streaming to YouTube Live requires that you have a Google account and that you’re set up in YouTube to broadcast live streams.

**Note:** In this tutorial, YouTube, not Wowza Streaming Cloud, performs the transcoding on your live stream.

### Create a live stream in YouTube Studio

To use Wowza Streaming Cloud as a video source for YouTube, you first need to set up a live stream in YouTube Studio. For more information about YouTube Studio, see the YouTube help article [Intro to YouTube Studio](#).

1. Go to the YouTube Studio Live Streaming page and sign in with your Google credentials.
2. On the **Stream** tab, if given the option to choose between copying an existing stream or creating a new stream, click **New Stream**.
3. On the **New stream** dialog box, enter a title, privacy level, description, category, and other details for the live stream, and then click **Create Stream**.
4. Note the **Stream URL** and the **Stream name/key** that YouTube generates. You’ll use those values when configuring the stream target for your application.

### Create a live stream or transcoder in Wowza Streaming Cloud

YouTube only accepts one stream, or output rendition, which it transcodes for playback. Depending on the type of subscription you have in Wowza Streaming
Cloud, prepare a stream for YouTube by doing one of the following:

- Create an adaptive bitrate live stream and send only one output rendition, the highest bitrate output rendition, to YouTube. All subscriptions support adaptive bitrate live streaming. For instructions, jump to Create and prepare a live stream for YouTube.
- Create a passthrough transcoder and send the transcoder's one passthrough rendition to YouTube. This option requires a subscription that supports passthrough. For instructions, jump to Create and prepare a passthrough transcoder for YouTube.

If you’re not sure what type of subscription you have, check your account on the Wowza portal.

For information about 24x7 and passthrough streaming subscriptions, see Wowza Streaming Cloud 24x7 streaming plans.

Create and prepare a live stream for YouTube

When you create a live stream, Wowza Streaming Cloud automatically creates multiple adaptive bitrate output renditions based on the aspect ratio and resolution of the source video. However, you’re only going to need the highest bitrate output rendition. That’s what you’ll send to YouTube.

1. In Wowza Streaming Cloud, click Live Streams on the menu bar, and then click Add Live Stream.
2. On the Live Stream Setup page, enter a Live Stream Name, choose a Broadcast Location, and then click Next.
3. If you have the option on the Video Source and Transcoder Settings page, specify the Live Stream Type as Adaptive bitrate.
4. For Closed Captions, choose None or CEA-608-digital.
5. Specify other video source settings, including an aspect ratio of 1280 x 720, and then click Next.

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

6. Click Next two times to skip the Playback Settings and Hosted Page Settings pages. These options don’t matter if you’re delivering the stream to...
viewers at YouTube.
7. On the Review page, click Finish to create the live stream.

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

To prepare the live stream for YouTube, go to the stream’s transcoder detail page.

8. Click Advanced on the menu bar, click Transcoders, and then select your live stream’s transcoder. It appears as \[Live stream name\] / Transcoder.
9. Click the Outputs & Targets tab of the transcoder detail page.

The Outputs & Targets tab displays the output renditions for your live stream. The first output on the list is the highest bitrate output rendition, the one
You’re going to send to YouTube. You’re not using the others, so delete them.

10. For the second output on the page, click the trash can icon. When prompted, click **OK** to confirm that you want to delete the output.

11. Repeat Step 10 to delete the other adaptive bitrate output renditions until only the highest bitrate rendition remains.

There’s one more clean-up step. You’re not using the stream target that Wowza Streaming Cloud automatically created for the highest bitrate output rendition, so delete it, too.

12. Click the **Actions** button for the highest bitrate output’s assigned target and then click **Remove Stream Target**. When prompted, click **OK** to confirm that you want to delete the target.

Now you’re ready to create the custom YouTube stream target for your live stream. For instructions, jump to **Create a YouTube target for the live stream or transcoder**.
Create and prepare a passthrough transcoder for YouTube

1. In Wowza Streaming Cloud, click Advanced on the menu bar, click Transcoders, and then click Add Transcoder.
2. On the Transcoder Setup page, enter a Transcoder Name.
3. For Transcoder Type, choose Passthrough. Then, choose a Broadcast Location that's as close as possible to where your stream will originate.
4. For Closed Captions, choose None or CEA-608-digital.
5. Specify the other transcoder setup options.

Note: For more information about transcoder settings, see the Help panel located on the right side of the page.

6. Click Add.

Wowza Streaming Cloud creates the transcoder and displays the Outputs & Targets tab of the transcoder detail page. A single passthrough output rendition is ready for the transcoder. You just need to create the custom YouTube stream target for it. For instructions, continue to Create a YouTube target for the live stream or transcoder.

Create a YouTube target for the live stream or transcoder

Next, create a custom target that sends the live stream or transcoder's output rendition to YouTube over RTMP.

1. On the Outputs & Targets tab of the transcoder detail page, click Add a Stream Target and then choose Custom.

2. On the Create a custom target page, provide details for the YouTube target:
- **Target Name** - A short, descriptive name for this target.
- **Provider** - Choose RTMP.
- **Primary URL** - The Stream URL located on the Stream Settings tab of the YouTube Live Control Room page for your event. Omit the RTMP prefix and the trailing slash.
- **Backup URL** - The Backup server URL located on the Stream Settings tab of the YouTube Live Control Room page for your event, if you choose to use it for increased redundancy. Omit the RTMP prefix and the trailing slash.
- **Stream Name** - The Stream name/key located on the Stream Settings tab of the YouTube Live Control Room page for your event
- **Target Username** - Leave blank.
- **Target Password** - Leave blank.
- **RTMP Playback URL** - Leave blank.

3. Click **Add**.

### Start your stream

Make sure your video source is set up, connected to Wowza Streaming Cloud, and ready to roll. Then:

1. Select your transcoder.
2. Click **Start Transcoder** at the top of the transcoder detail page.
3. Click **Start** to confirm that you want to start the transcoder.

Wowza Streaming Cloud starts the transcoder and connects with the source.

4. Start your video source.
5. In Wowza Streaming Cloud, confirm that the stream is working by looking at the **Video Snapshot** in the **Overview** tab of the transcoder detail page.

The video snapshot displays a frame from the live stream every five seconds. The started date and time appear under the snapshot. Source stream, transcoder, and delivery metrics begin to update.
6. Go to the YouTube Live Control Room page for your event. If YouTube is successfully receiving the stream, a preview of the stream is automatically displayed on the page. Click Go Live to start your broadcast.

7. When your event ends, stop the video source, stop the live stream in Wowza Streaming Cloud, and stop the event on YouTube.

More resources

- Wowza Streaming Cloud user guide
- Encoding best practices for Wowza Streaming Cloud