Stream to Periscope and Twitter from Wowza Streaming Cloud

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The Wowza Streaming Cloud™ service can send streams to Periscope. This article describes how to create a live stream that delivers live video to a custom Periscope stream target. Then, you can broadcast the stream over Periscope and, if desired, Twitter.

Note: This workflow requires Periscope Producer, an advanced feature in Periscope that accepts live video from external sources. To broadcast on Twitter you'll need a Twitter account, too. To learn more about connecting Twitter and Periscope, see the Periscope Help Center article How can I share my broadcast on other platforms?

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Periscope broadcast requirements

- Accepted codecs are H.264 (video) and AAC (audio).
- The recommended resolution is 960 x 540 (16:9 aspect ratio), and the recommended video bitrate is 800 Kbps.
- The maximum resolution is 1280 x 720, and the maximum video bitrate is 900 Kbps.
- For 360 degree streams, the recommended resolution is 1440 x 720, and the recommended video bitrate is 5000 Kbps.
- Streams should be 30 fps with a keyframe interval (i-frame) every 3 seconds or every 90 frames.
- Audio bitrate should be 64 Kbps to 96 Kbps.
- The recommended audio sampling rate is 44.1 kHz.
Configure the broadcast in Periscope

**Note:** For more information, see the Periscope Help Center article *What is Periscope Producer?*

In the Periscope mobile app

1. In the Periscope app, tap the **People** icon and then tap the **Profile** icon.
2. Tap **Settings**, and then and tap **Periscope Producer** in **Advanced Sources**.
3. Tap **Create Additional Source** for a normal stream or **Create Additional Source [360]** for a 360 degree stream.
4. Make note of the **Source Connection Info** (the **Server URL** and the **Stream Name / Stream Key**), or keep the **Advanced Sources** page open and available. You’re going to need the **Source Connection Info** in Wowza Streaming Cloud.

In the Periscope web application

1. Navigate to **Periscope**.
2. Click the **account profile** icon, and select **Producer**.
3. Click **Create New Source**, and select **Normal Source** for a normal stream or **360 Source** for a 360 degree stream.
4. If you have a need to distinguish streams in Periscope, enter a **Source Display Name**.
5. Make note of the **Source Connection Info** (the **Server URL** and the **Stream Name / Stream Key**), or keep the **Producer** page open and available. You’re going to need the **Source Connection Info** in Wowza Streaming Cloud.

Create a live stream for Periscope

**Note:** If you are simultaneously broadcasting (simulcasting) your stream to Periscope/Twitter as well as another destination such as a Wowza Streaming Cloud hosted webpage; a custom target; or a Wowza CDN edge resource, you can add a custom output rendition for Periscope to an already existing live stream.

Start by adding a live stream whose highest bitrate output rendition is 960 x 540 pixels, Periscope’s preferred resolution. Wowza Streaming Cloud doesn’t typically generate a 960 x 540 output rendition, so you’ll need to create an adaptive bitrate live stream with a custom
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**.

5. For **Aspect Ratio**, enter the custom value **960 x 540**.

6. Specify other video source settings, including the encoder, and then click **Next**.

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

7. 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 Periscope.

8. 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.

### Clean up the live stream's transcoder

The live stream isn’t quite ready for Periscope. You need to first make some changes to the live stream’s transcoder.

1. Click **Advanced** on the menu bar, click **Transcoders**, and then select your live stream’s transcoder. It appears as **[Live stream name] / Transcoder**.

2. Click the **Outputs & Targets** tab.

   The **Outputs & Targets** tab displays the output renditions that Wowza Streaming Cloud created for the live stream, starting with the highest bitrate rendition, the 960 x 540 rendition. Delete the other four renditions, which you don’t need.
3. Click the trash can icon for the 854 x 480 output rendition and, when prompted, click OK to confirm that you want to delete the output.

4. Repeat Step 3 for the 640 x 360, 512 x 288, and 320 x 180 output renditions.

   Next, edit the 960 x 540 output rendition to conform to Periscope's requirements.

5. Click the pencil icon for the 960 x 540 output rendition and make the following changes:
   
   - Set the Video Bitrate to 800 Kbps and the Audio Bitrate to 96 Kbps.
   - Select Main for the H.264 Profile.

   There's one more clean-up step. You're not using the stream target that Wowza Streaming Cloud automatically created for the 960 x 540 output rendition, so remove it from the rendition.

6. Click the Actions button for the target and then click Remove this stream target. When prompted, click OK to confirm that you want to remove the target from the output rendition.

   Note: If you also want to delete the target from Wowza Streaming Cloud, click the Advanced menu and then click Stream Targets. Select the target, which appears as [Live stream name] / Stream Target. Then, click Delete Stream Target.

Add a custom stream target for Periscope

Now, create a custom stream target that sends the live stream to Periscope.

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

2. On the Create a custom stream target page, enter a Target Name to identify the target in Wowza Streaming Cloud.

3. For Provider, choose RTMP.
4. For **Primary URL**, enter the **Server URL** from the **Source Connection Info** in Periscope.
5. Leave **Backup URL** empty or enter the **Server URL** from the **Source Connection Info** in Periscope.
6. For **Stream Name**, enter the name of the stream from the **Source Connection Info** in Periscope.
7. Leave **Target Username** and **Target Password** blank.
8. Click **Add**.

## Test your setup

When your live stream and stream target are complete, configure your source encoder or camera and test the entire setup.

1. Select your transcoder.
2. Click **Start Transcoder** at the top of the live stream’s 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 Thumbnail** on the **Overview** tab of the transcoder detail page.

   The **Video Thumbnail** displays a frame from the live 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. On the **Advanced Sources** page in the Periscope app, check the **Preview Broadcast**.
7. When you’re ready to go live, tap **Start Broadcast** to notify your followers and start the stream on Periscope and Twitter.
8. When you’re ready to stop streaming, first stop the broadcast in Periscope, then click **Stop Transcoder** at the top of the transcoder detail page in the Wowza Streaming Cloud web manager, and finally stop the video source.