GLOBAL LEADER IN BROADCAST QUALITY LIVE VIDEO OVER IP

Zixi Broadcaster How to Send a Zixi Stream to YouTube

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Introduction

This is the procedure for setting up a stream in Zixi Broadcaster that will stream to YouTube. The procedure involves taking a source video in Zixi Broadcaster and then sending that stream to YouTube.

Prerequisites

This guide assumes you have already set up a YouTube Studio account on YouTube and that your account has been approved for live streaming (this process may take 24 hours).

Streaming to YouTube

YouTube enables you to create an RTMP or HLS stream and begin streaming immediately or create the stream and schedule the streaming to take place at a later time. The configuration of the stream involves configuring You Tube and Zixi Broadcaster in tandem, as described in the following sections.

Step 1 - Creating an input stream in Zixi Broadcaster

The Input in Zixi Broadcaster can be any of the supported inputs.

➡ To create an Input stream:

- 1. Login to Zixi Broadcaster.
- 2. In the Main Navigation menu, click the Inputs tab.
- 3. In the Menu bar, click **New Input**.

The Add a new input stream window is displayed.

Add new input stream	х
Stream ID: Unlimited Max Outputs: Unlimited Show in Matrix:	
Push Pull UDP Delayed File RTMP	RTSP O HLS O TS over HTTP O RIST O NDI O
Stream parameters Password: Latency [ms]: Point to point: ID of high priority source: Enable time shift Transmit as multicast	Remote configuration Disable P2P fallback: None
Decrypt stream	
Enable encryption	
Recording parameters	
	Ok Cancel

- 4. Select the type of Input based on the source stream.
- 5. Fill in the fields with the relevant information, see *Zixi Broadcaster User Guide*.
- 6. Click **Ok**.

The new Input is created.

Step 2 (option a) - Setting a scheduled (Later Date) live stream on YouTube

In this option the stream will be played at a later time according to the specified schedule.

➡ To set a scheduled live stream on YouTube:

 In YouTube Studio's, at the top right corner click the Create button and then click Go Live.

GE	T STARTED DI	SMISS
\bigcirc	CREATE	A
<u>ר</u> נ	Jpload videos	
(•)) (ive	

The following welcome message is displayed:

1	💌 Studio		0
			this projection deal of the and lat
			contractly brane often you're going free-
		Control Table Live Control Room Device to the new YouTube Live Control Room Device to be available to prive? Device the stream wave both avary, such	close -
		Now a a chiner to inview anticipitation priorite line Inview International Inview Internation Inview International Inview International Inview Int	

- 2. In the Later date box, click Start.
- 3. Click the **Go** button in the **Streaming Software** box.

Pick the type of stream to begin	
Built-in webcam Recommended for first-time creators No setup required. Use your existing webcam for an easy way to go live. Learn more	
Streaming software Requires additional software. Add overlays, new graphics, and more. Learn more	
	BACK

The following screen is displayed:



4. Click Schedule Stream.

The following screen is displayed:

New stream	×
Create a title	
Public	-
Add a description	
People & Blogs	-
Wed, Apr 7 - 6:55 PM	-
UPLOAD CUSTOM THUMBNAIL	
Audience	
Is this video made for kids? (required) Regardless of your location, you're legally required to comply w Privacy Protection Act (COPPA) and/or other laws. You're requi your videos are made for kids. What's content made for kids?	ith the Children's Online red to tell us whether
Features like personalized ads and live chat won't be availa made for kids. Learn more	ble on live streams
○ Yes, it's made for kids	
No, it's not made for kids	
✓ Age restriction (advanced)	
	CREATE STREAM

5. Enter the stream details, including the **Date** and **Time** in which the streaming event will be scheduled to. These details are internal in YouTube and not used by Zixi Broadcaster.

6. Click Create Stream.

The following screen is displayed

v Connect streaming software to start preview Viewers will be able to find your stream once you go live STREAM SETUP HELP	Title Scheduled Stream Catagor People & Blogs Privacy Scheduled for Privacy Scheduled for Physic Apr 12, 2021, 4:00 PM Ververt waiting Likes 0 0		ЕЭЛТ
No data			
STREAM SETTINGS ANALYTICS STREAM HEALTH			
Stream key Select dream key Default stream key (RTMP; Variable) Stream key (patie in encoder) Stream UR,	Additional settings Enable Auto-start Enable Auto-stop Enable Auto-stop Enable DVR COPY 360° video COPY Anted Geby None	••	
Stream latency 🥜	Closed captions	••	
Normal latency Low-latency Ithro low latence	Unlist live replay once stream ends	•	

 At this point you will need to create the output in Zixi Broadcaster, while using the stream key and stream URL. Leave the screen open while you setup the output in Zixi Broadcaster, as described in sections Step 3 (option a) – Creating an RTMP output in Zixi Broadcaster or Step 3 (option b) – Creating an HLS output in Zixi Broadcaster.

Step 2 (option b) – Setting an immediate (Right Now) live stream on YouTube

In this option the stream will be played immediately after creating it in YouTube and creating the output in Zixi Broadcaster.

- ➡ To set an immediate live stream on YouTube:
 - 1. In **YouTube Studio**'s, at the top right corner click the **Create** button and then click **Go Live**.

GE	T STARTED DI	SMISS
?	CREATE	A
<u>±</u> (Jpload videos	
((•))	Go live	

The following welcome message is displayed:



- 2. In the **Right now** box, click **Start**.
- 3. Click the **Go** button in the **Streaming Software** box.

Pick the type of stream to begin	in
Built-in webcam Recommended for first-time creators No setup required. Use your existing webcam an easy way to go live. Learn more	n for GO
Streaming software Requires additional software. Add overlays, n graphics, and more. Learn more	ew GO
	BACK

The following screen is displayed:

С		Title Alon Men Liv	ve Stream
Connect streaming software to g	jo live	Category People & Blog	s
Viewers will be able to find your stream or	nce you go live	Privacy	
STREAM SETUP HELP		Viewers waiting 0	Likes O
 Start sending us your video from 	your streaming sof	tware to go live	
STREAM SETTINGS ANALYTICS	STREAM HEALTH		
Stream key			Additional settings
Select stream key Default stream key (RTMP, Variable)		-	Enable DVR
Stream key (paste in encoder)	RESET	СОРУ	360° video

At this point you will need to create the output in Zixi Broadcaster, while using the stream key and stream URL. Leave the screen open while you setup the output in Zixi Broadcaster, as described in sections Step 3 (option a) – Creating an RTMP output in Zixi Broadcaster or Step 3 (option b) – Creating an HLS output in Zixi Broadcaster.

Step 3 (option a) – Creating an RTMP output in Zixi Broadcaster

- **•** To create an RTMP output in Zixi Broadcaster:
 - 1. On **Zixi Broadcaster**, in the **Inputs** tab, click the menu button **a** for the Input that you have created.

≑ Status	≜ ID	Type	Source	# Bitrate[kbps]	Up Time	TR 101 290	¢ Error	Outp	uts Ac	tions 🗖
Gennected	Clocks	Pull	demo.zixi.com:2077	775	00:20:28	Off	None	0		ו 🗌
Generation Offline	demo	Pull	demo.zixi.com:2088	0	00:00:00	Off	No Source	0	Stop	_ 0
⊖ Offline	Elitest	Push		0	00:00:00	Off	None	0	X Delete	
Connected	jelly10bit	File	jellyfish-16-mbps- hd-hevc-10bit.ts	16004	215:28:59	Off	None	1	Duplicate Record	
Gennected	local	UDP	172.31.26.125:6556	16005	215:28:59	Off	None	1	V Analyze	
Offline	OBSStream01	Push		0	00:00:00	Off	None	0	New Output	
⊖ Offline	WirecastStream01	Push		0	00:00:00	Off	None	0	A Play with VL	.c
									Play with Fla Play Shoutc	ast

2. Click New Output.

The **Add new output** window is displayed with the info of your Input Stream in place.

3. Select **RTMP** for the output type.

The window shows the fields that need to be configured for an RTMP output.

RIST

4. In the **Output Name** field, enter a unique identifier for the output.

5. On YouTube, under Stream Settings, in the Stream URL field, click Copy.

STREAM SETTINGS ANALYTICS	STREAM HEALTH			
Stream key (paste in encoder)	RESET	СОРҮ	360° video	
Stream URL Trmp://a.rtmp.youtube.com/live2		СОРҮ	Added delay None	•
Backup server URL	oackup=1	СОРҮ	Closed captions	
YouTube also supports RTMPS for secure connectio	ns. Learn more		Unlist live replay once stream end	s

- 6. On **Zixi Broadcaster**, paste the copied string into the **URL** field.
- 7. If you want to add a backup URL, on **YouTube**, in the **Backup server URL** field, click

Copy.

STREAM SETTINGS	ANALYTICS	STREAM HEALTH		
Stream key (paste in encoder		RESET	СОРҮ	360° video
Stream URL	tube.com/live2		СОРҮ	None 🗸
Backup server URL rtmp://b.rtmp.youtube.com/live2?backup=1		СОРҮ	Closed captions	
YouTube also supports RTMP	S for secure connection	ons. Learn more		Unlist live replay once stream ends

- 8. On Zixi Broadcaster, paste the copied string into the Backup URL field.
- 9. On **YouTube**, in the **Stream key** field, click **Copy**.

STREAM SETTINGS ANALYTICS	STREAM HEALTH		
Stream key (paste in encoder)	RESET	СОРҮ	360° video
Stream UDI			
rtmp://a.rtmp.youtube.com/live2		СОРҮ	None 👻
			Closed captions
rtmp://b.rtmp.youtube.com/live2?backup=1		СОРҮ	
YouTube also supports RTMPS for secure connection	ns. Learn more		Unlist live replay once stream ends

10. On **Zixi Broadcaster**, delete the existing text in the **Stream Name** field and paste the copied text, add additional stream settings as desired and click **OK**.

If the stream connected successfully you should be able to see a preview of the stream.

Step 3 (option b) – Creating an HLS output in Zixi Broadcaster

➡ To create an HLS output in Zixi Broadcaster:

- 1. On **Zixi Broadcaster**, you will need to first create an Adaptive Group. If you have an adaptive group created, proceed to step 7.
- 2. In the Adaptive screen, click + Add group.

The following screen is displayed:

Adaptive live streams group	×
Group name:	.m3u8/.mpd
Stream ID	Bitrate[kbps]
Elitest	0 😣
Protocols	
Zixi ☐ HLS ✓ Support MultiAudio: Fast playback: Convert CEA-708 to WebVTT: HLS over multicast HLS segment duration [secs]: HLS segments count: DASH segment duration [secs] DASH segments count:	CMAF(DASH + fMP4 HLS) □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
Recording Keep recorded files for [minuter * Leave blank to use global settings. File name template: %G = Group Name; %N = Sequence N + Add s	s]: Global Settings %N Jumber; %T = Timestamp

- 3. In the **Group name** field, enter a name for the group.
- 4. In the **stream ID** field, select the input stream that you would like to include in the adaptive group and specify its bitrate.
- 5. Click + Add stream to add additional stream variants with different bitrates to the adaptive groups.
- 6. Click **OK**.
- 7. In the main menu click **Outputs**.
- 8. Click + New Output.

9. Select the **HTTP Push** option.

The following screen is displayed:

New output		×
Output Name: Input Adaptive Group: Show in Matrix:		
UDP O RTMP O Pull O Push O TCP O HTTP Push O		ST 🔿
HLS encapsulation DASH/fMP4 HLS encapsulation Target URL: Additional URL parameters: URL parameters support macros: %PATH% - file path as appears in playlist; %FILE% - file name 	0	
Delete outdated fragments from server Upload DVR playlist Segment Path: Ignore TLS certificate errors Authorization		
	Ok Cano	el

- 10. In the **Output Name** field, enter a name for the output.
- 11. In the **Input Adaptive Group**, select the adaptive group that you have created.
- 12. On **YouTube**, under **Stream Settings**, in the **Select stream key** drop-down menu, select the **HLS Stream (HLS, Variable)** option.

13. In the Stream URL field, click Copy.

STREAM SETTINGS	ANALYTICS	STREAM	I HEALTH		
Stream key					
Select stream key HLS stream (HLS, Variable)					
Stream key (paste in encoder)	Ø	RESET	СОРҮ	
Stream URL https://a.upload.youtube.com/http_upload_hls?cid=*** 🗞					
Backup server URL https://b.upload.youtube.com/http_upload_hls?cid=*** 🐼					
Your encoder configuration may need to be updated for HLS. Learn more					

- 14. On **Zixi Broadcaster**, paste the copied string into the **Target URL** field.
- 15. The string that was pasted includes the additional parameters, which belong in the **Additional URL parameters** field. From the Additional URL parameters field, Cut the string after the http_upload_hls (i.e. from the question mark to the end) and paste it into the **Additional URL parameters** field.

Output parameters		
HLS encapsulation 🔍 DA	SH/fMP4 HLS encapsulation	
Target URL:	https://a.upload.youtube.com/http_upload_hls	
Additional URL parameters:	?cid=xum5-6stc-xbds-7bzg-955y©=0&file	
URL parameters support macros: %PATH% - file path as appe	ears in playlist; %FILE% - file name	

- In the Additional URL parameters field, at the end of the string add the following string
 %PATH% (the final string should look like this ?cid=xum5-6stc-xbds-7bzg-955y©=0&file=%PATH%).
- 17. In the Segment Path field, select the Path in parameters option.

Delete outdated fragments from server \Box

Segment Path:	Path in parameters \vee
	·
Ignore ILS certificate errors	

18. Click **OK**.

If the stream connected successfully you should be able to see a preview of the stream.