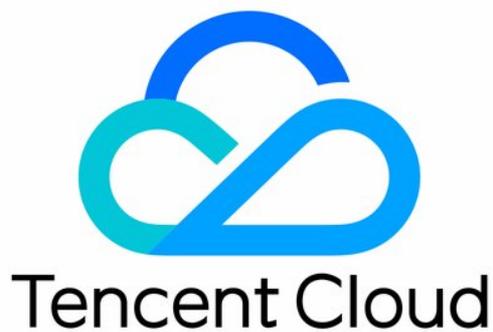


StreamLive

Console Guide

Product Documentation



Copyright Notice

©2013-2024 Tencent Cloud. All rights reserved.

Copyright in this document is exclusively owned by Tencent Cloud. You must not reproduce, modify, copy or distribute in any way, in whole or in part, the contents of this document without Tencent Cloud's the prior written consent.

Trademark Notice

 Tencent Cloud

All trademarks associated with Tencent Cloud and its services are owned by Tencent Cloud Computing (Beijing) Company Limited and its affiliated companies. Trademarks of third parties referred to in this document are owned by their respective proprietors.

Service Statement

This document is intended to provide users with general information about Tencent Cloud's products and services only and does not form part of Tencent Cloud's terms and conditions. Tencent Cloud's products or services are subject to change. Specific products and services and the standards applicable to them are exclusively provided for in Tencent Cloud's applicable terms and conditions.

Contents

Console Guide

- Input Management

- Channel Management

 - Overview

 - Creating a Channel

 - Step 1. Set the Basic Channel Information

 - Step 2. Add Inputs

 - Step 3. Configure Inputs

 - Step 4. Configure Output Groups

 - Modifying and Deleting a Channel

 - Exporting, Importing, Cloning a Channel

 - Monitoring Channel Quality

- Watermark Management

- Plan Management

Console Guide

Input Management

Last updated : 2024-02-22 09:30:30

Inputs are the source of streams for StreamLive channels. An input is usually associated with 1 security group and 1 StreamLive channel.

Prerequisites

You have activated [StreamLive](#).

You have logged in to the [StreamLive console](#).

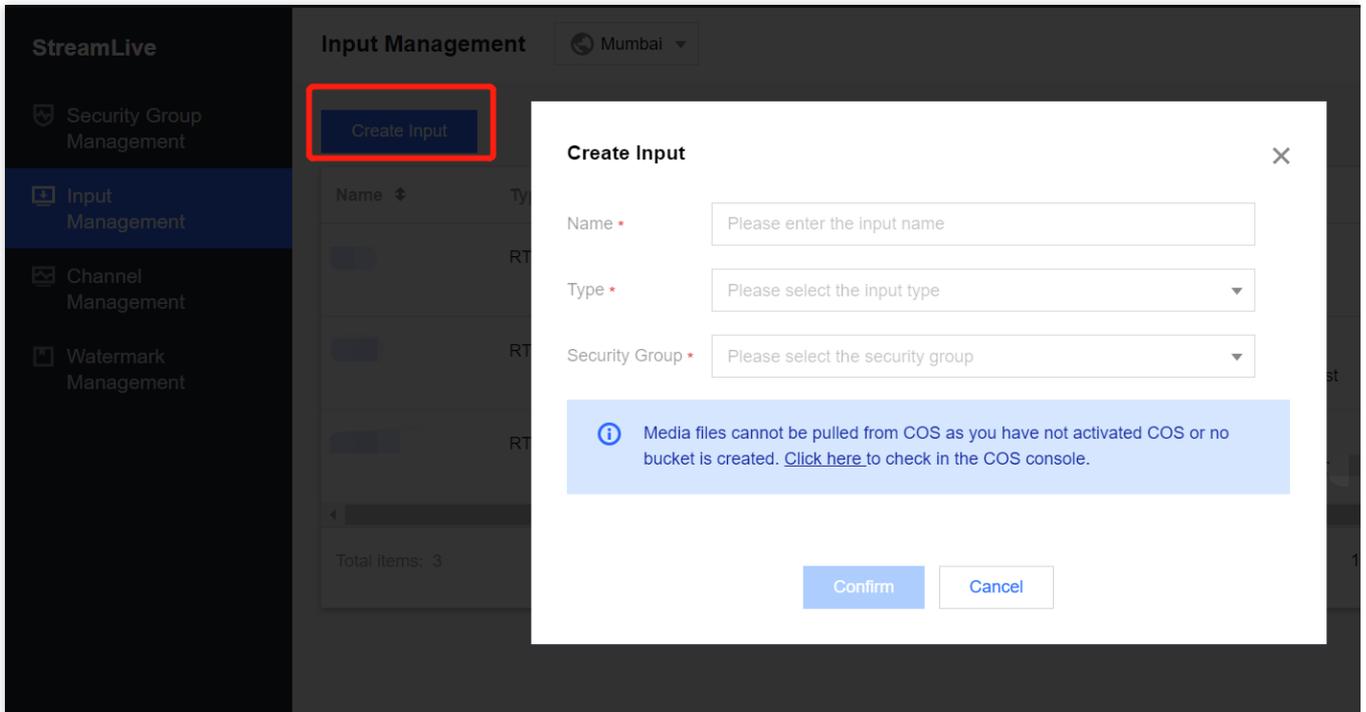
Input management

Select **Input Management** on the left sidebar. On this page, you can view the name, type, state and ID of created inputs. Each input is usually associated with one security group and one StreamLive channel. The state of an input that has been associated with a channel is **Attached**. Each input has two independent pipelines (A and B), which can push streams at the same time to ensure data availability.

The screenshot displays the StreamLive console interface for Input Management. The left sidebar is dark-themed and lists navigation options: Security Group Management, Input Management (highlighted in blue), Channel Management, and Watermark Management. The main content area is titled 'Input Management' and includes a location selector set to 'Mumbai'. A 'Create Input' button is positioned at the top left of the table. The table has five columns: Name, Type, State, ID, and URL A. It contains three rows of data, all of which are blurred. Below the table, a summary indicates 'Total items: 3' and a page number '1'.

Creating an input

You can create PULL or PUSH inputs. On the **Input Management** page, click **Create Input** and complete the following settings in the pop-up window:



Name: The input name, which can be 1-32 characters long and can contain numbers, letters, and underscores (_).

Type: The input type. Currently, RTMP_PUSH, RTP_PUSH, RTP-FEC_PUSH, UDP_PUSH, SRT_PUSH, RTMP_PULL, HLS_PULL, MP4_PULL, RTSP_PULL, and SRT_PULL are supported.

Security Group: If you are creating a PUSH input, you must associate it with an input security group.

RTMP_PUSH

If the input type is RTMP_PUSH, you need to enter an application name and stream name for the destination.

Create Input

Name *

Type *

Security Group *

Delay Time

Destination A ⓘ *

Destination B ⓘ

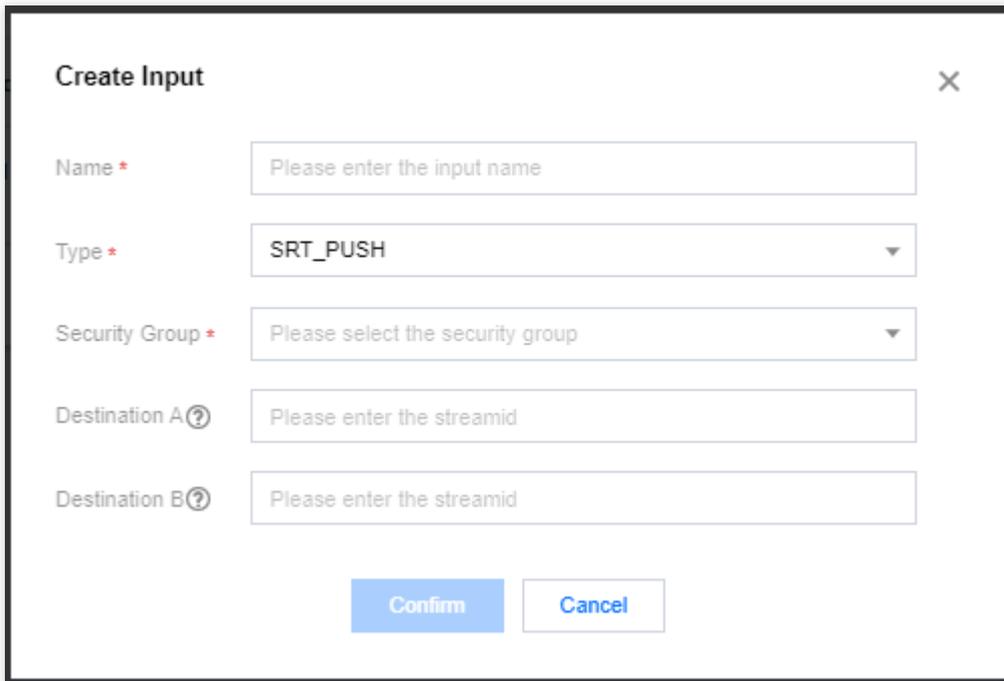
i Media files cannot be pulled from COS as you have not activated COS. A COS bucket is created. [Click here](#) to check in the COS console.

Confirm

Cancel

SRT_PUSH

If the input type is SRT_PUSH, you can enter a stream ID for the destination (optional).



Create Input [Close]

Name *

Type *

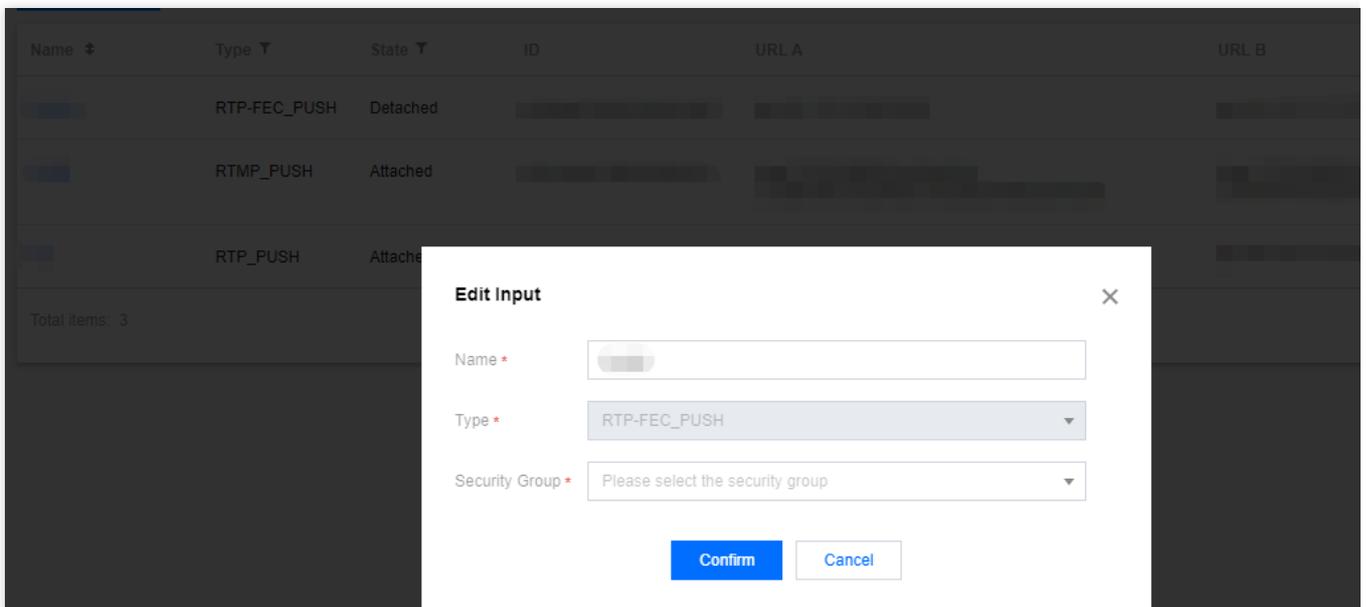
Security Group *

Destination A ?

Destination B ?

PULL

If the input type is PULL, you need to enter an input address, which is used as the source of the PULL input.



Name	Type	State	ID	URL A	URL B
	RTP-FEC_PUSH	Detached			
	RTMP_PUSH	Attached			
	RTP_PUSH	Attached			

Total items: 3

Edit Input [Close]

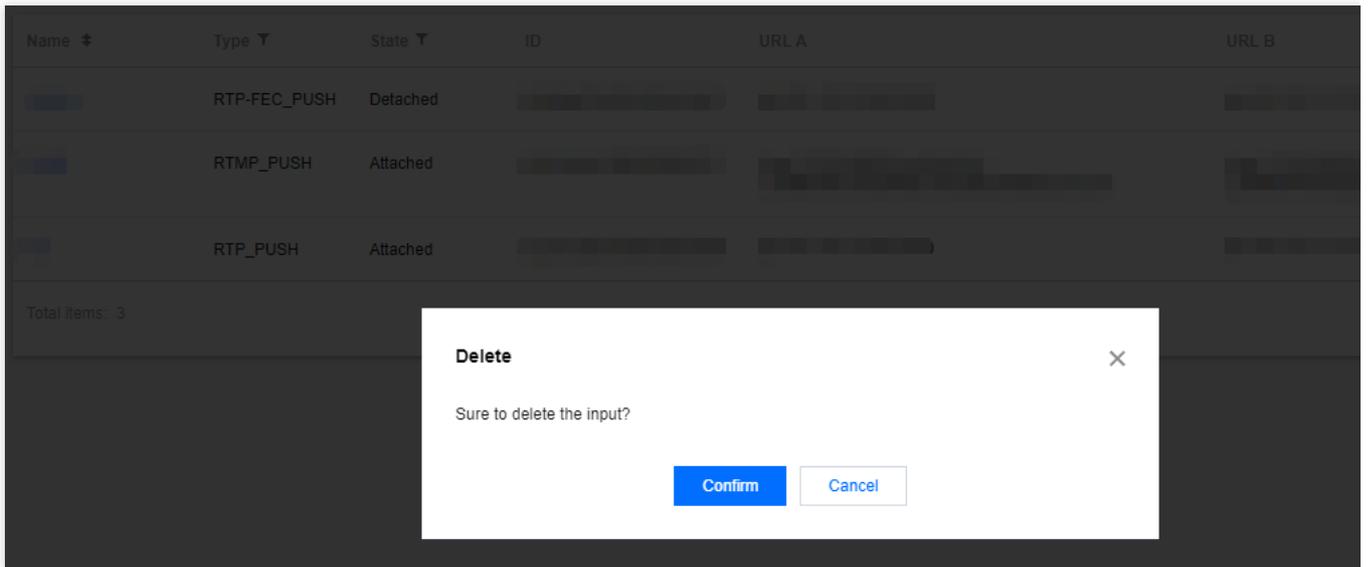
Name *

Type *

Security Group *

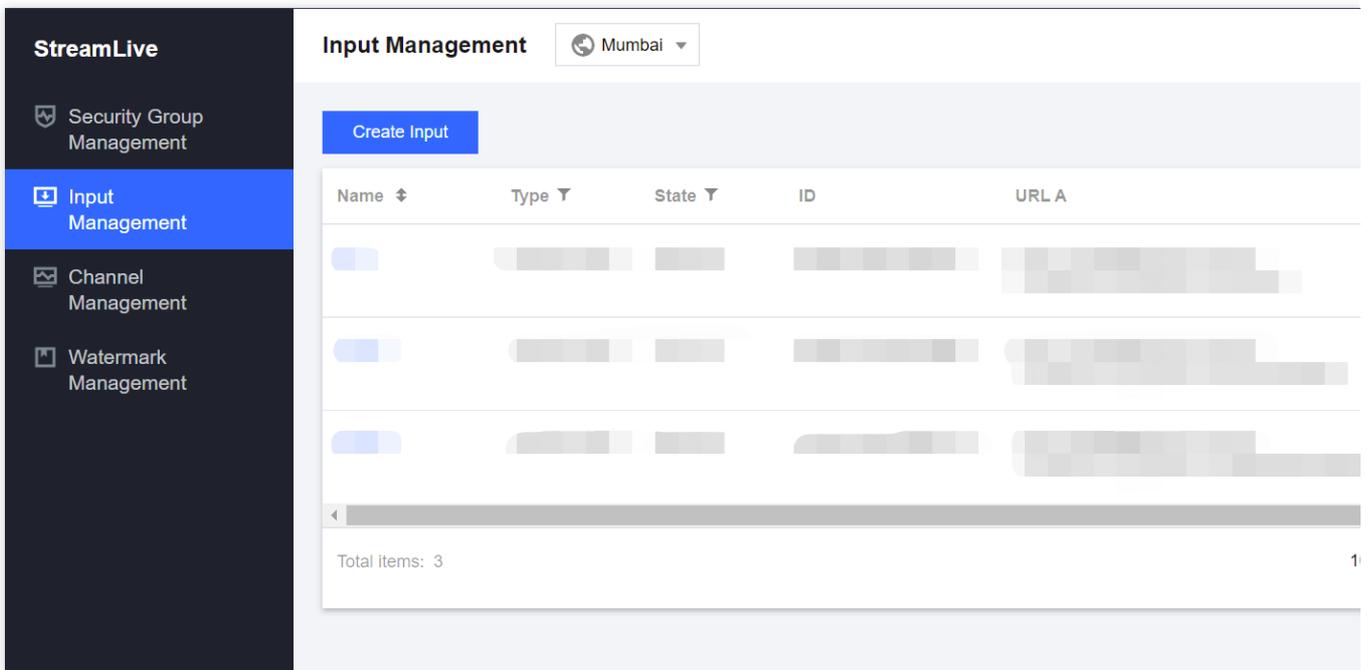
Modifying an input

To modify an input, find it on the **Input Management** page and click **Edit** on the right. Modify its settings in the pop-up window and click **Confirm**.



Deleting an input

To delete an input, find it on the **Input Management** page, click **Delete** on the right, and click **Confirm** in the pop-up window.



Note:

You can create up to five inputs by default.

The source of an input must contain at least one video pipeline.

In case of MPEG-TS multiplexing, up to eight pipelines can transfer data simultaneously.

For 4K resolution inputs, when using standard transcoding or top speed codec transcoding, please be aware of the respective supported codec, color depth, frame rate, and bitrate for the inputs :

Transcoding Type	Codec	Color Depth	Frame Rate	Bitrate
Standard Transcoding	H.264、 H.265	8bit、 10bit	<=60 fps	<=100Mbps
Top Speed Codec Transcoding	H.264	8bit、 10bit	<=60 fps	
	H.265	8bit	<=60 fps	
		10bit	<=30 fps	

Channel Management

Overview

Last updated : 2022-08-19 16:34:42

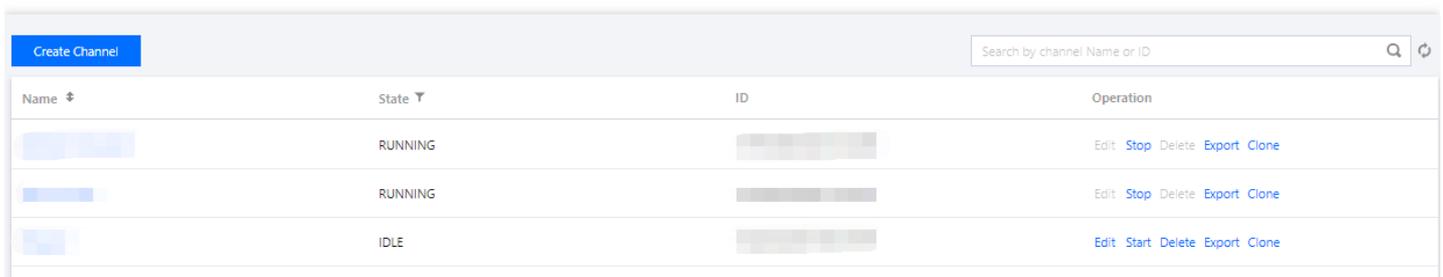
The StreamLive service is managed at the channel level in the StreamLive console. You can set up high-quality video streams and distribute them to various types of devices. The channel management module is the main module of StreamLive, via which you can perform various video processing operations such as transcoding and remuxing and send the results to the specified destination or store them on COS.

Prerequisites

- You have activated [StreamLive](#).
- You have logged in to the [StreamLive console](#).

Channel Management

Select **Channel Management** on the left sidebar. On this page, you can view, create, start/stop, delete, export, or clone channels. This page also shows the status of created channels. "IDLE" means a channel has not been started, and "RUNNING" means a channel is started. To edit a channel that has been started, you need to stop it first.



Name	State	ID	Operation
[blurred]	RUNNING	[blurred]	Edit Stop Delete Export Clone
[blurred]	RUNNING	[blurred]	Edit Stop Delete Export Clone
[blurred]	IDLE	[blurred]	Edit Start Delete Export Clone

Creating a Channel

Step 1. Set the Basic Channel Information

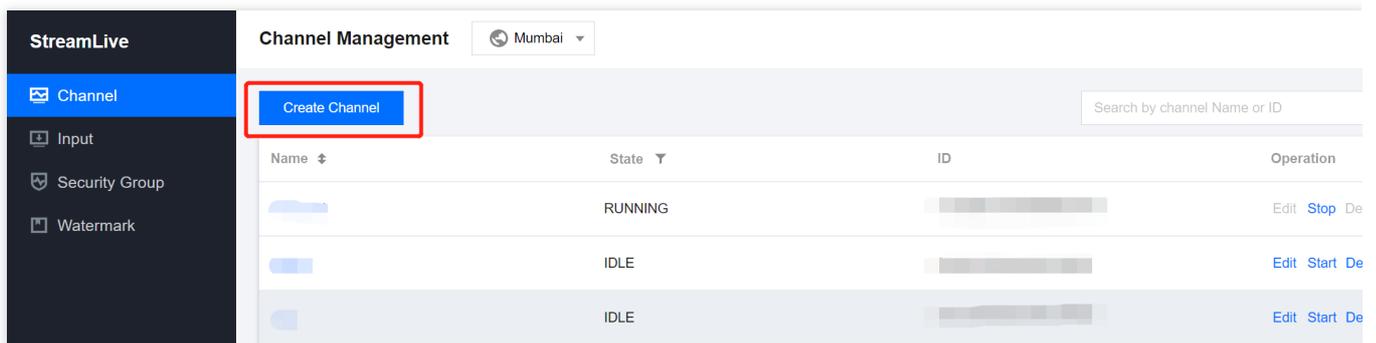
Last updated : 2023-09-14 17:50:10

Before creating a channel, make sure you have the following information:

1. The input. Make sure you have created an input to bind to the channel.
2. The output protocol and destination.
3. The audio and video encoding parameters for the output group.

Setting the basic channel information

1. Click **Create Channel**.



StreamLive

Create channel

1 **General Setting**

2 Input Setting

3 Output Group Setting

General info

Create a channel that encodes your input into multiple groups and outputs.

Channel name *

Regularly cleaned?

[Import Configuration](#) [Next](#)

2. Enter a channel name. The channel name can contain up to 32 characters. Letters, numbers, and underscores are allowed.

3. Enable/Disable **Regularly cleaned**. This is disabled by default. If you enable it, the events of a plan will be cleared automatically seven days after execution. You can ignore this if you don't use plans. For details, see [Plan Management](#).

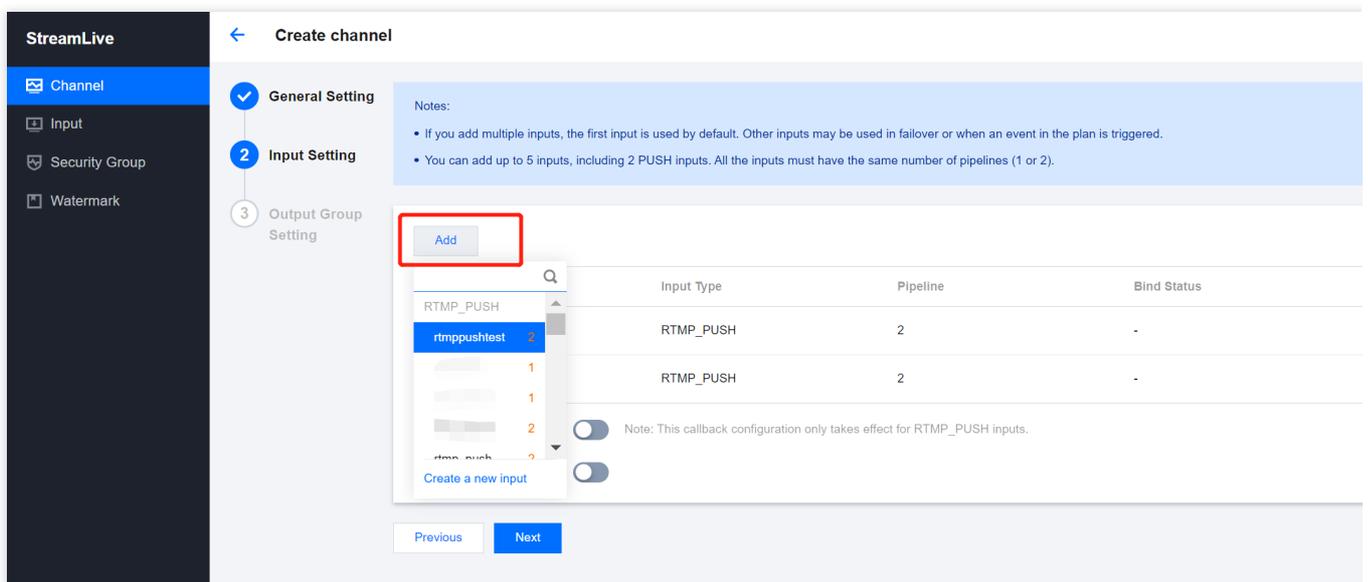
Step 2. Add Inputs

Last updated : 2023-09-14 17:51:24

Adding inputs

You can bind one or more inputs to a channel. The first input bound will be used as the default input, while others may be used for failover or by the plan.

From the drop-down list of **Add**, select an input that's not already bound to another channel. You can bind up to five inputs to each channel, including two PUSH inputs.

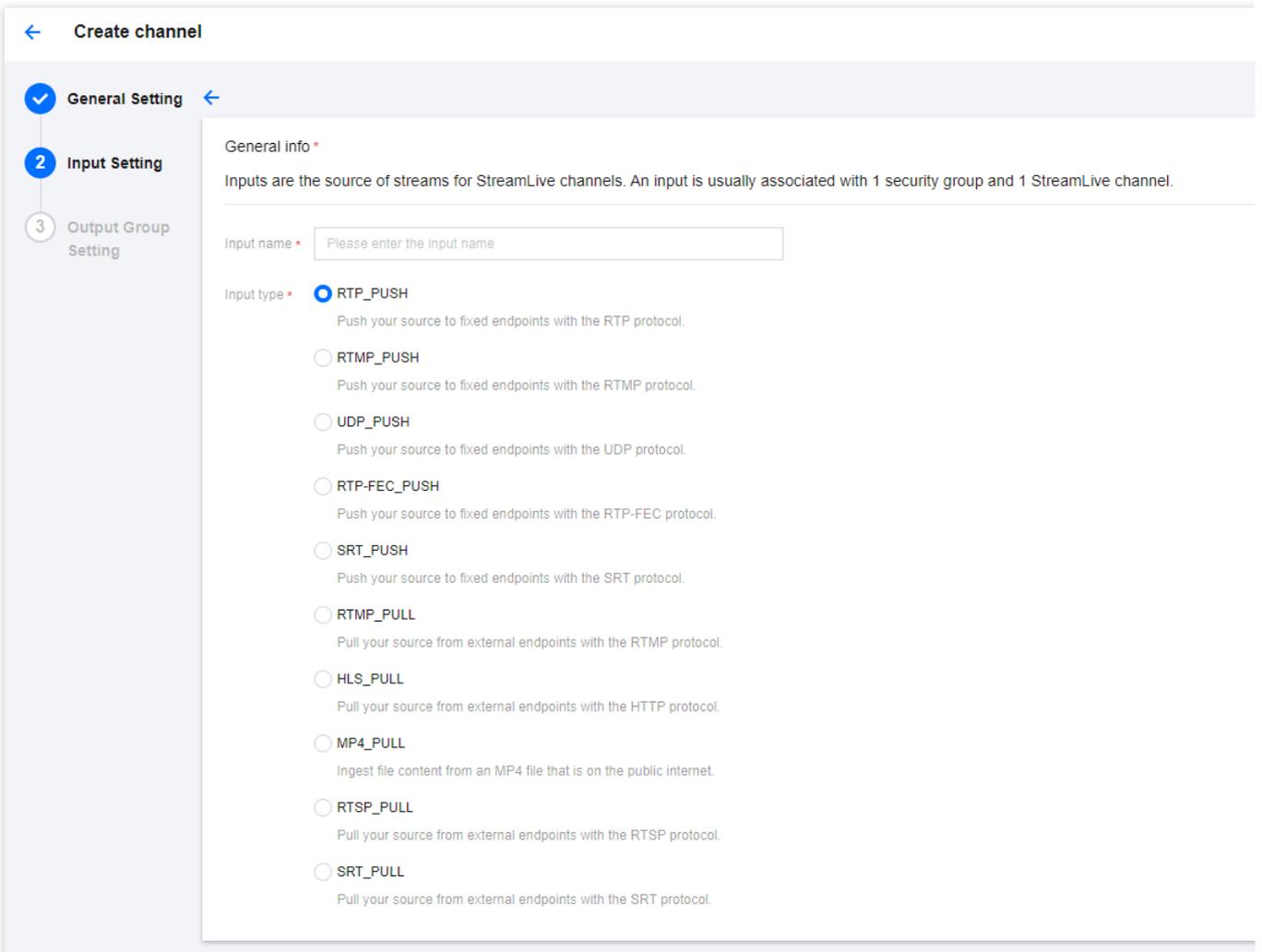
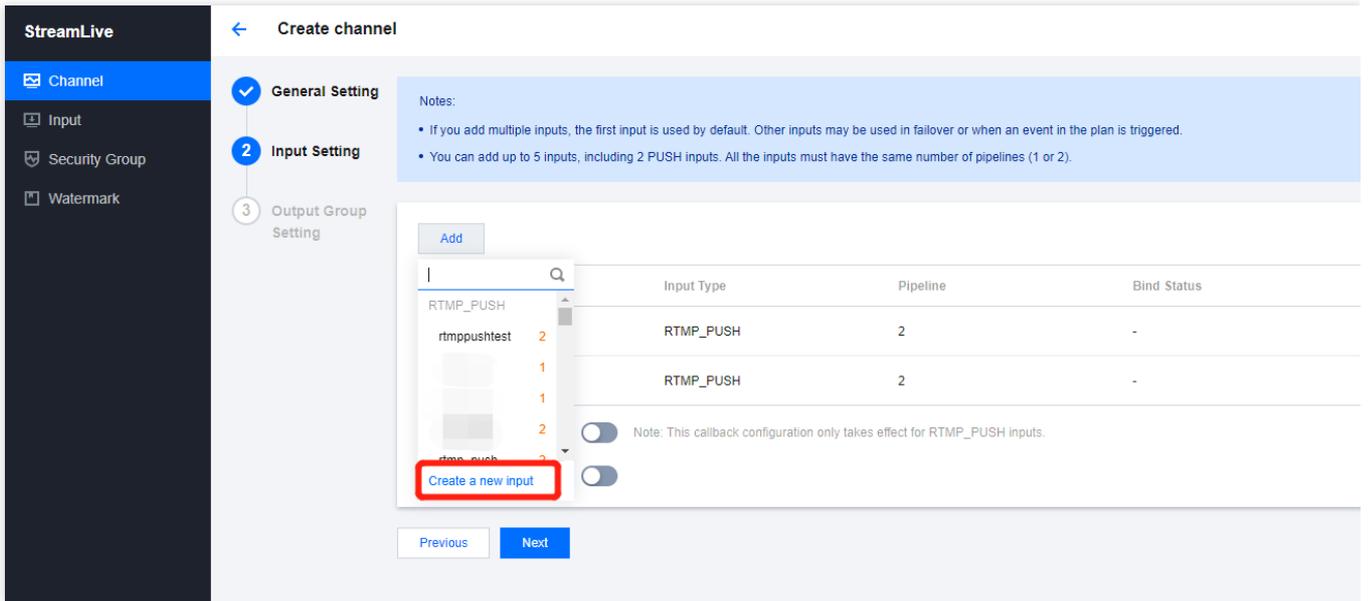


The screenshot shows the 'Create channel' interface in the StreamLive console. The 'Input Setting' step is active, and the 'Add' button is highlighted with a red box. A dropdown menu is open, showing a list of inputs. The first input is 'rtmppushtest'. Below the list, there are toggle switches and a note: 'Note: This callback configuration only takes effect for RTMP_PUSH inputs.' The interface also shows a table with columns for 'Input Type', 'Pipeline', and 'Bind Status'.

Input Type	Pipeline	Bind Status
RTMP_PUSH	2	-
RTMP_PUSH	2	-

Creating a new input

From the drop-down list of **Add**, click the **Create a new input**.



Name : The input name, which can be 1-32 characters long and can contain numbers, letters, and underscores (_).

Type: The input type. Currently, RTMP_PUSH, RTP_PUSH, RTP-FEC_PUSH, UDP_PUSH, SRT_PUSH, RTMP_PULL, HLS_PULL, MP4_PULL, RTSP_PULL, and SRT_PULL are supported.

Type : RTMP_PUSH

If the input type is RTMP_PUSH, you need to enter at least one **application name** and **stream Name** for the destination. You can configure two destinations to offer redundancy.

User Name	<input type="text" value="Please enter the user name"/>	
Password	<input type="text" value="Please enter the password"/>	
Delay Time	<input checked="" type="checkbox"/>	
Destination A  *	<input type="text" value="application name"/>	<input type="text" value="stream name"/>
Destination B 	<input type="text" value="application name"/>	<input type="text" value="stream name"/>

Furthermore, you can enter **User Name** and **Password** to support authentication, use **Delay Time** to support [Delayed Playback](#).

Type : SRT_PUSH

If the input type is SRT_PUSH, you can enter **stream ID** for the destination (optional).

Destination A 	<input type="text" value="Please enter the streamid"/>
Destination B 	<input type="text" value="Please enter the streamid"/>

Configuring security group

If the input type is PUSH, it is necessary to bind an Input Security Group for security verification. The Security Group is a means to verify the legitimacy of the input address. By configuring the Security Group, the input of the StreamLive channel can be more secure. You can create a new Security Group, or choose from existing ones.

Input security group *

Create an input security group to use with your PUSH input type.

Create security group Exist security group

Name *

securitygroup1

IP Allowlist  *

Please add one or more IPs(separated by comma or newline)to allowlist , such as '192.168.0.1/24' or '192.168.0.1/24,192.168.0.2/24'.

Input security group *

Create an input security group to use with your PUSH input type.

Create security group Exist security group

Security Group *

Please select the security grou 

If you want to create new security group, please enter name and ip allowlist:

- 1) **Name:** Security group name, which can be 1-32 characters long and can contain numbers, letters, and underscores (_).
- 2) **IP Allowlist:** IP addresses must be in CIDR format. Separate addresses with commas or line breaks. If you don't need to restrict the source IP, you can fill in 0.0.0.0/0.

Type : PULL

If the input type is PULL, you need to enter the input address, which is used as the source of the PULL input.

RTMP_PULL

Pull your source from external endpoints with the RTMP protocol.

HLS_PULL

Pull your source from external endpoints with the HTTP protocol.

MP4_PULL

Ingest file content from an MP4 file that is on the public internet.

RTSP_PULL

Pull your source from external endpoints with the RTSP protocol.

SRT_PULL

Pull your source from external endpoints with the SRT protocol.

Input source A *

For pull type inputs, you must specify the source URL and access credentials of the location that you want to pull.

URL *

Input source B

For pull type inputs, you must specify the source URL and access credentials of the location that you want to pull.

URL

Step 3. Configure Inputs

Last updated : 2023-11-03 09:54:04

The input list shows the inputs bound. You can click **Setting** to configure an input.

StreamLive

← Create channel

Channel

Input

Security Group

Watermark

General Setting

Input Setting

Output Group Setting

Notes:

- If you add multiple inputs, the first input is used by default. Other inputs may be used in failover or when an event in the plan is triggered.
- You can add up to 5 inputs, including 2 PUSH inputs. All the inputs must have the same number of pipelines (1 or 2).

Add

Input Name	Input Type	Pipeline	Bind Status
rtmppushtest	RTMP_PUSH	2	-
rtmp_push	RTMP_PUSH	2	-

Callback Configuration Note: This callback configuration only takes effect for RTMP_PUSH inputs.

Input Loss Behavior

Previous Next

Audio Selector

For RTP/UDP PUSH inputs, if MPEG-TS is used, there may be multiple audio tracks. You can specify the audio track to process and output by entering the **PID**. If you don't set this, an audio track will be selected randomly. The name of an audio selector must be unique across the channel.

Settings

Input Settings

Input Name `rtp_push_1`

Audio Selector[?]

Name	PID	Operation
<input type="text"/>	<input type="text" value="1-8191"/>	Delete

[Add Audio Selector](#)

[Confirm](#) [Cancel](#)

Note:

Make sure the PID you enter is the same as that of the source stream, or the audio selector will fail to work, and the system will randomly select an audio track to output.

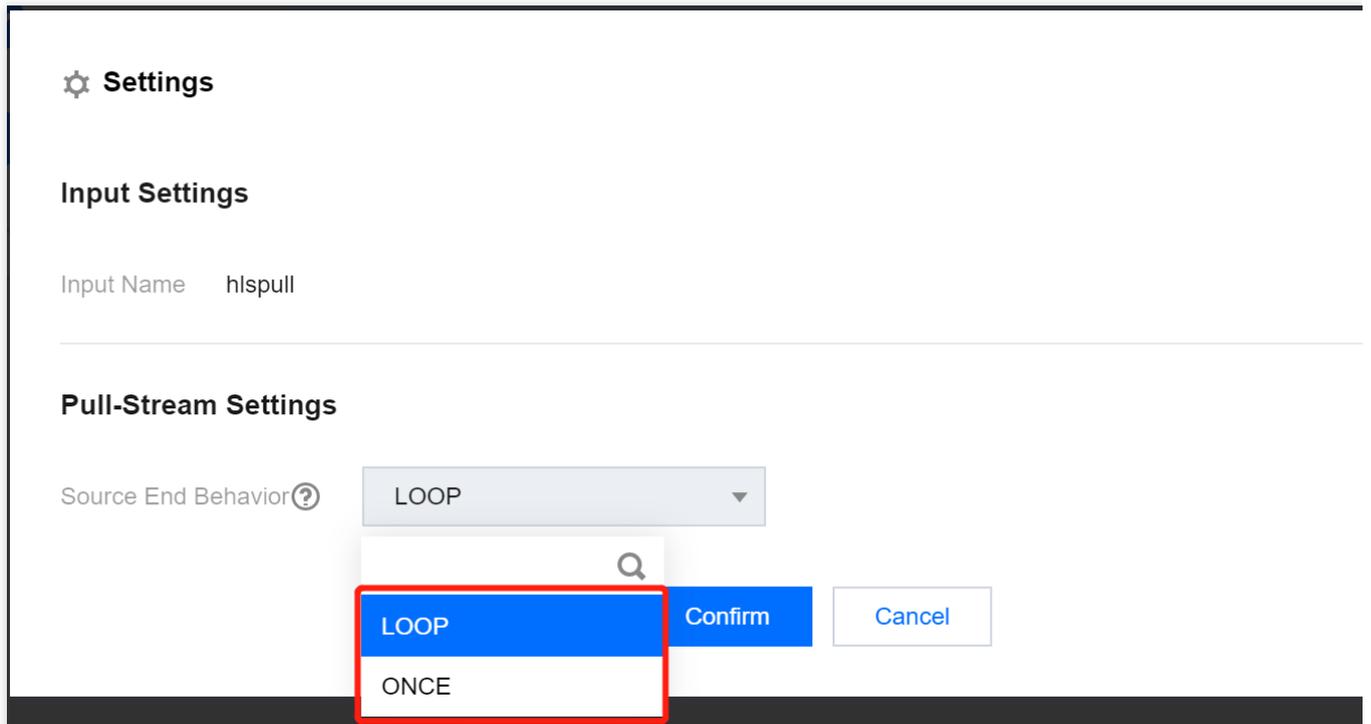
If input failover is enabled, the audio selectors configured for the primary input will apply to the backup input as well.

Source End Behavior

You can set the **Source End Behavior** of a PULL input to tell StreamLive what to do after the input ends.

LOOP: Pulls the input again after it ends.

ONCE: Pulls the input only once.



Failover

To prevent interruption of service caused by input exceptions, you can enable failover for RTMP_PUSH/RTP_PUSH inputs. If the primary input is down, StreamLive will automatically switch to the backup input.

Settings

Input Settings

Input Name rtmpushtest

Failover Settings

Input Failover  

Select Backup Input  *  

Downtime Threshold  ms

Input Preference  

Input Failover: Toggle this on if you want to enable failover for an input.

Select Backup Input: Select a backup input, whose type must be the same as the primary input.

Downtime Threshold: Set the wait time (milliseconds) for failover. If the primary input is down, StreamLive will switch to the backup input after the wait time elapses to ensure data availability. The default is 3,000 ms.

Input Preference: Set whether to switch back to the primary input after it recovers. **CURRENT_PREFERRED** (default): Continue to use the current input; **PRIMARY_PREFERRED**: Switch back to the primary input after it recovers.

Click **Confirm**. In the input list, you will see that the **Bind Status** of the primary input has changed to **Primary** and that of the backup input has changed to **Backup**.

General Setting

2 Input Setting

3 Output Group Setting

Notes:

- If you add multiple inputs, the first input is used by default. Other inputs may be used in failover or when an event in the plan is triggered.
- You can add up to 5 inputs, including 2 PUSH inputs. All the inputs must have the same number of pipelines (1 or 2).

Add

Input Name	Input Type	Pipeline	Bind State
rtmppushtest	RTMP_PUSH	2	Primary
rtmp_push	RTMP_PUSH	2	Backup

Callback Configuration Note: This callback configuration only takes effect for RTMP_PUSH inputs.

Input Loss Behavior

Previous Next

Note:

You can specify only one backup for each input, and it must be of the same type and have the same number of pipelines as the primary input.

Once an input is used as a backup, the failover feature will be disabled for the input automatically, which means that you cannot configure a backup for this input. To change the primary and backup roles of two inputs, you must disable failover for the primary input first.

After successful configuration, **Primary** and **Backup** will appear next to the names of the primary and backup inputs. In the input list, the backup input will appear below the primary input.

Input Loss Behavior

You can customize the way that StreamLive handles media when the video input into the channel is lost. :

Input Loss Behavior : Toggle this on if you want to enable the input loss behavior .

Repeat Last Valid Frame : On input loss, the number of milliseconds to repeat the previous picture before switching to the frame specified by **Input Loss Image Type**. Please enter an integer value x , where $0 \leq x \leq 1,000,000$ and a value of 1,000,000 will be interpreted as infinite. 0 indicates don't repeat the previous picture.

Input Loss Image Type : Indicates whether to substitute a solid color or a image into the output after input loss exceeds milliseconds to repeat the previous picture.

1 General Setting

2 **Input Setting**

3 Output Group Setting

Notes:

- If you add multiple inputs, the first input is used by default. Other inputs may be used in failover or when an event in the plan is triggered.
- You can add up to 5 inputs, including 2 PUSH inputs. All the inputs must have the same number of pipelines (1 or 2).

[Add](#)

Input Name	Input Type	Pipeline	Bind Status
honda_udp	UDP_PUSH	2	-
UDP_PUSH	UDP_PUSH	2	-

Input Pipeline Failover ?

Input Loss Behavior ?

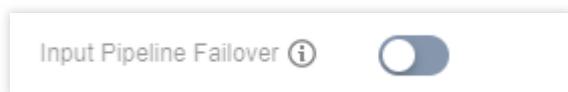
Repeat Last Valid Frame ? ms

Input Loss Image Type ? RGB ? #000000

[Save](#)

Pipeline Failover

For the two inputs in one **Input**, they correspondingly output to **Destination A** and **B**, forming two pipelines (Pipeline A and B). Failover settings can be made between these two pipelines.



Input Loss Behavior : If you enable this, the pipelines of this channel's inputs will function as backup for each other. If failover fails, the **Input Loss Behavior** settings will apply. If this is not enabled or if an input has only one pipeline, the **Input Loss Behavior** settings will also apply in case of failure to obtain input data.

Other operations

Click **Details** to view the source address and other information of an input.

Click **Set as First** to set an input as the default. The input will be moved to the top of the list. You cannot set a backup input as the default.

Click **Delete** to remove an input.

Click **Next** to proceed to the next step and configure outputs.

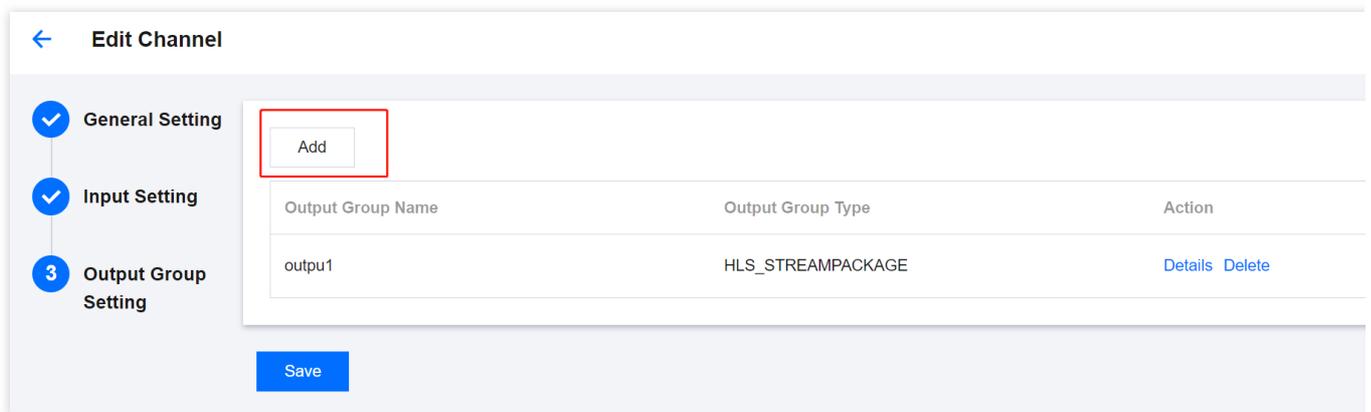
Step 4. Configure Output Groups

Last updated : 2023-11-03 09:34:50

StreamLive supports different types of outputs. This document shows you how to create outputs and output groups.

Configuring multiple output groups for a channel

You can configure multiple output groups for a channel by clicking the **Add** button.



Setting the name and type of an output group

Set the name and type of an output group:

Group1 Group2

Add output group *

An output group can contain one or many outputs. For each output, you can configure the encoding settings, and add or remove audio, video, and caption track

Output Group name *

Output Group type *

- HLS
Send live video and audio to smartphones, tablets, computers, and other services with HLS.
- DASH
Send live video and audio to smartphones, tablets, computers, and other services with DASH.
- HLS_ARCHIVE
Archive your live video and audio to Tencent Cloud COS with HLS.
- DASH_ARCHIVE
Archive your live video and audio to Tencent Cloud COS with DASH.
- HLS_STREAM_PACKAGE
Send live video and audio to Tencent Cloud StreamPackage with HLS.
- DASH_STREAM_PACKAGE
Send live video and audio to Tencent Cloud StreamPackage with DASH.

Currently, the types of outputs supported are HLS, DASH, HLS_STREAM_PACKAGE, DASH_STREAM_PACKAGE, HLS_ARCHIVE, and DASH_ARCHIVE.

HLS and DASH outputs are sent to the destination via HTTP PUT.

HLS_STREAM_PACKAGE and DASH_STREAM_PACKAGE outputs are sent to [StreamPackage](#) of the current account. You can use the outputs as origin servers to stream content via CDNs.

HLS_ARCHIVE and DASH_ARCHIVE outputs are saved to [Tencent Cloud COS](#).

Configuring the destinations

If the output type is HLS or DASH, enter the CDN URLs to push to. Enter the authentication information as well if the URLs require authentication.

Destination Information *

Destination A
 ⓘ *

Authentication

Destination B
 ⓘ

Authentication

If the output type is `HLS_STREAM_PACKAGE` or `DASH_STREAM_PACKAGE`, enter the **ID of the StreamPackage channel** to push live streams to.

Destination Information *

StreamPackage Channel ID
 ⓘ *

If the output type is `HLS_ARCHIVE` or `DASH_ARCHIVE`, enter the **COS destinations** to save the output. StreamLive will save live streams in the last seven days to COS (the data will be overwritten after restart).

Destination Information *

COS Destination A
 ⓘ *

COS Destination B
 ⓘ

Configuring outputs

Click **Add** to add an output.

Outputs *

Add one or more outputs to this group. Each output has unique stream settings that enable you to choose the video captions tracks that you need.

[Add](#)

Output Name	Transcoding	Action
	No Output	Add

Configuring transcoding settings

For the added Output, click **Setting** in the Transcoding Setting to configure the transcoding parameters.

Outputs *

Add one or more outputs to this group. Each output has unique stream settings that enable you to choose the video, audio, and captions tracks that you need. A need to be kept in the same transcoding type (joint transcoding/separate transcoding).

[Add](#)

Output Name	SCTE-35 Setting	Transcoding Setting	Actions
<input type="text" value="output1"/>	<input type="checkbox"/>	Setting	Remove

You can configure either joint or separate transcoding templates. For HLS outputs, separate transcoding allows you to combine different audio tracks. If you don't need this, we recommend you use joint transcoding.

A joint transcoding template includes settings for both audio and video transcoding.

Transcoding Setting

Transcoding ⓘ **Joint Transcoding** Separate Transcoding

[Add Audio/Video](#)

Audio/Video [Copy Audio/Video](#)

Name <input type="text"/>	Audio Selector Name ⓘ <input type="text" value="Please Select"/>	Audio Transcoding <input checked="" type="checkbox"/>
Acodec <input type="text" value="AAC"/>	Audio Bitrate/bps <input type="text" value="6000"/>	Sample Rate ⓘ <input type="text" value="48000"/>
Audio Normalization Settings ⓘ <input type="checkbox"/>	Target LUFs ⓘ <input type="text"/>	Video Transcoding <input checked="" type="checkbox"/>
Vocodec <input type="text" value="H264"/>	Rate Control Mode ⓘ <input type="text" value="ABR"/>	Video Bitrate/bps * <input type="text"/>
Width ⓘ <input type="text"/>	Height ⓘ <input type="text"/>	Fps ⓘ <input type="text"/>
Top Speed Codec Transcoding ⓘ <input type="checkbox"/>	Bitrate Compression Ratio ⓘ <input type="text"/>	Video Watermark <input type="checkbox"/>
Video Watermark Template <input type="text" value="Please Select"/>	Smart Subtitles ⓘ <input type="checkbox"/>	Subtitle Configuration <input type="text" value="Please Select"/>
Face Blurring ⓘ <input type="checkbox"/>		

With separate transcoding, you need to set audio and video transcoding parameters separately. The audio transcoding templates specify parameters for the audio tracks the stream can use.

Transcoding Setting

Transcoding ⓘ Joint Transcoding **Separate Transcoding**

Audio Copy Audio

Name

Acodec

Audio Bitrate/bps

Sample Rate ⓘ

Audio Selector Name

Language Code ⓘ

Audio Normalization Settings ⓘ

Target LUFs ⓘ

Video Copy Video

Name

Vcodec

Rate Control Mode ⓘ

Video Bitrate/bps *

Width ⓘ

Height ⓘ

Fps ⓘ

Top Speed Codec Transcoding ⓘ

Bitrate Compression Ratio ⓘ

Video Watermark

Video Watermark Template

Face Blurring ⓘ

For transcoding parameters, you can create new parameters or use existing transcoding templates. Click **Copy** to reuse an existing transcoding template.

Transcoding Setting

Transcoding ⓘ Joint Transcoding Separate Transcoding

[Add Audio/Video](#)

Audio/Video [Copy Audio/Video](#)

Name	<input type="text"/>	Audio Selector Name ⓘ	<input type="text" value="Please Select"/>	Audio Transcoding	<input checked="" type="checkbox"/>
Acodec	<input type="text" value="AAC"/>	Audio Bitrate/bps	<input type="text" value="6000"/>	Sample Rate ⓘ	<input type="text" value="48000"/>
Audio Normalization Settings ⓘ	<input type="checkbox"/>	Target LUFs ⓘ	<input type="text"/>	Video Transcoding	<input checked="" type="checkbox"/>
Vcodec	<input type="text" value="H264"/>	Rate Control Mode ⓘ	<input type="text" value="ABR"/>	Video Bitrate/bps *	<input type="text"/>
Width ⓘ	<input type="text"/>	Height ⓘ	<input type="text"/>	Fps ⓘ	<input type="text"/>
Top Speed Codec Transcoding ⓘ	<input type="checkbox"/>	Bitrate Compression Ratio ⓘ	<input type="text"/>	Video Watermark	<input type="checkbox"/>
Video Watermark Template	<input type="text" value="Please Select"/>	Smart Subtitles ⓘ	<input type="checkbox"/>	Subtitle Configuration	<input type="text" value="Please Select"/>
Face Blurring ⓘ	<input type="checkbox"/>				

Name	Type	Action
▼ name12	audio/video	Copy

Name	<input type="text" value="name12"/>
Audio Selector Name?	<input type="text" value="test"/>
Audio Transcoding	<input checked="" type="checkbox"/>
Acocodec	<input type="text" value="AAC"/>
Audio Bitrate/bps	<input type="text" value="6000"/>
Audio Normalization Settings?	<input type="checkbox"/>
Target LUFS	<input type="text"/>
Video Transcoding	<input checked="" type="checkbox"/>
Vcodec	<input type="text" value="H264"/>
Rate Control Mode?	<input type="text" value="ABR"/>
Video Bitrate/bps *	<input type="text" value="100000"/>
Width?	<input type="text"/>
Height?	<input type="text"/>
Fps?	<input type="text"/>
Top Speed Codec Transcoding	<input type="checkbox"/>

The Copy operation can save on transcoding fees by reusing a transcoding template. Within a channel, if multiple Outputs reuse the same transcoding template, only a single transcoding fee will be charged for the usage of this template.

Note:

Top Speed Codec Transcoding is a high-performance transcoding service developed by the Tencent Cloud Video team. It offers low-bitrate, high-quality transcoding by leveraging AI algorithms to dynamically determine the best encoding parameters. **Bitrate Compression Ratio** is the percentage of video bitrate expected to be reduced.

Configuring manifest information

PdtInsertion : Enable this function if you want to include the EXT-X-PROGRAM-DATE-TIME tag in manifest files.

PdtDuration is used to set the time interval for insertion of EXT-X-PROGRAM-DATE-TIME tags, in seconds.

Stream Order : For the master manifest in HLS, set the stream order by video bitrate ascending or descending.

Video Resolution : For the master manifest in HLS, set whether to include resolution information.

▼ Manifest Information

PdtInsertion

PdtDuration
Between 1 and 3000

Stream Order

Video Resolution

Configuring segment information

You can also specify the Segment Information on this page, including the segment type, segment duration, and segment number. For some devices, such as Apple TV, to play H.265-encoded videos, you need to select fmp4 as the Segment Type and hvc1 as the Packaging Type.

▼ Segment Information

Segment Type

Segment Duration
Between 1000 and 30000, only be a multiple of 1000

Segment Number
Between 3 and 300

PdtInsertion

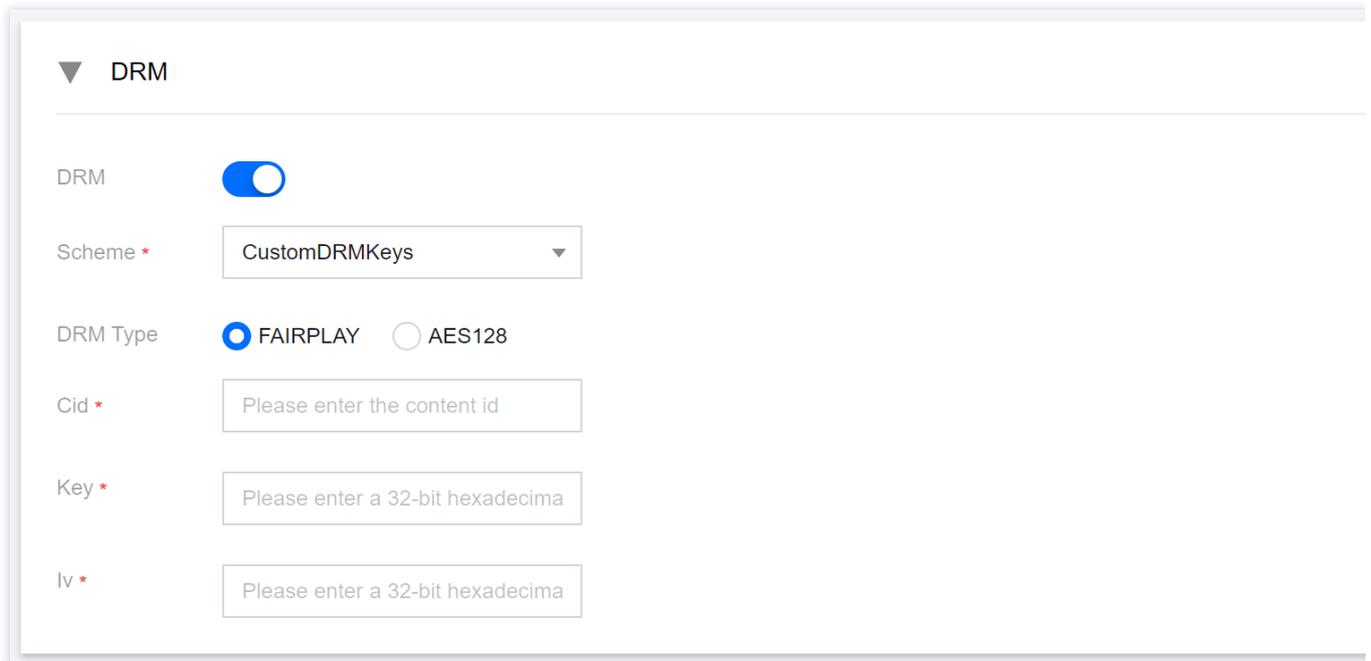
H.265 Packaging Type

Low Latency

When the Output group type is HLS_STREAMPACKAGE, you can enable Low Latency function (Low-Latency HLS, LL-HLS) and set the corresponding Partial Segment Duration and Part Hold Back.

Configuring DRM

StreamLive supports DRM (CustomDRMKeys and SDMC DRM). For detailed directions how to enable the feature, see [Channel DRM Configuration via DRMtoday](#).



The screenshot shows a configuration panel for DRM. At the top, there is a dropdown menu labeled 'DRM' with a downward arrow. Below this, the 'DRM' toggle switch is turned on. The 'Scheme' is set to 'CustomDRMKeys'. The 'DRM Type' is set to 'FAIRPLAY' (selected with a radio button) and 'AES128' (unselected). There are three input fields: 'Cid' with the placeholder 'Please enter the content id', 'Key' with the placeholder 'Please enter a 32-bit hexadecimal', and 'Iv' with the placeholder 'Please enter a 32-bit hexadecimal'.

Saving the configuration

Click **Confirm** and **Done** to save the configuration. This concludes the configuration of a channel. You can then click **Start** to start the channel.

StreamLive

Channel Management Mumbai

[Create Channel](#)

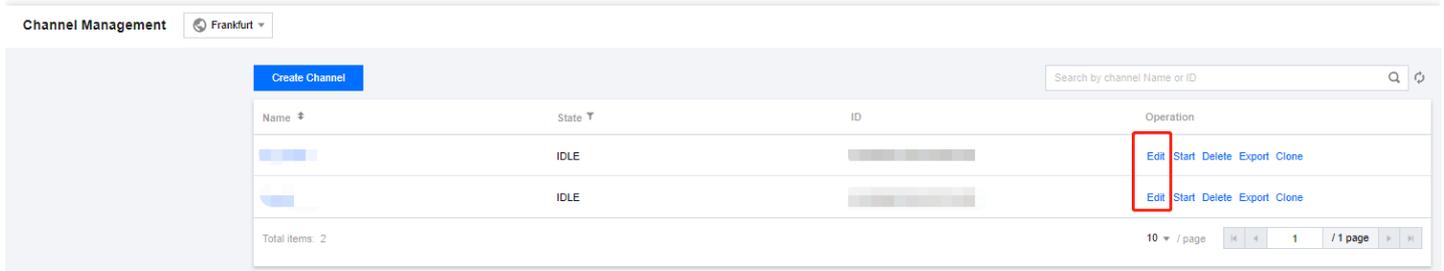
Name	State	ID	Operation
[Redacted]	IDLE	[Redacted]	Edit Start
[Redacted]	RUNNING	[Redacted]	Edit Stop
[Redacted]	IDLE	[Redacted]	Edit Start
[Redacted]	IDLE	[Redacted]	Edit Start
[Redacted]	RUNNING	[Redacted]	Edit Stop

Modifying and Deleting a Channel

Last updated : 2022-08-19 16:34:42

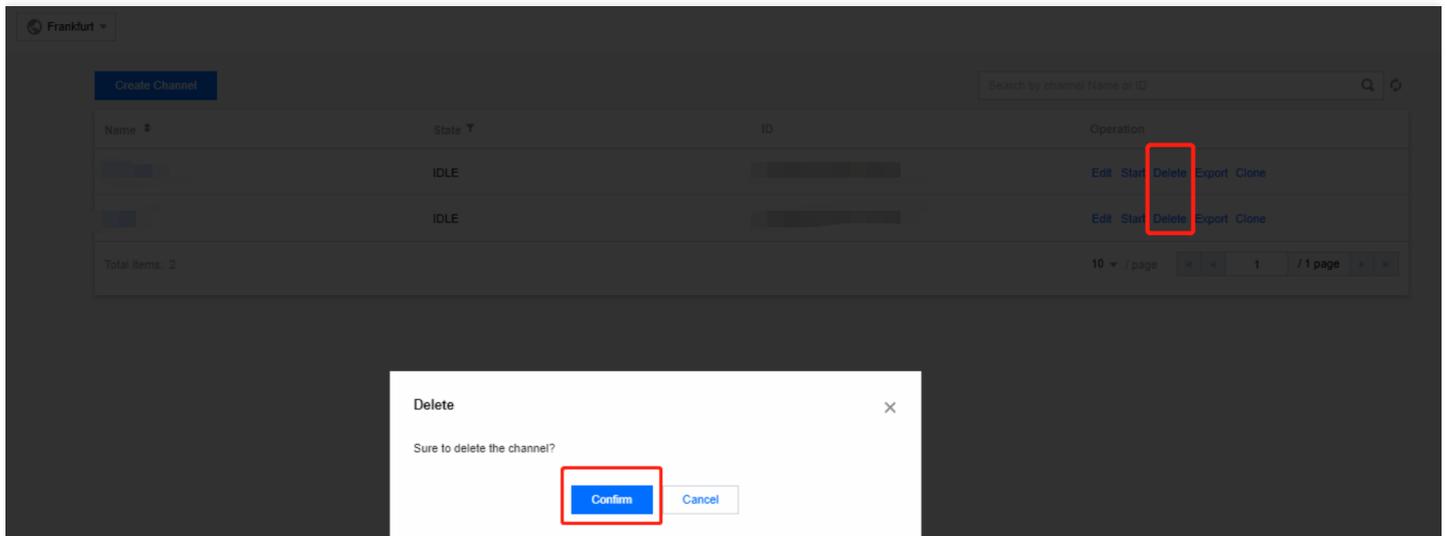
Modifying a channel

To modify a channel, find it on the **Channel Management** page, and click **Edit** on the right.



Deleting a channel

To delete a channel, find it on the **Channel Management** page, click **Delete** on the right, and click **Confirm** in the pop-up window.



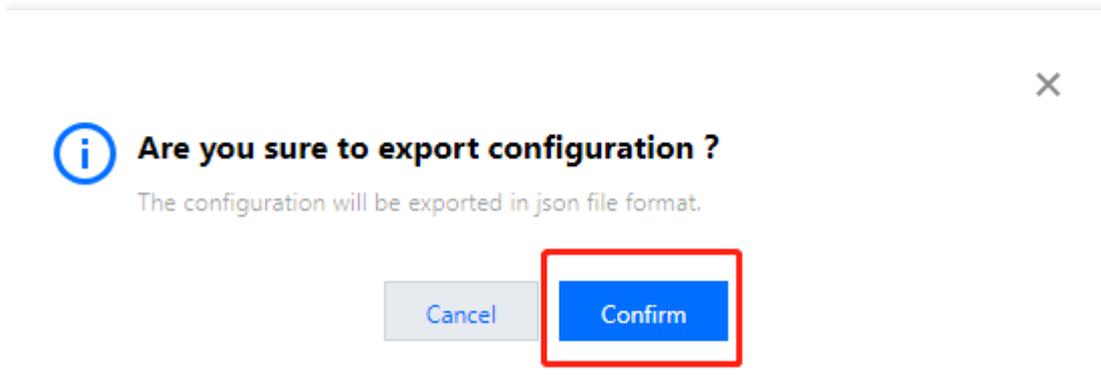
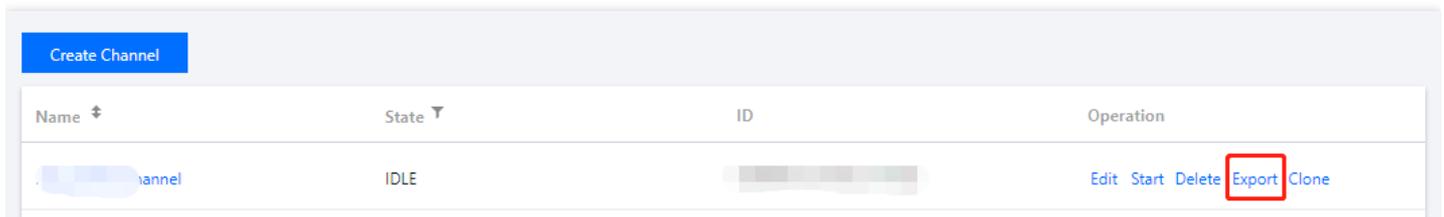
Exporting, Importing, Cloning a Channel

Last updated : 2022-08-19 16:34:42

StreamLive allows you to import/export a channel configuration file and clone an existing channel.

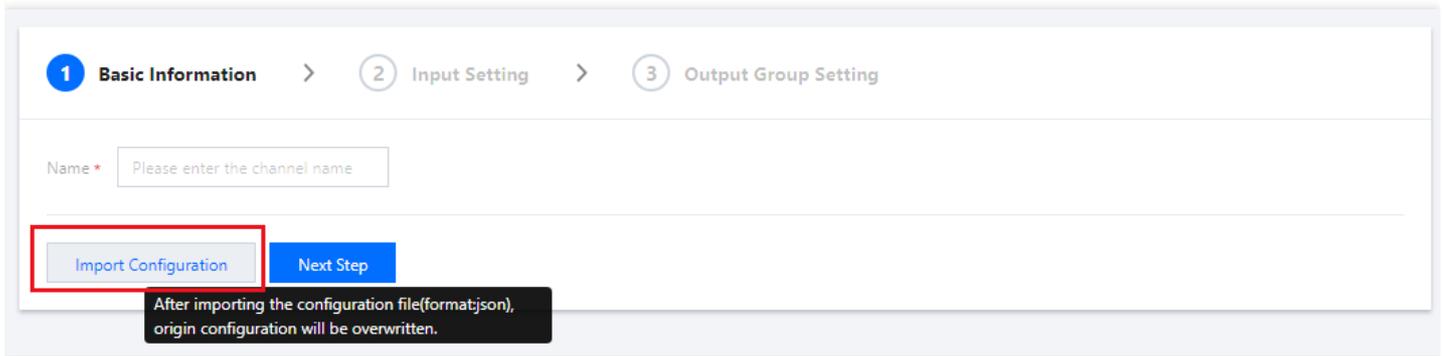
Exporting a channel

The **Channel Management** page shows the channels created and their state. Click **Export** in the **Operation** column to export a JSON file of the channel's configuration.



Importing a channel

On the **Channel Management** page, click **Create Channel** and then click **Import Configuration**. Select the JSON file to import. You can then edit the imported channel and save the configuration.



1 Basic Information > 2 Input Setting > 3 Output Group Setting

Name *

After importing the configuration file(formatjson), origin configuration will be overwritten.

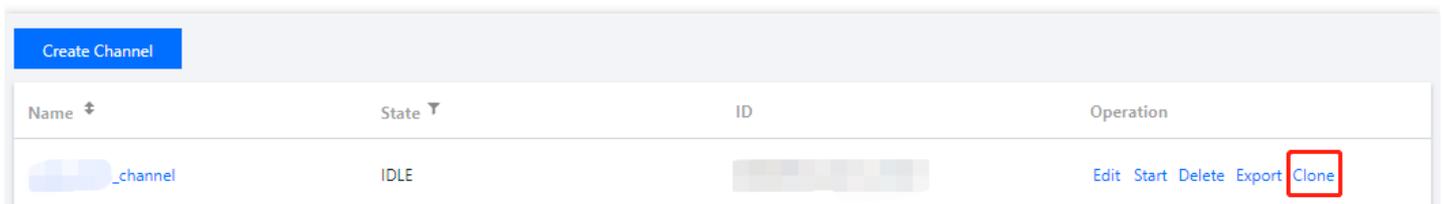
The import feature allows you to quickly configure a channel. The console will auto-fill the information in **Basic Information** and **Output Group Setting** according to the JSON file you select, but will ignore the **Input Setting** information of the file. You still need to select the inputs to bind.

Note :

If you import a configuration file when editing a channel, the existing configurations will be overwritten.

Cloning a channel

Channel cloning is essentially a quick channel exporting and importing process. On the **Channel Management** page, click **Clone** in the **Operation** column. You will enter the configuration page of the new channel.



Name	State	ID	Operation
<input type="text" value="..._channel"/>	IDLE	<input type="text" value="..."/>	Edit Start Delete Export <input type="button" value="Clone"/>

StreamLive will complete the channel configurations (except **Input Setting**) automatically according to the cloned channel. Complete the rest of the configurations and submit them.

Monitoring Channel Quality

Last updated : 2022-08-19 16:34:43

On the **Channel Management** page, click the name of a channel to view information about its input, output, alerts, and health.

The screenshot displays the 'Channel Management' page for a specific channel. At the top right, there are 'Start Channel' and 'Stop Channel' buttons. Below the navigation bar, the 'Information' tab is selected, showing 'Basic Information' with fields for Name, ID, and State (RUNNING). The 'Input Setting' section is also visible, containing 'Default Input Source' and 'Other Input Sources' with details like Id, Name, and Source End Behavior.

Basic Information Edit

Name: [Redacted]
 ID: [Redacted]
 State: RUNNING

Input Setting

Default Input Source

Id: [Redacted]
 Name: 30mintime
 Source End Behavior: LOOP

Other Input Sources

Id: [Redacted]
 Name: 1to3time
 Source End Behavior: LOOP

Id: [Redacted]
 Name: 22to25time
 Source End Behavior: ONCE

Alerts

If a problem occurs or is likely to occur in any pipeline of a channel, StreamLive will generate an alert for the channel.

Set time is the time when the alert is generated, and **Cleared time** is the time when the alert is cleared. The state of an alert changes. When the alert state is **SET**, the **Set time** and **State** columns are highlighted in red. After an alert is cleared, its state changes to **CLEARED**, and the highlighting is removed. You can query alert data, including the problematic pipeline, alert type, and other details, for a time period of less than 24 hours in the last 5 days.

Information Output Group Setting **Alerts** Health

[Refresh](#)

Set time	Cleared time	State	Pipeline	Type	Message
2021-03-25 14:28:11	-	SET	A	RTMP Stream Not Found	Message details ▼
2021-03-25 11:34:41	-	SET	B	RTMP Stream Not Found	Message details ▼

Total items: 2 10 / page 1 / 1 page

Information Output Group Setting **Alerts** Health

[Refresh](#)

Set time	Cleared time	State	Pipeline	Type	Message
2021-03-25 14:28:11	2021-05-08 18:56:28	CLEARED	A	RTMP Stream Not Found	Message details ▼
2021-03-25 11:34:41	-	SET	B	RTMP Stream Not Found	Message details ▼

Total items: 2 10 / page 1 / 1 page

Health

The **Health** tab displays information about a channel's inputs (bandwidth and input video/audio frame rate) and outputs (bandwidth), which help you determine whether the current channel is working properly. You can query data for a time period of less 24 hours in the last 5 days.

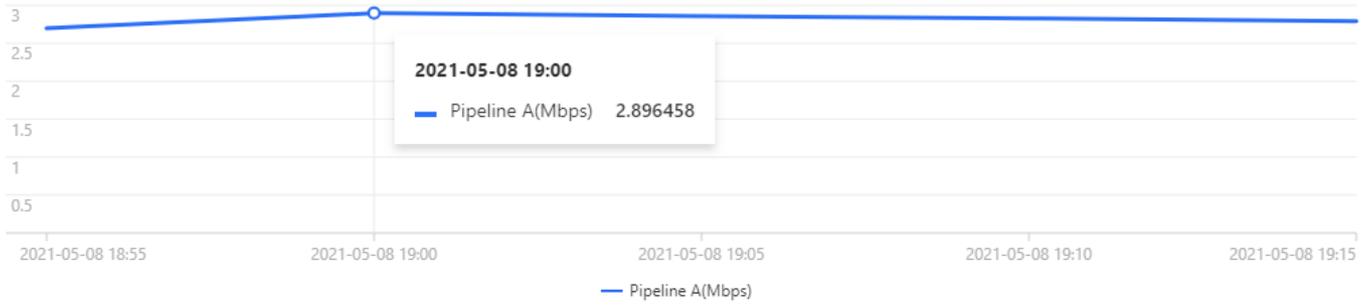
Information Output Group Setting Alerts **Health**

Input Output Group

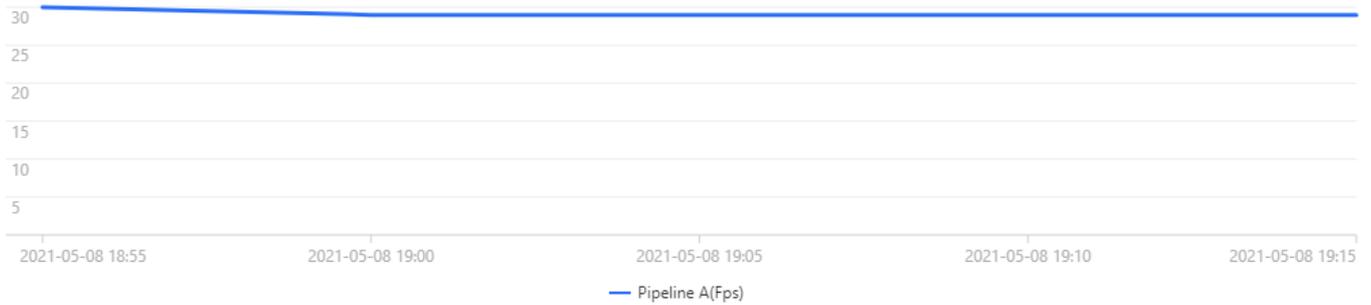
Time Zone: UTC+8 2021-05-07 19:18:25 ~ 2021-05-08 19:18:25 Pipeline A Pipeline B Confirm Show Data in Last Hour

Select a time range of up to 24 hours in the last 5 days.

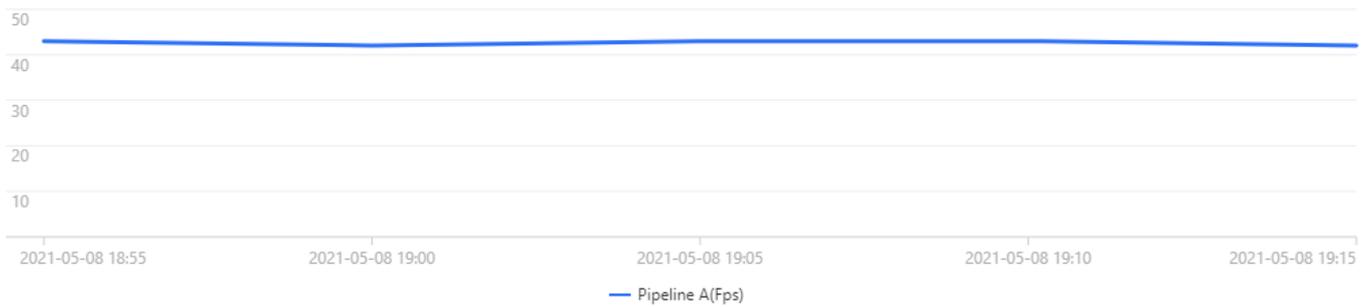
Bandwidth (Mbps)



Input Video Frame Rate (Fps)



Input Audio Frame Rate (Fps)



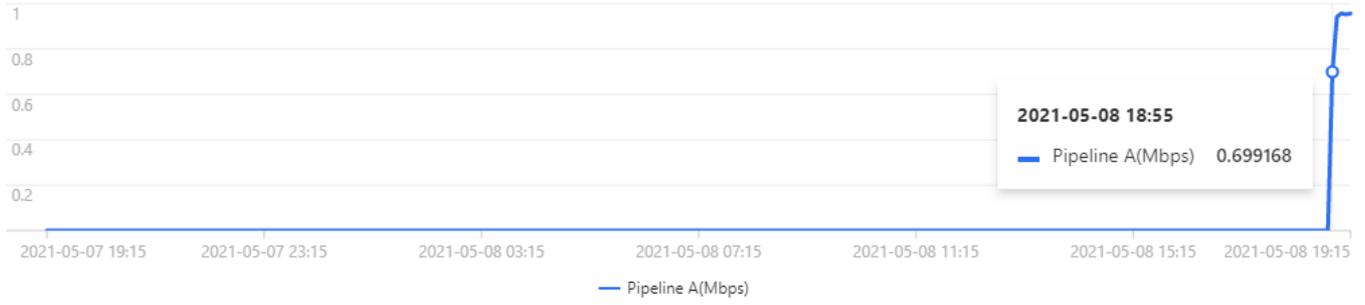
Information Output Group Setting Alerts **Health**

Input **Output Group**

Time Zone UTC+8 2021-05-07 19:18:25 ~ 2021-05-08 19:18:25 Pipeline A Pipeline B Confirm Show Data in Last Hour

Select a time range of up to 24 hours in the last 5 days.

Bandwidth (Mbps) Output Group 1(hls)



Watermark Management

Last updated : 2022-08-19 16:34:43

You can add a static image or text to the video outputs of StreamLive. A watermark image must be in PNG or JPG format.

Viewing watermarks

Select **Watermark Management** on the left sidebar. On this page, you can preview the watermarks added as well as view information such as image size and dimensions.

Template Name/ID	Content	Format	Type	Origin	Size (Width × Height)	Template Binding	Last Modified	Operation
[blurred]		jpg	Image Watermark	Origin TOP_LEFT Horizontal Offset 5% Vertical Offset 5%	Width 10% * Height 0%	0	[blurred]	Edit Delete
[blurred]		png	Image Watermark	Origin TOP_RIGHT Horizontal Offset 0% Vertical Offset 90%	Width 20% * Height 20%	0	[blurred]	Edit Delete

Adding a watermark

To add a watermark, on the **Watermark Management** page, click **Create Template** and complete the following settings:

StreamLive

← **Create Watermark Template**

Template Name *

Watermark Type **Text Watermark**

Watermark Text *

Maximum 64 characters

Font Size px

Color

Origin **Top Left**

Vertical Offset 0% 50% 99% %
Vertical offset is the ratio of the vertical distance between the watermark and origin to the video height.

Horizontal Offset 0% 50% 99% %
Horizontal offset is the ratio of the horizontal distance between the watermark and origin to the video width.

General settings:

- **Template Name:** The template name can be up to 16 characters long and can contain numbers, letters, and underscores (_).
- **Watermark Type:** Select **Text Watermark** or **Image Watermark** from the drop-down list.
- **Origin:** Select from the drop-down list whether to use the **Top Left**, **Bottom Left**, **Top Right**, or **Bottom Right** corner as the origin.
- **Vertical Offset:** The vertical offset of the watermark relative to the origin.
- **Horizontal Offset:** The horizontal offset of the watermark relative to the origin.

Adding a text watermark

- **Watermark Text:** The text to add to a video. This is required if you are adding a text watermark.
- **Front Size:** The font size.

- **Color:** The text color.

← Create Watermark Template

Template Name * ✓

Watermark Type

Watermark Text * ✓

Maximum 64 characters.

Font Size px
Font Size should be between 25 to 50 px.

Color

Origin

Vertical Offset %
Vertical offset is the ratio of the vertical distance between the watermark and origin to the video height.

Horizontal Offset %
Horizontal offset is the ratio of the horizontal distance between the watermark and origin to the video width.

Click **Confirm**.

Adding an image watermark

- **Watermark Image:** This is required if you are adding an image watermark. Click **Click to upload** or drag and drop the image file to upload.
- **Watermark Size:** The width and height of the watermark as a percentage of the image's original dimensions. If you leave them empty or set them to 0, the original image dimensions will be used.

Template Name * ✓

Watermark Type

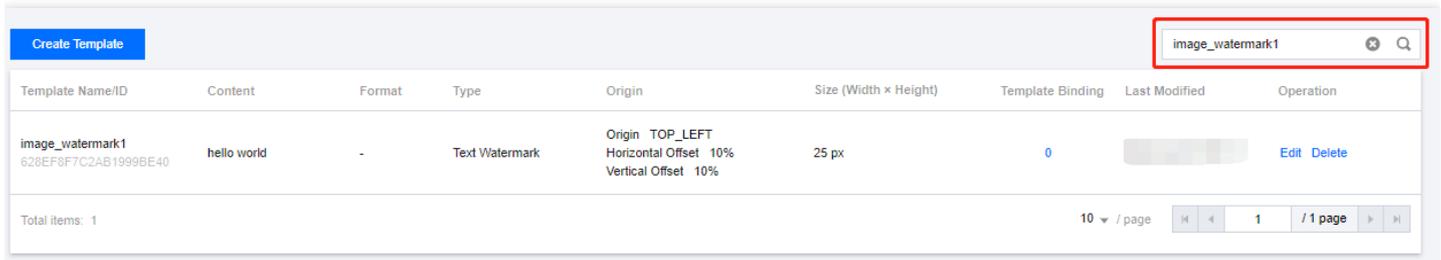
Watermark Image

Currently only images in PNG and JPG format are supported, Size within 2M.

Click **Confirm**.

Querying a watermark

In the top right corner of the **Watermark Management** page, enter a watermark template name or watermark ID in the search box to search for a watermark.



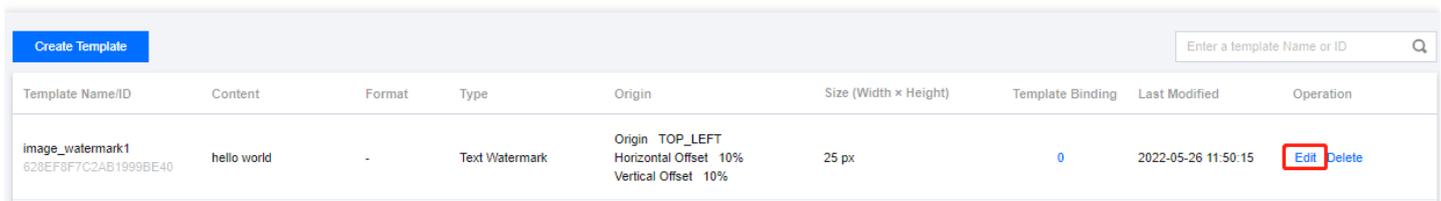
The screenshot shows the Watermark Management interface. At the top left is a 'Create Template' button. At the top right is a search box containing 'image_watermark1'. Below is a table with the following data:

Template Name/ID	Content	Format	Type	Origin	Size (Width × Height)	Template Binding	Last Modified	Operation
image_watermark1 628EF8F7C2AB1999BE40	hello world	-	Text Watermark	Origin TOP_LEFT Horizontal Offset 10% Vertical Offset 10%	25 px	0		Edit Delete

At the bottom of the table, it shows 'Total items: 1' and a pagination control set to '10 / page' with '1 / 1 page'.

Editing a watermark

On the **Watermark Management** page, find the target watermark and click **Edit** in the **Operation** column to edit the watermark.

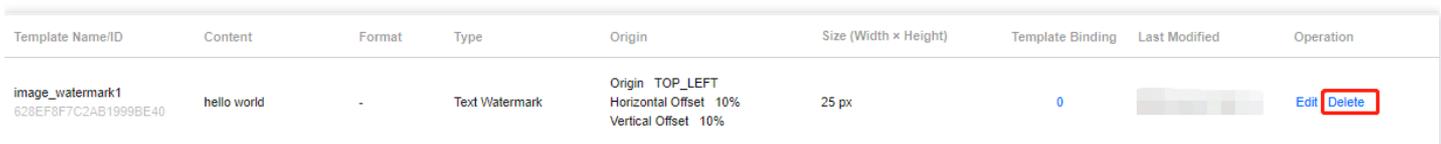


The screenshot shows the same Watermark Management interface as above, but the 'Edit' button in the Operation column of the first row is highlighted with a red box.

Template Name/ID	Content	Format	Type	Origin	Size (Width × Height)	Template Binding	Last Modified	Operation
image_watermark1 628EF8F7C2AB1999BE40	hello world	-	Text Watermark	Origin TOP_LEFT Horizontal Offset 10% Vertical Offset 10%	25 px	0	2022-05-26 11:50:15	Edit Delete

Deleting a watermark

On the **Watermark Management** page, find the target watermark and click **Delete** in the **Operation** column to delete the watermark.



The screenshot shows the same Watermark Management interface as above, but the 'Delete' button in the Operation column of the first row is highlighted with a red box.

Template Name/ID	Content	Format	Type	Origin	Size (Width × Height)	Template Binding	Last Modified	Operation
image_watermark1 628EF8F7C2AB1999BE40	hello world	-	Text Watermark	Origin TOP_LEFT Horizontal Offset 10% Vertical Offset 10%	25 px	0		Edit Delete

You cannot delete a watermark that has been bound to a channel. The **Template Binding** column shows the number

of channels a watermark is bound to.

Template Name/ID	Content	Format	Type	Origin	Size (Width × Height)	Template Binding	Last Modified	Operation
test2 62161696C2AB4C4E779D	test	-	Text Watermark	Origin BOTTOM_LEFT Horizontal Offset 12% Vertical Offset 12%	50 px	1		Edit Delete

Total items: 1

10 / page

Binding a watermark to a channel

After creating a watermark template, you can bind it to a channel. Find the target channel on the **Channel Management** page and click **Edit**. In **Output Group Setting**, toggle on **Video Watermark** and select the watermark template created from the drop-down list of **Video Watermark Template**.

The screenshot shows the 'Edit Channel' interface with the 'Output Group Setting' tab selected. Under 'Group 1', the 'Video Watermark' toggle is turned on. A dropdown menu for 'Video Watermark Template' is open, displaying a search bar and a list of templates: 'test6', 'test4', 'image_water...', and 'image_water...'. The 'Audio Transcoding' and 'Video Transcoding' options are also visible and turned on.

Note :

Configuration changes do not take effect until the next live streaming.

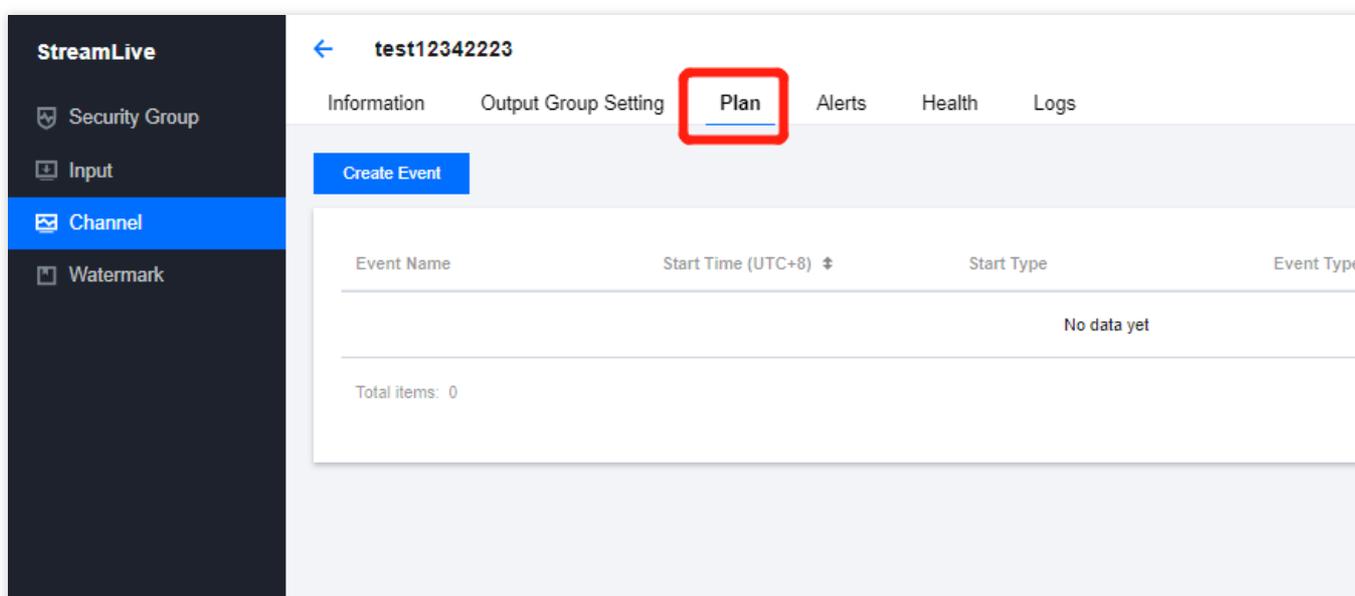
Plan Management

Last updated : 2023-11-03 09:49:50

You can execute events for a channel while it's running by adding events to the plan of the channel. StreamLive will perform the specified action at the specified time.

Viewing events

On the **Channel** page, click the name of the channel for which you want to configure events and select the **Plan** tab.



Creating an event

Click **Create Event**. Currently, the following event types are supported:

Input Switch : Change the input of a running channel.

Time Record: Record a specific segment of a running channel's output.

SCTE-35 Time Signal : Configure a SCTE-35 time_signal event.

SCTE-35 Splice Insert : Configure a SCTE-35 splice_insert event.

SCTE-35 Return to Network : Configure a SCTE-35 return to network event.

Creating an Input Switch event

The screenshot displays the 'Create Event' configuration page in the StreamLive console. The page is titled 'test12342223' and is under the 'Plan' tab. A sidebar on the left shows navigation options: Security Group, Input, Channel (selected), and Watermark. The main content area features a 'Create Event' button and a table with columns for 'Event Name', 'Start Time (UTC+8)', and 'Start Type'. Below the table, it indicates 'Total items: 0'. The right-hand panel contains the following configuration sections:

- Basic Information:** 'Event Name' field with a placeholder 'Please enter th'.
- Timing:** 'Start Type' dropdown set to 'Fixed Time'; 'Date (UTC+8)' field set to '2023-07-05 15:'.
- Event:** 'Event Type' radio buttons with 'Input Switch' selected. Other options include 'Time Record', 'SCTE-35 Tim', 'SCTE-35 Spli', and 'SCTE-35 Ret'.
- Input Attachment:** Field with a placeholder 'Please select'.

At the bottom right of the configuration panel are 'Confirm' and 'Cancel' buttons.

Event Type : Select **Input Switch**.

Event Name : Enter the event name, which can be up to 32 characters long, can contain numbers, underscores, and letters, and must be unique across the channel.

Start Type : Select **Fixed Time** or **Immediate**. Fixed Time: Execute the event at a specified time (UTC), which must be at least 10 seconds later than the event configuration time. Immediate: Execute the event immediately.

Input Attachment : From the inputs that have been bound to the channel, select one to change to.

Creating a Time Record event

The screenshot shows the 'Create Event' form in the StreamLive console. The form is divided into three main sections:

- Basic Information:** Contains input fields for Event Name, OutputGroupName, ManifestName, DestinationUrl1, and DestinationUrl2. Each field has a placeholder text like 'Please enter the...'. There is also a dropdown for Start Time (UTC+8).
- Timing:** Contains a Date (UTC+8) field with the value '2023-07-05 14:42'.
- Event:** Contains radio buttons for Event Type: Input Switch, Time Record (selected), SCTE-35 Time, SCTE-35 Splice, and SCTE-35 Return.

At the bottom of the form, there are 'Confirm' and 'Cancel' buttons.

Event Type : Select **Time Record**.

Event Name : Enter the event name, which can be up to 32 characters long, can contain numbers, underscores, and letters, and must be unique across the channel.

OutputGroupName : Select the output group to record. You can view the output groups of a channel on the **Output Group Setting** page.

ManifestName : Enter the name of the manifest file generated (you don't need to include .m3u8 or .mpd in the name).

DestinationUrl : Enter the COS address to save the file.

Timing : Enter the time period (UTC) to record.

For SCTE-35 event, you can refer to the **SCTE STANDARD - SCTE 35 2022**

Creating a SCTE-35 Time Signal event

StreamLive

test12342223

Information Output Group Setting **Plan** Alerts Health

Create Event

Event Name Start Time (UTC+8) ↓

Total items: 0

Create Event

Basic Information

Event Name *

Timing

Start Type

Date (UTC+8)

Event

Event Type

- Input Switch
- Time Record
- SCTE-35 Time Signal
- SCTE-35 Splice
- SCTE-35 Return

SCTE-35 Descriptors

Event Type : Select **SCTE-35 Time Signal**.

Event Name : Enter the event name, which can be up to 32 characters long, can contain numbers, underscores, and letters, and must be unique across the channel.

Start Type : Select **Fixed Time** or **Immediate**. Fixed Time: Execute the event at a specified time (UTC), which must be at least 10 seconds later than the event configuration time. Immediate: Execute the event immediately.

Click **Add** to create several SCTE-35 Descriptors.

Event

Event Type

Input Switch

Time Record

SCTE-35 Time Signal

SCTE-35 Splice Insert

SCTE-35 Return To Network

SCTE-35 Descriptors (3) Add

SCTE-35 Descriptptor 1 [Remove](#) ▼

SCTE-35 Descriptptor 2 [Remove](#) ▼

SCTE-35 Descriptptor 3 [Remove](#) ▼

Confirm Cancel

For each SCTE-35 Descriptor, you can set following information:

SCTE-35 Descriptor 1 [Remove](#)

Descriptor Type	Segmentation Descriptor
Segmentation Event ID [?] *	<input type="text"/>
Segmentation Event Cancel Indicator [?] *	<input checked="" type="radio"/> PREVIOUSLY_EVENT_NOT_CANCELLED <input type="radio"/> PREVIOUSLY_EVENT_CANCELLED
Delivery Restrictions	<input type="checkbox"/>
Segmentation Duration [?]	<input type="text"/>
Segmentation UPID Type [?] *	<input type="text"/>
Segmentation UPID [?] *	<input type="text"/>
Segmentation Type ID [?] *	<input type="text"/>
Segment Num [?] *	<input type="text"/>
Segments Expected [?] *	<input type="text"/>
Subsegment Num [?] *	<input type="text"/>
Subsegments Expected [?] *	<input type="text"/>

Segmentation Event ID : A 32-bit unique segmentation event identifier. Please enter an integer between 0 and 4294967295.

Segmentation Event Cancel Indicator : Indicates that a previously sent segmentation event, identified by segmentation_event_id, has been cancelled.

Delivery Restrictions : Correspond to SCTE-35 web_delivery_allowed, no_regional_blackout, archive_allowed, device_restrictions parameter.

Segmentation Duration : The duration of the segment in 90kHz ticks. Please enter an integer between 0 and 1099511627775.

Segmentation UPID Type : Correspond to SCTE-35 segmentation_upid_type parameter. Please enter an integer between 0 and 255.

Segmentation UPID : Correspond to SCTE-35 segmentation_upid parameter. Please enter a string which can contain up to 255 characters. Segmentation UPID can be empty only when Segmentation UPID Type is 0.

Segmentation Type ID : Correspond to SCTE-35 segmentation_type_id parameter. Please enter an integer between 0 and 255.

Segment Num : Correspond to SCTE-35 segment_num parameter. Please enter an integer between 0 and 255.

Segments Expected : Correspond to SCTE-35 segment_expected parameter. Please enter an integer between 0 and 255.

Subsegment Num : Correspond to SCTE-35 sub_segment_num parameter. Please enter an integer between 0 and 255.

Subsegments Expected : Correspond to SCTE-35 sub_segments_expected parameter. Please enter an integer between 0 and 255.

Creating a SCTE-35 Splice Insert event

Create Event ✕

Basic Information

Event Name *

Timing

Start Type

Date (UTC+8) 

Event

Event Type

Input Switch

Time Record

SCTE-35 Time Signal

SCTE-35 Splice Insert

SCTE-35 Return To Network

Splice Event ID *

Duration

Event Type : Select **SCTE-35 Splice Insert**.

Event Name : Enter the event name, which can be up to 32 characters long, can contain numbers, underscores, and letters, and must be unique across the channel.

Start Type : Select **Fixed Time** or **Immediate**. Fixed Time: Execute the event at a specified time (UTC), which must be at least 10 seconds later than the event configuration time. Immediate: Execute the event immediately.

Splice Event ID : A 32-bit unique segmentation event identifier. Please enter an integer between 0 and 4294967295.

Duration : The duration of the segment in 90kHz ticks. Please enter an integer between 0 and 8589934591.

Creating a SCTE-35 Return to Network event

Create Event ✕

Basic Information

Event Name *

Timing

Start Type ▼

Date (UTC+8) 

Event

Event Type

- Input Switch
- Time Record
- SCTE-35 Time Signal
- SCTE-35 Splice Insert
- SCTE-35 Return To Network

Splice Event ID *

Event Type : Select **SCTE-35 Return to Network**.

Event Name : Enter the event name, which can be up to 32 characters long, can contain numbers, underscores, and letters, and must be unique across the channel.

Start Type : Select **Fixed Time** or **Immediate**. Fixed Time: Execute the event at a specified time (UTC), which must be at least 10 seconds later than the event configuration time. Immediate: Execute the event immediately.

Splice Event ID : A 32-bit unique segmentation event identifier for SCTE-35 splice_insert. Please enter an integer between 0 and 4294967295.

Creating a Timed Metadata event

The screenshot shows the StreamLive console interface. On the left is a navigation menu with 'Channel', 'Security Group', 'Input', and 'Watermark'. The main area has tabs for 'Information', 'Output Group Setting', 'Plan', 'Alerts', 'Health', and 'Logs'. The 'Plan' tab is active, showing a table with one event: '1' at '2023-08-16 16:20:31' with 'Immediate' start type. A 'Create Event' button is highlighted with a red box. On the right, the 'Create Event' form is visible. Under 'Basic Information', there's a field for 'Event Name'. Under 'Timing', 'Start Type' is set to 'Fixed Time' and 'Date (UTC+8)' is '2023-10-18 11:00'. Under 'Event', 'Event Type' is set to 'Timed Metadata', which is highlighted with a red box. There is also an 'ID3' field at the bottom.

Event Type : Select **Timed Metadata**.

Event Name : Enter the event name, which can be up to 32 characters long, can contain numbers, underscores, and letters, and must be unique across the channel.

Start Type : Select **Fixed Time** or **Immediate**. Fixed Time: Execute the event at a specified time (UTC), which must be at least 10 seconds later than the event configuration time. Immediate: Execute the event immediately.

ID3:

Please enter a fully formed ID3 metadata item (including both a header and a frame, as per the [ID3 specification](#)) and encode it as base64, which can be up to 1024 characters long.

For output in this channel that requires the passthrough of ID3 metadata, it is necessary to toggle on the **ID3 Passthrough** switch in the output setting.

Outputs *

Add one or more outputs to this group. Each output has unique stream settings that enable you to choose the video, audio, and caption need to be kept in the same transcoding type (joint transcoding/separate transcoding).

Add

Output Name	SCTE-35 Setting	ID3 Passthrough	Transcoding Setting
720	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	720p,128k,64k
1080p	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1080p,64k,128k

Deleting an event

Find the event to delete, click **Delete** in the **Operation** column, and then click **Confirm** in the pop-up window. You can delete an event that hasn't been executed or has finished, but not one that is being executed.

Create Event

Event Name	Start Time (UTC+8) ↕	Start Type	Event Type
switch_event	2022	Fixed Time	Input Switch
timerecord_event			Time Record

Total items: 2