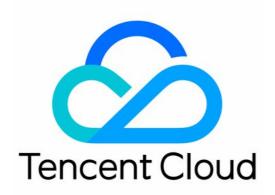


StreamPackage

Console Guide Product Documentation





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Overview

StreamPackage is a high-quality video packaging and origin platform. It offers professional, stable, secure, and easyto-use video packaging and delivery services globally and helps you enhance origin resilience. You can use StreamPackage to securely and reliably distribute video streams at a large scale.

StreamPackage manages tasks at the channel level. It packages compressed and encoded audio and video tracks into certain formats for distribution.

Console Overview

The StreamPackage console provides a rich set of easy-to-use and flexible features. It manages tasks at the channel level and functions through four main sections: channel, input, endpoint, and CDN.

StreamPackage	Channel Management	🔇 Mumbai 🔻			
Channel Management	Create Channel	Delete			
	Name \$	Input Pro	otocol T ID		Input URL (
	E	HLS	174030401.000		NOV. 10144000 April mundourrectapic NOV. 10144000 April mundourrectapic
	E Nort	HLS	PRINCIPAL	omei fe	Mip/100148008.ay munistransisyon Mip/100148008.ay munistransisyon
	CLIMM	DASH	Pro astantina	Loves 15	wip.//iloiashidi.ay mumbul mudayar Wip.//iloiashidi.ay mumbul mudayar
		HLS	51010404030000	anter 6	http://riciteedec.ap.munitalinaciap.or http://riciteedec.ap.munitalinaciap.or
		DASH	5100422440	сная Б	http://itoriedeciap.munitalineciapse http://itoriedeciap.munitalineciapse
	-	DASH	PROMINE	10HCI 10	NIQUITECHNOLOGIAP municipanetapoe Niquitechdebellap municipanetapoe
	- N.H	HLS	PHOMPA	10 MICH	Wip,/100100001.ay munistimedapat Wip,/100100001.ay munistimedapat
	- N.H.	HLS	A" ON ONE DESCRIPTION	9000 G	Wep/Hitchashidi.ay munital mulayar http://richashidi.ay munital mulayar
	Total items: 18				

Prerequisites

You have a domain for playing videos from CDNs (if you want to use Tencent Cloud's live streaming CDN for content distribution).

You have activated CSS.

You have logged in to the StreamPackage console.

Directions

1. Select an AZ

Currently, StreamPackage services are available in Mumbai (India), Bangkok (Thailand), Seoul (South Korea), Tokyo (Japan), Frankfurt (Germany), and Singapore. If you want to deploy your business in other regions, please contact us.

Channel Management	🔇 Mumbai 👻	
	Asia	Europe
	Bangkok	Frankfurt
	Mumbai	
	Seoul	
	Tokyo	
	Singapore	

2. Create a channel

A channel holds basic information about inputs and outputs. You can configure a channel to receive live streams that use a specific protocol. You can also create endpoints to generate content to be distributed.

1. Click Create Channel.

2. Enter a channel name and select an input protocol (HLS and DASH are supported).

Name *	test	${\boldsymbol{ \oslash}}$	
Input Protocol *	HLS 🔻		
HLS Setting			
Max Segment Duration (sec) 🚯 *	15	${\boldsymbol{ \oslash}}$	
Max Playlist Duration (sec) 🛈 *	600	${\boldsymbol{ \oslash}}$	

3. Complete other HLS/DASH settings.

Max Segment Duration indicates the maximum duration of HLS TS segments or DASH M4S segments pushed to this channel. The default is 15 seconds.

Max Playlist Duration indicates the maximum total duration of the HLS M3U8 or DASH MPD playlist pushed to this channel. The default is 600 seconds.

Note

If you are sending two streams, one primary stream and one backup stream, to the channel for failover, we recommend you set **Max Segment Duration** slightly longer than actually needed. 4. Click **Create**.

3. View channel information

Viewing channel information

After the channel is created, you will be directed to the channel details page (you can also go to the details page by clicking the channel name or **Info** on the right). This page displays the channel's name, ID (automatically generated), input protocol, and other settings. StreamPackage will generate two inputs of the specified protocol for the channel.

Channel Management	Channel Management							
Create Channel Delete	9							
Name \$	Input Protocol T	ID		Input URL				
test	HLS		6	1100				

Viewing inputs

An input is the basic unit of the content StreamPackage receives. After a channel is created, StreamPackage will automatically generate two inputs as well as two input URLs for the channel. You can send streams to the URLs.

Infomation	Input	Endpoints CD	N		
ltem		Input Protocol	Input Url		Authentica
input1		HLS		Б	OFF
input2		HLS		n -	OFF

You can enable authentication for an input: Click **Authentication** in the **Operation** column. StreamPackage will generate a username and a password for HTTP authentication. Click **Rotate credentials** to complete the configuration.

input1 authentication	×
Input Authentication	
Username	
Password 6	
Rotate credentials	

Note

Once you rotate credentials, the existing credentials of the channel will become invalid.

Creating an endpoint

You can create endpoints for a channel so that streams can be pulled from the channel.

1. Click Create Endpoint.

← test				
Infomation Input	Endpoints CDN			
Create Endpoint	Delete			
Name \$	Endpoint Protocol	Url		Authentica
			No data yet	
Total items: 0				

2. Enter an endpoint name. The endpoint type is the same as the channel's input type by default. If the input type is HLS, you can also select CMAF as the endpoint type. This means StreamPackage can package HLS streams into CMAF streams (DASH).

Name	Please en	ter the endpoir	nt name.		
Туре	HLS				•
Manifest Name 🛈	HLS				
IP Restriction	CMAF				
IF Restriction					
AuthKey					
Time-shifted Viewing 🛈					

If you want to modify the Manifest Name, please enter the name in "Manifest Name", the default value is main.

Create Endpoint		×
Name	Please enter the endpoint name.	
Туре	HLS •	\odot
Manifest Name 🛈	main .m3u8	
IP Restriction		
AuthKey		
Time-shifted Viewing 🛈		
	Create Cancel	

Note

HLS repackaging into CMAF (DASH format) does not currently support DRM inputs. If the input HLS m3u8 contains

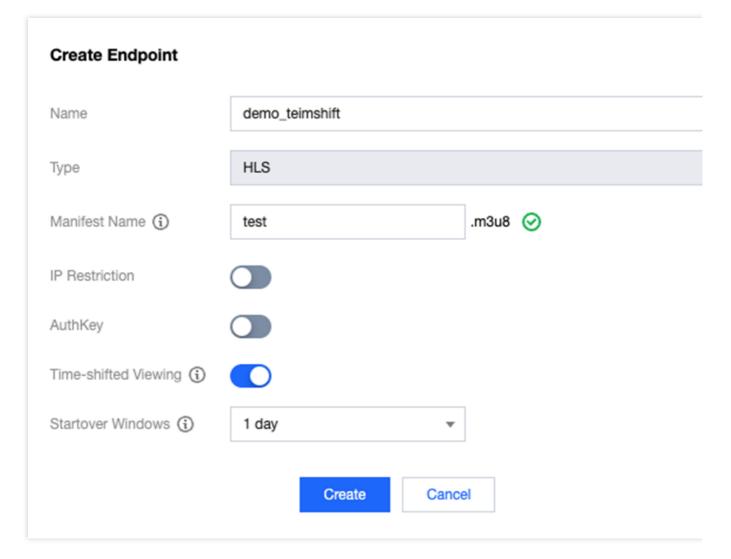
SCTE-35 tags, these SCTE-35 tags will not appear in the repackaged CMAF manifest.

3. You can also enable IP allowlist/blocklist and AuthKey if necessary.

IP allowlist/blocklist: Allow only specific IP address ranges to push or disallow specific IP address ranges to push. AuthKey: Perform authentication using the HTTP header field X-TENCENT-PACKAGE.

Name	Please enter the endpoint name.	
Туре	HLS	
Manifest Name 🛈	main	.m3u8
IP Restriction		
	O IP Allowlist IP Blocklist	
	Please add one or more IPs (sepa allowlist, such as "192.168.0.1/24"	
AuthKey		
AuthKey		

4. If you need the timeshift feature, you can enable the "Time-shifted Viewing" to activate it.



Startover Windows : Set how long StreamPackage will support time-shifted viewing for the content. Default value is 1 day, and 3days, 7 days, 15 days and 30 days are also supported.

Once timeshift is enabled, live segments will be saved in the cloud, and you can watch them with timeshift by adding specific parameters to the Endpoint URL. The parameters are as follows:

timeshift=1, Indicates that you want to watch TimeShift stream.

start=xxx, indicating the start time of the timeshift. It supports either the ISO 8601 dates format or the POSIX (or Epoch) time format.

end=xxx, indicating the end time of the timeshift. It supports either the ISO 8601 dates format or the POSIX (or Epoch) time format.

Please note:

If both start and end are specified, end must be greater than start, otherwise a 400 error will be returned.

The start time must be within the Startover Windows range, otherwise a 400 error will be returned.

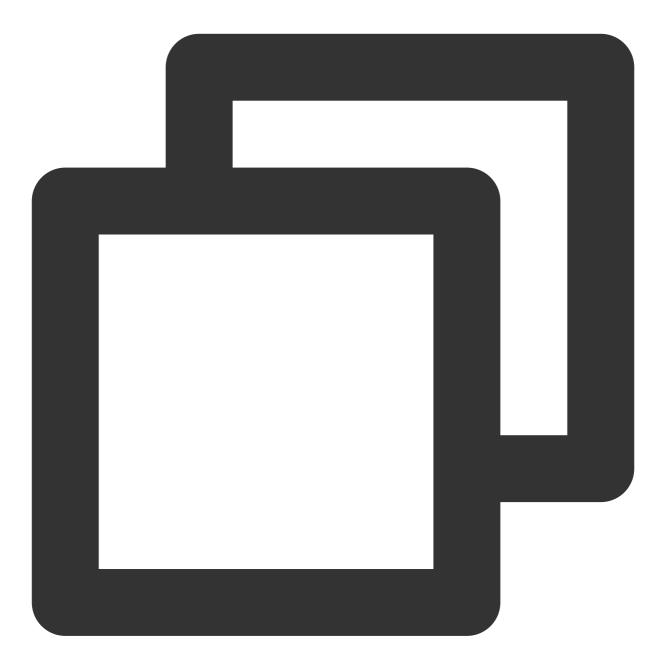
Only a maximum of 24 hours of timeshift content can be returned. This means that the time difference between end

and start cannot exceed 24 hours, otherwise a 400 error will be returned.

Example timeshift URLs:



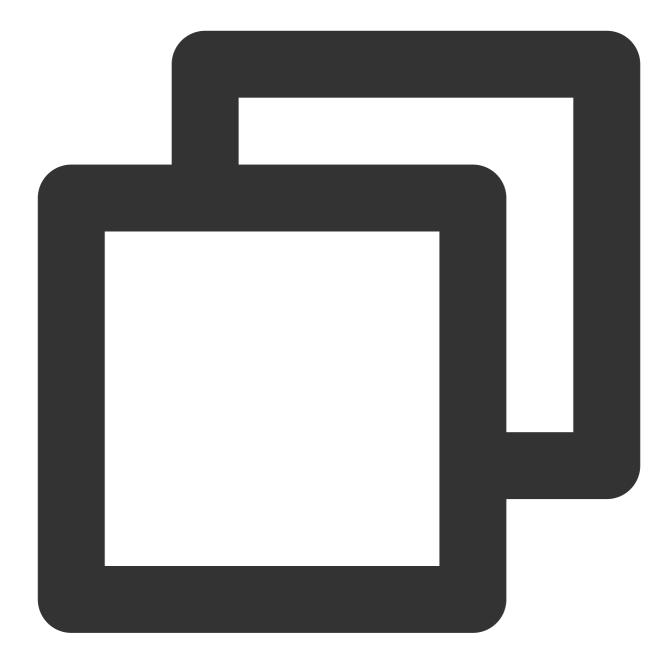
Request timeshift content from 2023-07-01T00:002 to 2023-07-01T23:59:59Z:



http://domain/v1/path/subpath/playlist.m3u8?timeshift=1&start=2023-07-01T00:00:00Z&

or

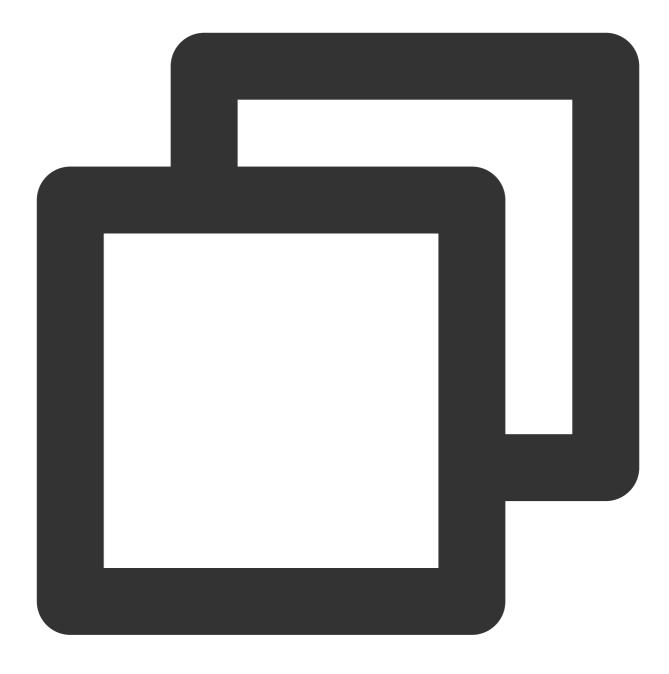




http://domain/v1/path/subpath/playlist.m3u8?timeshift=1&start=1688169600&end=168825

Request live content starting from 2023-07-01T00:00:00Z until the end of the live stream:

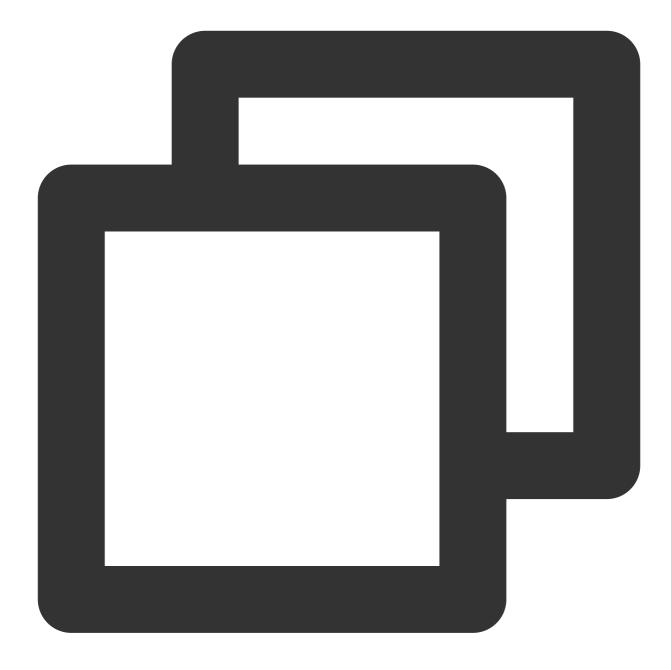




http://domain/v1/path/subpath/playlist.m3u8?timeshift=1&start=2023-07-01T00:00:00Z

or





http://domain/v1/path/subpath/playlist.m3u8?timeshift=1&start=1688169600

Note

CMAF type time-shifting does not currently support SCTE-35.

5. Click **Create** and the endpoint is created. You can modify or delete the endpoint. From the endpoint URL generated, you can pull streams and distribute them.

Infomation	Input	Endpoints	CDN			
Create Endpoint	Dele	ete				
Name \$		Endpoir	it Protocol	Url		Authenticat
test		HLS			ò	
Total items: 1						1

Configuring a CDN distribution

You can create a CDN distribution for a StreamPackage channel to distribute the streams in the channel via Tencent

Cloud's live streaming CDN. To achieve this, you need to activate CSS and grant CSS access to StreamPackage

and StreamPackage access to CSS.

Before we proceed, make sure you understand the following terms:

LVB CDN: StreamPackage allows you to quickly distribute streams in a channel via the LVB CDN.

CDN domain/CDN playback domain: A playback domain in the LVB CDN, which can be used to distribute live streams.

1. Activate CSS

Before you configure a CDN distribution, make sure you have activated CSS.

2. Grant StreamPackage access to CSS

In the StreamPackage console, go to the details page of the channel for which you want to configure a CDN distribution, select the **CDN** tab, and click **Authorization**.

Note

After the authorization, you will be able to configure a CSS playback domain for a StreamPackage channel.

Infomation	Input	Endpoints	CDN			
2	n service has		-	h CSS CDN to distril o use it, please click		authorization b
Authorizatio	on					

Click **Click here**. To distribute streams via the LVB CDN, you need to allow StreamPackage to access certain resources. This is achieved via a service role. Click **Authorize Now** to go to the **Role Management** page, and click **Grant** to grant StreamPackage the permission to use related APIs.

Authorization		
1 Authorize StreamPackage to Use CSS CDN	> 2 Authorize CSS CDN to Use Stree	amPa
If you need to use CSS CDN for distribution, please make m	utual authorization between StreamPackage and CSS CDN	۱.
Step1: Click here to authorize StreamPackage to use CSS playback domain name.	\mathbf{SCDN} , thereby allowing StreamPackage to configure CDN	۱ servi
	Next	

Service Authorization	•
After you agree to grant p	permissions to StreamPackage, a preset role will be created and relevant permissions will be granted to StreamPackage
Role Name MD	DP_QCSRole
Role Type Sen	rvice Role
Description Cur	rrent role is a StreamPackage service role, which will access your other cloud service resources within the permissions of the associated policies.
Authorized Policies Pres	eset policy QcloudAccessForMDPRoleInLVBCDNDistribution

You will be directed back to the StreamPackage console. Click Authorization completed.

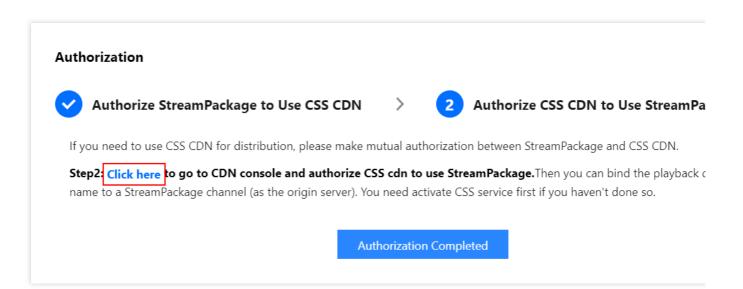
Autho	prization	
1	Confirm authorization complete	×
If	Have you completed the authorization of service role for the current feature?	
St	Authorization completed Authorization not completed	
	Next	

Authoriz	ation
1 Au	thorize StreamPackage to Use CSS CDN > 2 Authorize CSS CDN to Use StreamPacka
lf you ne	eed to use CSS CDN for distribution, please make mutual authorization between StreamPackage and CSS CDN.
	Click here to authorize StreamPackage to use CSS CDN , thereby allowing StreamPackage to configure CDN service f k domain name.
0	You have authorized StreamPackage to use CSS CDN. StreamPackage is allowed to configure CDN service for playbac domain name now.
	Next

Click Next.

3. Grant CSS access to StreamPackage

Click **Click here** to go to the CDN console and allow the LVB CDN to use StreamPackage. After the authorization, you will see that the authorization status for StreamPackage has become **Activated** in the CSS console.



Authorization	
StreamPackage	
	ofessional, stable, and secure video packaging and delivery services. After the authorization, you can bind StreamPackage channels with play as the origin servers for live streaming distribution and playback.
Activated	

Return to the StreamPackage console and click Completed.

Authorization		
		×
	Confirm authorization Complete	
If you need to u	Have you Completed authorization of service role for the current feature?	
Step2: Click her		
name to a Strea	Completed Cancel	
	Authorization completed	

Click Authorization Completed. You have now granted the LVB CDN access to StreamPackage and StreamPackage access to the LVB CDN (which means you can now configure a CDN playback domain for a StreamPackage channel and the LVB CDN can pull streams from a StreamPackage channel).

uthoriz	ation		
Au	thorize StreamPackage to Use CSS CDN	> 2	Authorize CSS CDN to Use Strea
lf you ne	eed to use CSS CDN for distribution, please make m	utual authorizatio	on between StreamPackage and CSS CDN
•	Click here to go to CDN console and authorize CS o a StreamPackage channel (as the origin server). You		
\odot	You have authorized CSS CDN to use StreamPacka	age. Now you car	n use CDN to distribute contents of Strear
	Aut	horization Comp	leted

4. Configure a CDN playback domain

After completing the authorization, under the **CDN** tab, click **Edit Configuration** to configure a CDN distribution.

Infomation	Input	Endpoints	CDN
-	ution is not cu		integration with CSS CDN to distribute live video streams.) enable it, please click "Edit Configuration" .

Enter the domain you want to use for CDN playback and click Confirm.

Domain Name		\odot	

CDN Setting (StreamPac	kage supports quick	integration with CSS CDN to distribute	live video streams.)	
Playback Domain	Name	www.baidurt23.com	n.	cname 🛈	() www.baidu123.com.tilweodn.com
Acceleration Regi	ion	Outside Mainland	China and Hong Kong/	Status	🕑 Enabled

Note

After a new playback domain is added, the system will assign it a CNAME which ends with

.liveplay.myqcloud.com . To make the CNAME accessible, you need to add a CNAME record for the domain at your DNS provider. For detailed directions, see Configuring CNAME for Domain Name.

The default acceleration region for a CDN playback domain configured in the StreamPackage console is outside the Chinese mainland. If you need to distribute live streams inside the Chinese mainland, according to relevant laws and regulations, ICP filing is required for your domain. You can click **Go to the CSS CDN Console to Perform More Actions**.

Playing streams via the configured playback domain

To achieve playback via the configured playback domain, after you associate a StreamPackage channel with a CDN playback domain, replace the domain in the channel's endpoint URL with the CDN playback domain. For example:

Suppose the endpoint URL of your channel is:

```
http://123456789.ap-
```

seoul.streampackage.srclivepull.myqcloud.com/v1/017697a3513109df73abda3c4b26/017697a



918bf09dfabc033b04d43/main.m3u8

Then your CDN playback address is:

http://CDN playback domain

name/v1/017697a3513109df73abda3c4b26/017697a918bf09dfabc033b04d43/main.m3u8

After the configuration is completed, please contact us for configuration optimization to ensure a better experience for you.

Note

Using the LVB CDN for distribution will incur playback traffic fees. For details, see Billing of LVB.

4. Edit and delete a channel

You can manage created channels on the **Channel Management** page. Click **Info** in the **Operation** column to view channel details. Click **Edit** to edit a channel, and click **Delete** to delete a channel. Note that you cannot delete a channel bound with endpoints. Delete the endpoints first before deleting a channel.

Create Channel	Delete			
Name \$	1	nput Protocol 🔻	ID	Input URL 🛈
test	ł	HLS	6093C9FDC2AB1CA194AA 🗖	http://1257039118.a http://1257039118.a

Harvest Jobs

Last updated : 2024-01-06 13:59:16

A harvest job represents a request to extract a live-to-VOD (video on demand) asset from an endpoint for a specific timeframe in the past. StreamPackage uses information from the harvest job to determine the start and end times of the asset, and where to store it after the harvest job is complete. A harvest job runs only once after it's been created. StreamPackage keeps a record of the job on your account for reference only. You can't modify or delete a record once you've created the harvest job.

Note:

Time-shifted Viewing feature must be enabled. The startover window determines the time frame that assets can be harvested from your endpoint. Your harvest job must fall within your StreamPackage endpoint's startover window. For example, if your endpoint has a startover window of 30 days, you can harvest your asset anytime within that time frame.

StreamPackage	← home_trang			
🗠 Channel	Infomation Input E	Endpoints CDN	Harvest Jobs	
Management	Create Endpoint Delete	9		
₩ Harvest Jobs				
	Name \$	Endpoint Protocol	Url	Authentication
	play	HLS	htt 🗖	
	共 1 条			

Harvest jobs management

Select **Harvest Jobs** on the left sidebar. On this page, you can view the ID, status, channel, endpoint, start time, end time and created time of your harvest jobs. The status includes running, completed and failed. You can only delete the completed and failed jobs. You can also click **Create Harvest Job** to create a new job, or click **Info** to view detailed information.

StreamPackage	Harvest Jobs				
전 Channel Management	Create Harvest Job	Delete			
Harvest Jobs	ID	Status T	Channel	Endpoint	Start Time 🗘
	-	Running	initia, frances	play 🗖	2023-10-24 09:
		Running	Section, Strength	play 🗖	2023-10-25 10:
		Running	in the second second	cmaf 🗖	2023-10-24 09:

For the harvest jobs belong to a channel, you can also manage the jobs in the channel details page (you can go to the details page by clicking the channel name in the **Channel Management** page).

StreamPackage	< tanà,™a				
Channel	Infomation In	put Endpoints	CDN Har	vest Jobs	
Management	Create Harvest Job	Delete			
	D	Status T	Channel	Endpoint	Start Time 🗘
		Running	100.758	play 🗖	2023-10-24 09:3
		Running		play E	2023-10-25 10:3
	共 2 条				

Creating a Harvest Job

1. Click Create Harvest Job.

Basic Information				
ID (j)				
	ID can contain up to 128 characters. Supported characters are numbers, letters, underscores (_), and dashes (-).			
Origin endpoint 🚯	T			
	StreamPackage only supports harvesting content from HLS and DASH endpoints that have startover turned on.			
Start/End date and	time			
Date and time format	O ISO-8601			
()	Formatted according to the ISO-8601 standard.			
	C Epoch seconds			
	Seconds since the epoch.			
Start date and time	2023-08-01T10:00:00+08:00			
End date and time 🕥	2023-08-01T10:00:00+08:00			
Destination				
Destination				
Tencent Cloud COS authorization (j)				
COS storage path	Region ap-			
	appid 251009588			
	Bucket 👻			
	If you cannot find a bucket for this service, create one.			

2. Set the basic information

The basic details of a harvest job define its identifier and the source for the live-to-VOD asset.

ID: ID is the primary identifier for the harvest job. ID can contain up to 128 characters. Numbers, letters, underscores (_), and dashes (-) are allowed.

Origin endpoint: Select the endpoint that serves the live stream that you're harvesting the live-to-VOD asset from.

And harvest job must fall within this endpoint's startover window.

3. Set start/end date and time

The start and end date and time information defines the time range for the harvest job. The maximum duration of the harvest job is **24 hours**. The duration between the start time and end time you enter cannot exceed 24 hours.

Date and time format: Choose Epoch seconds or ISO-8601. Epoch seconds: the date and time is formatted in

seconds since the epoch. ISO-8601: the date and time is formatted according to the ISO-8601 standard.

Start date and time: Enter when the live-to-VOD asset begins. The asset's begin time must be at the same time or after the live event started. The start time must also be within the startover window on the endpoint.

End date and time: Enter when the live-to-VOD asset ends. The length of the asset can't exceed the startover window on the endpoint. The end time must also be in the past.

4. Set destination

The destination information defines how StreamPackage saves the live-to-VOD asset after it has been harvested from the live stream. Currently, we only support using Tencent Cloud COS for file storage.

Tencent Cloud COS authorization: Enable the authorization to provide StreamPackage access to read and write from your Tencent Cloud COS bucket where the live-to-VOD asset will be stored.

COS storage path: Select the bucket where you want StreamPackage to store the live-to-VOD asset. You can only select a bucket that is in the same region StreamPackage is harvesting from.

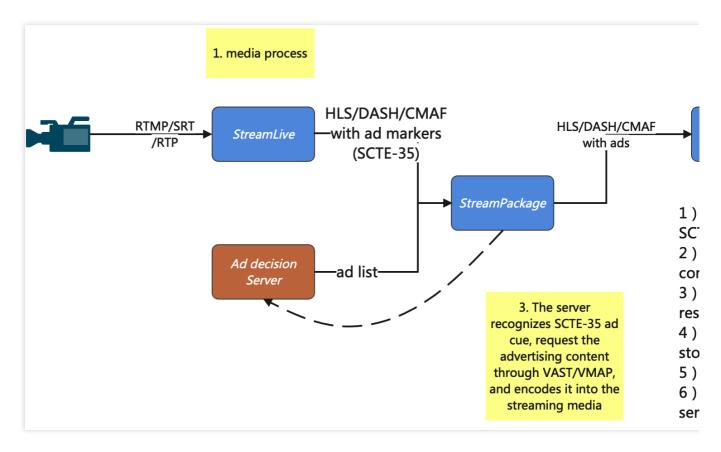
Manifest key: Enter the path within the bucket to the live-to-VOD asset, including the file name for the parent manifest of the asset. If the directory structure doesn't already exist in the bucket, StreamPackage creates it. The manifest key must be unique. When you use the same manifest key for multiple harvest jobs, the newest playlist for the asset overwrites existing playlists.

Server-Side Ad Insertion

Last updated : 2024-05-23 17:33:19

AD insertion

With the advancement of streaming media technology and applications on internet, it is apparent that ad-supported streaming media delivery has become a major monetization strategy. By using Tencent Cloud's Stream Service, you can implement dynamic ad insertion based on SCTE-35 ad markers and SSAI. The complete general process of SSAI is as follows:



1. The publisher pushes the live stream to StreamLive for transcoding, packaging, and inserting SCTE-35 ad markers, and then transmits it to StreamPackage. If there are no subsequent processes, step 1) has already completed all server-side steps in CSAI.

2. The player requests the manifest (m3u8/mpd), and StreamPackage fetches the origin manifest while parsing the manifest and checking the SCTE-35 ad markers.

3. StreamPackage send the request to the Ad Decision Server, parses the VAST/VMAP response, and obtains the ad video address.

4. StreamPackage downloads the ad video, transcodes and stores it.

5. StreamPackage updates the transcoded ad segment url in the manifest by inserting and replacing, and then distribute it.

6. After the ad is played on the client-side, StreamPackage reports to the ad Tracking service for tracking the event. If you use this AD insertion feature. AD insertion fee will be incurred.

Step 1: Create ad insertion configuration

StreamPackage	Ad Insertio	Ad Insertion Configurations					
☑ Channel Management	Create Con	iguration	Delete				
Ad Insertion Configurations		Name	ID		Playback endpoint prefix	Video content source	Ad decision se
☑ Harvest Jobs		vod_test		10	6	. 6	
		live_test		5	۲۵	.6	

In the StreamPackage console, click **Create Configuration** to enter the configuration page, which includes the following configurations:

Required settings: Essential configuration information, including Configuration Name, Content Source and Ad Decision Server.

Configuration aliases : Configuration aliases are used for dynamic parameter replacement.

Personalization details : Optional settings for ad break personalization.

Advanced settings : Advanced settings allow you to fine-tune properties related to your content delivery network (CDN) prefix, DASH.

Step 2: Fill in the required settings

StreamPackage	← Create Configuration
Channel Management	Required settings
Ad Insertion Configurations	Name () •
且 Harvest Jobs	Please enter an unique name. Supported characters are numbers, letters, underscores (_), and dashes (-). N
	Content source () http://streampackage.mycloud.com/v1/channel_id
	The URL for the origin server. If using HTTPS, the certificate can't be self-signed. Maximum 25,000 character
	Ad decision server () • http://pubs.ads.org/
	The URL for the ad decision server (ADS). If using HTTPS, the certificate can't be self-signed. Maximum 25,

Name

The Configuration Name is a unique identifier for an ad insertion configuration. It can include numbers, letters, underscores (_), hyphens (-), and supports up to 512 characters.

Content Source

Enter the URL prefix of the source stream. For example, entering http://origin-server.com/abc/ as the URL prefix can apply to all source streams with the same prefix, such as http://origin-server.com/abc/ as the

server.com/abc/example_1.m3u8, http://origin-server.com/abc/example_2.m3u8 , etc.lt

supports up to 25,000 characters.

Ad decision server

The ad decision server (ADS) is the origin server that's providing content to StreamPackage. It determines which ads StreamPackage will insert in ad breaks in the manifest. Please enter an address starting with http:// or https:// by the server that's providing content to StreamPackage. It determines which ads streamPackage will insert in ad breaks in the manifest. Please enter an address starting with http:// or https:// by the server that 's providing content to StreamPackage. It determines which ads streamPackage will insert in ad breaks in the manifest. Please enter an address starting with http:// or https:// by the server that 's providing to 25,000 characters.

Step 3: Configure aliases

Player parameters and aliases used for dynamic variable replacement. Click **Add player parameter**, **Edit**, **Delete** on the right to maintain player parameters. Parameter name can contain up to 32 letters, digits, underscores(_), and hythens(-).

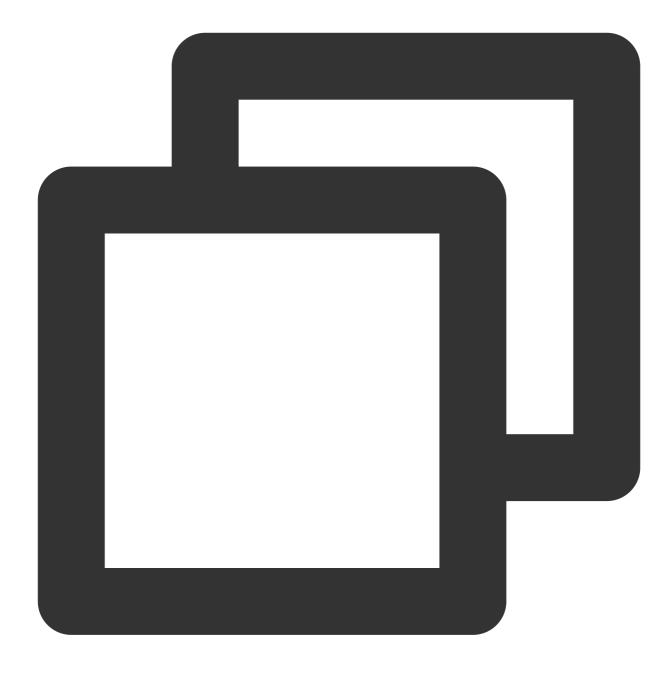
player_params.region	
Alias 🛈	Value 🛈
1	South
2	North

Enter alias key name and alias value in the parameter. You'll use the alias key as a player parameter variable during dynamic variable replacement. StreamPackage will replace the alias key with the mapped alias value.

An example :

1. URL for the ADS





https://my.ads.com/path?ad_type=[player_params.ad_type]®ion=[player_params.regio

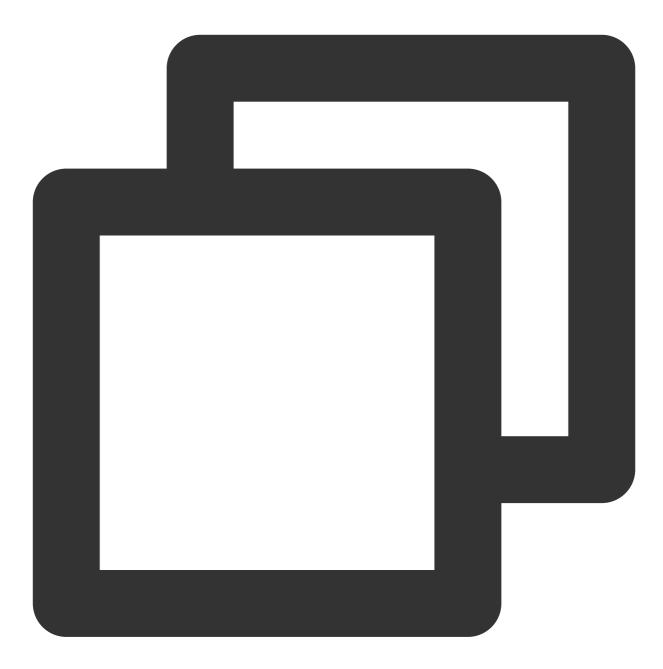
2. Aliases for dynamic variable replacement



```
"ConfigurationAliases": {
    "player_params.ad_type": {
        "customized": "abc",
        "default": "default"
    },
    "player_params.region": {
        "india": "ap-mumbai",
        "japan": "ap-tokyo"
    },
}
```



3. Add key-value in the request to StreamPackage



<master>.m3u8?ad_type=customized®ion=india

4. StreamPackage will pass the parameters to ADS





https://my.ads.com/path?ad_type=abc®ion=ap-mumbai

Step4: Set default slate ad

The slate ad is a default ad that's used if an ad break isn't filled by an ad replacement. It lets you define what happens when an ad break isn't completely filled by the ads dictated by the ad decision server (ADS). This way, if an ad is unavailable or too short, or if network conditions prevent the ad decision server from responding to StreamPackage, you know exactly what will be played instead. If an ad slate isn't specified, then the default is to show the underlying content stream. The URL for the slate ad is an address starting with http:// or https://. Maximum 25,000 characters.

Personalization details	Ð
Slate ad	https://
	A default ad that's used if an ad break isn't filled by an ad replacement. If using HTTPS, the certificate characters.
Personalization threshold	
	- 1 +
	The maximum amount of underfilled ad time (in seconds) allowed in an ad break.

The personalization threshold sets the maximum duration (in seconds) of underfilled ad time allowed in an ad break. If the duration of underfilled ad time exceeds the personalization threshold, then personalization of the ad break is abandoned and the underlying content is shown.

Step 5: Advanced settings

Advanced settings	
CDN content segment prefix 🛈	
	The content delivery network (CDN) prefix for con-
Ad marker passthrough	StreamPackage default
	Enable or disable ad marker passthrough.
SCTE-35 ad message type 🛈	All
	Directly copies the ad markers from the input stre

CDN content segment prefix: The CDN prefix for the source stream segments.

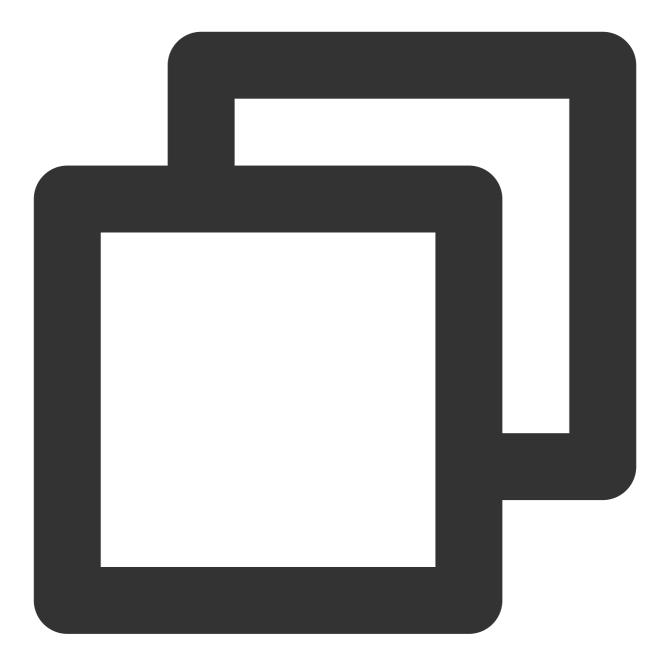
Ad marker passthrough: Enable or disable the ad marker passthrough.

SCTE-35 ad message type: Configure which tags in the input video stream are treated as ad markers.

Step 6: Generate playback URL with inserted ad

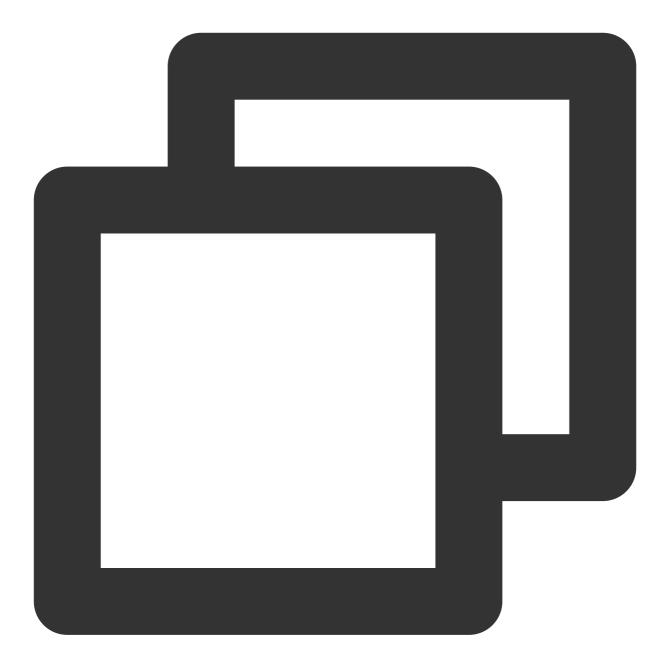
StreamPackage	Ad Inse	rtion Config	urations					
단 Channel Management		Create Conf	iguration Delete					
Ad Insertion Configurations			Name	ID		Playback endpoint prefix	Video content source	Ad decision se
∐ Harvest Jobs			vod_test		ī.		. . .	
			live_test		ā	http:// /ssai/master/_		

The full URL of the source stream:



http://origin-server.com/abc/main.m3u8

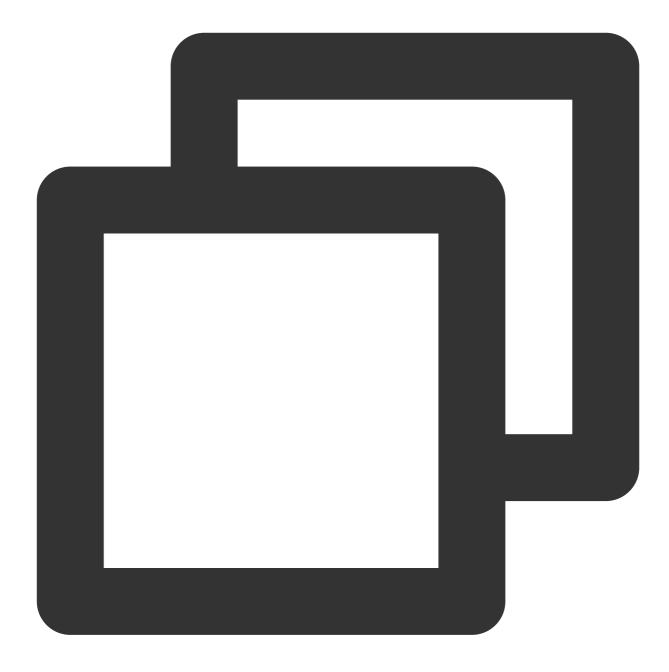
The prefix entered at the content source:



http://origin-server.com/abc/

Generated playback endpoint prefix:

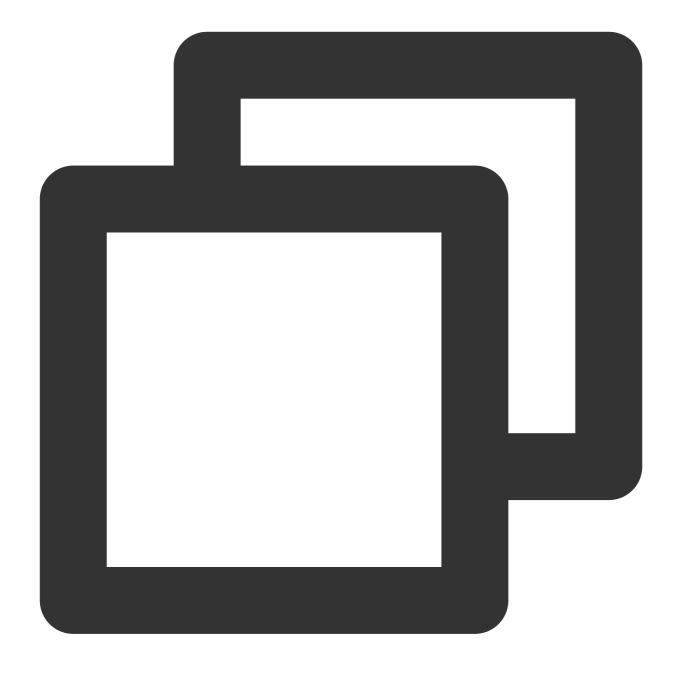




http://xxx.streampackage.srclivepull.myqcloud.com/v1/ssai/master/<uniq_id>/

Complete advertising replacement playback URL:





http://xxx.streampackage.srclivepull.myqcloud.com/v1/ssai/master/<uniq_id>/main.m3u

Step 7: Origin manifest and personalized manifest after replacement

The following examples provide a comparison between the origin manifest and the personalized manifest after replacement.

Origin manifest

Here is an example of the HLS master manifest obtained by StreamPackage from the original stream:

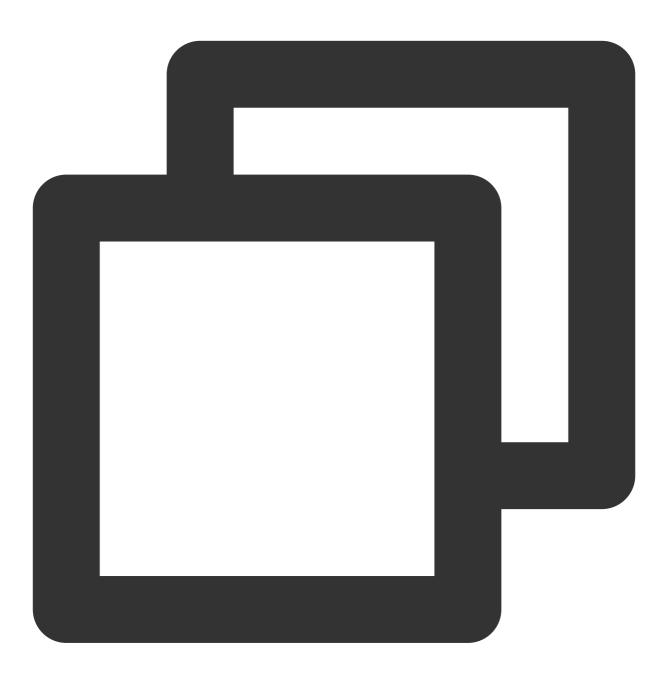




```
#EXTM3U
#EXT-X-VERSION:3
#EXT-X-INDEPENDENT-SEGMENTS
#EXT-X-STREAM-INF:PROGRAM-ID=0,BANDWIDTH=500000,RESOLUTION=640x360
tx_ssai_temp1.m3u8
#EXT-X-STREAM-INF:PROGRAM-ID=0,BANDWIDTH=2000000,RESOLUTION=960x540
tx_ssai_temp2.m3u8
#EXT-X-STREAM-INF:PROGRAM-ID=0,BANDWIDTH=3000000,RESOLUTION=1280x720
tx_ssai_temp3.m3u8
```



Here is an example of the HLS media manifest obtained by StreamPackage from the original stream, which includes inserted SCTE-35 markers:



#EXTM3U #EXT-X-VERSION:3 #EXT-X-MEDIA-SEQUENCE:11035046 #EXT-X-TARGETDURATION:4 #EXTINF:4.000, no desc seq 11035047 6594D5C2000003872642-p0_tmplav1_av1-1712914648040.ts?pts=118443600&txl=171291465244 #EXTINF:0.133, no desc seq 11035048 6594D5C2000003872642-p0_tmplav1_av1-1712914652040.ts?pts=118803600&txl=171291465593

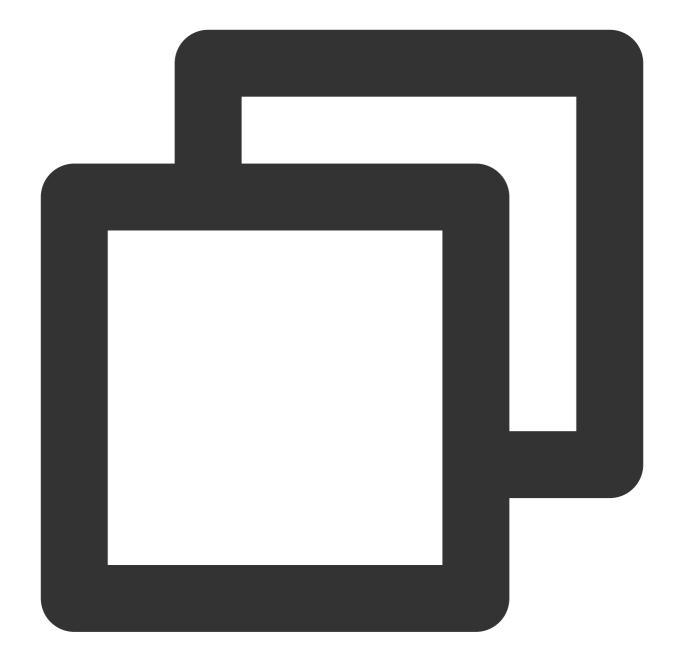


```
#EXT-OATCLS-SCTE35:/AAqAAAAAAAAAAAADwUAAAABAPCAABSZcAAAAAAABcABfA=
#EXT-X-CUE-OUT:15
#EXTINF:4.000, no desc seg 11035049
6594D5C2000003872642-p0_tmplav1_av1-1712914652173.ts?pts=118815570&txl=171291465638
#EXT-X-CUE-OUT-CONT:ElapsedTime=4,Duration=15,SCTE35=/AAgAAAAAAAAAAAAAAAABAPCAAB
#EXTINF:4.000, no desc seq 11035050
6594D5C2000003872642-p0_tmplav1_av1-1712914656173.ts?pts=119175570&tx1=171291466081
#EXT-X-CUE-OUT-CONT:ElapsedTime=8,Duration=15,SCTE35=/AAgAAAAAAAAAAAAAAAABAPCAAB
#EXTINF:4.000, no desc seq 11035051
6594D5C2000003872642-p0 tmplav1 av1-1712914660173.ts?pts=119535570&txl=171291466429
#EXT-X-CUE-OUT-CONT:ElapsedTime=12,Duration=15,SCTE35=/AAgAAAAAAAAAAAAAAAAABAPCAA
#EXTINF:3.000, no desc seq 11035052
6594D5C2000003872642-p0_tmplav1_av1-1712914664173.ts?pts=119895570&txl=171291466821
#EXT-X-CUE-IN
#EXTINF:0.834, no desc seq 11035053
6594D5C2000003872642-p0_tmplav1_av1-1712914667173.ts?pts=120165570&txl=171291467123
```

Personalized manifest

Here is an example of the personalized HLS master manifest generated by StreamPackage:





#EXTM3U

#EXT-X-VERSION:3

#EXT-X-INDEPENDENT-SEGMENTS

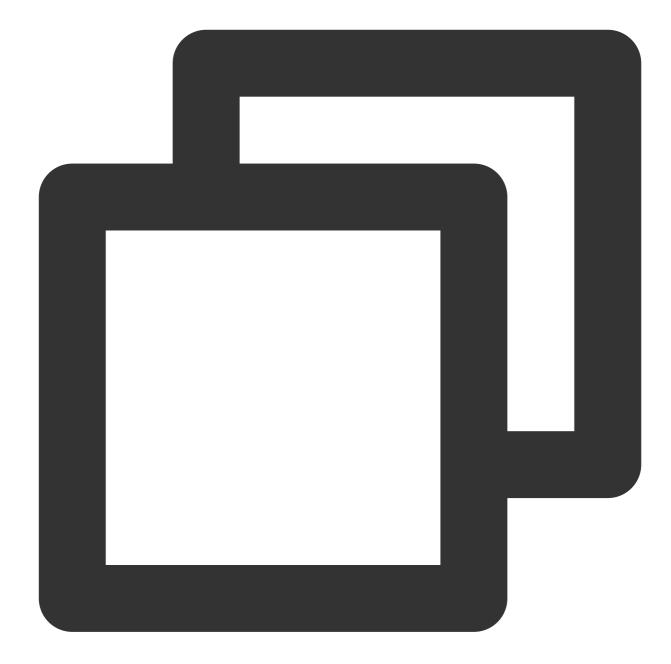
#EXT-X-STREAM-INF:PROGRAM-ID=0, BANDWIDTH=500000, RESOLUTION=640x360

../../manifest/018ec77ac9b309dc0f327e4b2d86/31bfddb8b8b73de51338eb764b3621c0/tx_ssa

- #EXT-X-STREAM-INF:PROGRAM-ID=0,BANDWIDTH=2000000,RESOLUTION=960x540
- ../../manifest/018ec77ac9b309dc0f327e4b2d86/31bfddb8b8b73de51338eb764b3621c0/tx_ssa
- #EXT-X-STREAM-INF:PROGRAM-ID=0,BANDWIDTH=3000000,RESOLUTION=1280x720
- ../../manifest/018ec77ac9b309dc0f327e4b2d86/31bfddb8b8b73de51338eb764b3621c0/tx_ssa

Here is an example of the personalized HLS media manifest generated by StreamPackage:





```
#EXTM3U
#EXT-X-VERSION:3
#EXT-X-MEDIA-SEQUENCE:11035046
#EXT-X-TARGETDURATION:4
#EXTINF:4.000, no desc seq 11035047
http://251009588.ap-mumbai.streampackage.srclivepull.myqcloud.com/v1/018c8bc8788509
#EXTINF:0.133, no desc seq 11035048
http://251009588.ap-mumbai.streampackage.srclivepull.myqcloud.com/v1/018c8bc8788509
#EXT-OATCLS-SCTE35:/AAgAAAAAAAAAAAWUAAAABAPCAABSZcAAAAAAABcABfA=
#EXT-X-CUE-OUT:15
#EXT-X-DISCONTINUITY
```



#EXTINF:2.000, http://251009588.ap-mumbai.streampackage.srclivepull.myqcloud.com/v1/ssai/segment/0 #EXTINF:1.000, http://251009588.ap-mumbai.streampackage.srclivepull.myqcloud.com/v1/ssai/segment/0 #EXT-X-CUE-IN #EXT-X-DISCONTINUITY #EXTINF:0.834, no desc seq 11035053 http://251009588.ap-mumbai.streampackage.srclivepull.myqcloud.com/v1/018c8bc8788509

Channel Linear Assembly Introduction

Last updated : 2024-06-05 18:03:51

StreamPackage Channel Assembly is a service that converts multiple video-on-demand (VOD) and live streaming sources into linear streaming channels, arranged in the order set by the user. It also supports the insertion of advertisements. A typical use case is the implementation of FAST (Free Ad-Supported Streaming TV) channels. This feature mainly includes the following modules:

1. Source Location: The addresses of video on demand (VOD) / live streaming sources can be stored in the 'Source Location' to support access to the corresponding sources.

2. Channel: Channels are the basic configuration for StreamPackage Channel Assembly.

3. Program: By adding a 'Program' to the 'Channel' and scheduling it, the corresponding live stream is output.

Source Location

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Source URLs can be stored in the Source Location for accessing the respective VOD / live streaming sources in subsequent steps.

Prerequisites

Please prepare the sources in advance and record the corresponding access URLs.

Notes

After maintaining the URLs in StreamPackage, for a VOD Source, StreamPackage will access your URL, pull content for processing and caching; for a Live Source, StreamPackage will only access the URL of the Live Source when it is used by a channel.

Source Location

Create Source Location

1. Log in to Tencent Cloud StreamPackage Console, choose **Channel Assembly** > Source Locations, and click **Create**.

000000000000000000000000000000000000000				
StreamPackage	← Cr	eate Source Location		
☑ Channel Management		Source location configu	ration ()	
Harvest Jobs		Name 🕢	demo_source_name	\odot
Channel ^ Assembly			The name can only contain digits, letters, underscores (_), and hyphens (-), wi	
Source Locations		Base URL 🚯 •	https://domain.com	⊘
Channels			The URL must be in standard format prefixed with $\tp::// or \tp:://.$	
		Segment delivery server	r configurations③	
		Use segment delivery servers		
		Default segment base URL	https://cdn.com	\odot
			The URL must be in standard format prefixed with http:// or https://.	
		Segment delivery config	gurations	
		Use StreamPackage to deliver content segments		
		Confirm Cancel	1	

2. Enter Name and Base URL.

3. If you wish to distribute a Source through your CDN acceleration domain name, please turn on the **Use segment delivery servers** toggle, and enter the corresponding URL.

 By default, all resources under Source Location are distributed after being retrieved by StreamPackage. If you don't require resources under Source Location to be retrieved from StreamPackage, please turn off the Use StreamPackage to deliver content segments toggle.

5. Click **Create** to complete the creation of the Source Location.

View Source Location

1. Log in to Tencent Cloud StreamPackage Console, choose **Channel Assembly**> Source Locations, to view all existing Source Locations. And you can search for a specific Source Location by entering its name or ID in the top right corner of the page.

StreamPackage	Source Locations	🔇 Mumbai 👻						
Channel Management	Create	Delete						Search by Source Location Name or ID
Harvest Jobs	Name \$		ID	URL		Created Time \$	Last Modified \$	Operation
Channel ^ Assembly	demo_so	urce_name	664FFD9300001C5EEF64	http://	16	2024-05-24 10:38:11	2024-05-24 11:40:52	Info Edit Delete
Source Locations			664D697600001C5EEF60	http://	nĒ	2024-05-22 11:41:42	2024-05-22 14:35:55	Info Edit Delete
Channels			664329EC00006D9454E3	https:/		2024-05-14 17:07:56	2024-05-17 14:19:29	Info Edit Delete

2. Click on a Source Location to view its basic information, as well as the VOD Sources and Live Sources created under this Source Location.



StreamPackage	
Channel Management	Information Vod Sources Live Sources
Harvest Jobs	Source location information
Channel ^ Assembly	Name * demo_source_name
Source Locations	ID 664FFD9300001CSEEF64 ID
· Channels	Base URL + http://
	Source delivery server configuration
	Default segment base URL CLOSE
	Segment delivery configurations
	Use StreamPackage to deliver content segments OPEN

VOD Source:

Channel Management	Information Vod Sources	Live Sources			
Harvest Jobs	Add VOD Source	Delete			Search by VOD Source Name or ID
Channel ^ Assembly	Name \$	D	Created Time \$	Last Modified 🗘	Operation
Source Locations	demo_vod	664FFE5800001D19F651	2024-05-24 10:41:28	2024-05-24 11:42:20	Info Edit Delete
Channels	共 1 条				10 ▼ 条/页 📧 ∢ 1 /1]

Live Source:

StreamPackage	demo_source_name				
E Channel	Information Vod Sources	Live Sources			
Management	Add Live Source	Delete			Search by Live Source Name or IE
Harvest Jobs					
Channel ^ Assembly	Name \$	ID	Created Time \$	Last Modified \$	Operation
Source Locations	demo_live	6650053200001C4DD58F	2024-05-24 11:10:42	2024-05-24 11:40:52	Info Edit Delete
Channels	共 1 条				10 - 条/页 🖂 🔞 1 /1

Delete Source Location

Delete a single source location

In the list, select a source location and click **Delete** to delete the selected Source Location.

StreamPackage	Source Locations	s 🔇 Mumbai 🔻						
Channel Management	Create	Delete						Search by Source Location Name or ID
Ad Insertion Configurations	Nam	e \$	ID	URL		Created Time \$	Last Modified \$	Operation
Harvest Jobs			6658587E0000516CE746 1	http://	16	2024-05-30 18:44:14	2024-05-30 18:46:52	Info Edit Delete
∃≟ Channel ^ Assembly	demo	_source_name	664FFD9300001C5EEF64	http:/.	jā.	2024-05-24 10:38:11	2024-05-24 11:40:52	Info Edit Delete
Source Locations			664D697600001C5EEF60 1		ā	2024-05-22 11:41:42	2024-05-22 14:35:55	Info Edit Delete

Batch delete source locations

Select the source locations you wish to delete and click **Delete** to batch delete multiple source locations.

StreamPackage	Source Locations S Mumbai >					
Channel Management	Create Delete				Sear	ch by Source Location Name or ID
I Harvest Jobs	Name \$	ID	URL	Created Time \$	Last Modified \$	Operation
Channel ^ Assembly	demo_source_name	664FFD9300001C5EEF64 1	http://)1 🕞	2024-05-24 10:38:11	2024-05-24 11:40:52	Info Edit Delete
Source Locations		664D697600001C5EEF60 1		2024-05-22 11:41:42	2024-05-22 14:35:55	Info Edit Delete
Channels		664329EC00006D9454E3		2024-05-14 17:07:56	2024-05-17 14:19:29	Info Edit Delete

Note:

A Source Location can only be deleted if there are no sources under it.

Source

A Source can be a VOD (Video On Demand) or live streaming source, composed of multiple different package configurations, with a single source supporting up to 4 package configurations. Currently, StreamPackage Channel Assembly only supports multi-bitrate HLS, not single-bitrate HLS. And other packaging formats like DASH will gradually be supported in the future.

Create a Source

1. Log in to Tencent Cloud StreamPackage Console, choose **Channel Assembly** > Source Locations, and select a created source location.

2. Depending on your needs, select the Vod Sources tab and click **Add VOD Source**; or select the Live Sources tab and click **Add Live Source**.

3. Enter the **Source name**.

4. In Package configurations, enter the **Source group name**, select the **Type**, and enter the **Relative path** accessed by the Source (relative to the URL of the Source Location).

- 5. If you need more Package configurations, click **Add Configuration** to add and enter the relevant information.
- 6. Click **Confirm** to complete the creation.

000000000000000000000000000000000000000				
StreamPackage	← Create			
전 Channel Management	VOD Source①			
🗄 Harvest Jobs	Name () • demo_vod		\odot	
Channel ^ Assembly				
Source Locations	Package configurations	D		Add Configuration
Channels				
	✓ Source group 1			G
	Source group name ④	• group1	\odot	
	Туре 🛈	HLS v		
	Relative path 🕥 *	/static/vod/demo.m3u8	\odot	
	• Source group 2			C
	Source group name ④	• group2	\odot	
	Туре 🛈	HLS v		
	Relative path () •	/static/vod/demo_4k.m3u8	\odot	
	Confirm Cancel			

Note:

Different source groups are mainly used to group different packaging of the same source. For example, different packaging formats (HLS/DASH) or different codec (AVC/HEVC) or different resolutions (4k/8k) of the same source. If the groups are not distinct bitrates or formats of the same video file, undefined behavior errors may occur. **Note:**

After creation, for a VOD Source, StreamPackage will access your URL, pull content for processing and cache it. If there are any errors during the VOD Source processing, you can view the specific error messages on the **Alert** page.

Channel Pa Management	ackage Configuration Alerts			
Harvest Jobs	Alerts (11)		Time Zone UTC+08:00 > 2024-05-24 00:00:00 ~ 2024-05-24 10:43:56	Search by Message Q Search
Channel ^ Assembly	Code Ŧ	Category T	Message	Last Modified
Source Locations	20012	PLAYBACK_WARNING	https://domain.com/static/vod/demo.m3u8 request response http 403.	2024-05-24 10:43:28
Channels	20012	PLAYBACK_WARNING	https://domain.com/static/vod/demo_4k.m3u8 request response http 403.	2024-05-24 10:43:04
	20012	PLAYBACK_WARNING	https://domain.com/static/vod/demo.m3u8 request response http 403.	2024-05-24 10:43:04
	20012	PLAYBACK_WARNING	https://domain.com/static/vod/demo.m3u8 request response http 403.	2024-05-24 10:42:43
	20012	PLAYBACK_WARNING	https://domain.com/static/vod/demo_4k.m3u8 request response http 403.	2024-05-24 10:42:43
	20012	PLAYBACK_WARNING	https://domain.com/static/vod/demo_4k.m3u8 request response http 403.	2024-05-24 10:42:19
	20012	PLAYBACK_WARNING	https://domain.com/static/vod/demo.m3u8 request response http 403.	2024-05-24 10:42:19
	20012	PLAYBACK_WARNING	https://domain.com/static/vod/demo_4k.m3u8 request response http 403.	2024-05-24 10:41:58
	20012	PLAYBACK_WARNING	https://domain.com/static/vod/demo.m3u8 request response http 403.	2024-05-24 10:41:58
	20012	PLAYBACK_WARNING	https://domain.com/static/vod/demo.m3u8 request response http 403.	2024-05-24 10:41:29
	共 11 条			10 ▼ 条/页 × ∢ 1 /2页

For a Live Source, StreamPackage will only access the URL of the Live Source when it is used by a channel. Adding a Live Source will not generate any alert; Alerts are only generated when this Live Source is used by a Channel and errors occur.

View Source

1. Log in to Tencent Cloud StreamPackage Console, choose **Channel Assembly**> Source Locations, and click on an created Source Location.

2. Select the Vod Sources tab to view all Vod Sources

Channel Management	Information Vod Sources	Live Sources			
I Harvest Jobs	Add VOD Source	Delete			Search by VOD Source Name or ID
Channel ^ Assembly	Name \$	ID	Created Time \$	Last Modified \$	Operation
Source Locations	demo_vod	664FFE5800001D19F651	2024-05-24 10:41:28	2024-05-24 11:42:20	Info Edit Delete
Channels	共1条				10 ▼ 条/页 📧 🖛 1 /1页

3. Select the Live Sources tab to view all Live Sources

Channel In Management	nformation Vod Sources Li	ve Sources			
Harvest Jobs	Add Live Source De	iete			Search by Live Source Name or II
Channel ^	Name \$	ID	Created Time \$	Last Modified \$	Operation
Source Locations	demo_live	6650053200001C4DD58F 🛅	2024-05-24 11:10:42	2024-05-24 11:40:52	Info Edit Delete
Channels	共 1 条				10 - 条/页 🖂 4 1 /1]

4. Click on the Source to view its details.

전 Channel Management	Package Configuration Alerts•			
Harvest Jobs	Package Configurations (2)			
☑ Channel ^ Assembly	Source group name	Туре Т	Relative path	URL
Source Locations	group1	HLS	3u8 12	http:/
Channels	group2	HLS	n3u8 Г	http://
	共 2 条			10 ▼ 条/页 🖂 ◀ 1 /1页

Delete Source

1. Delete a single source

In the list, select a source and click **Delete** to delete a single source.

StreamPackage						
점 Channel	Informat	tion Vod Sources	Live Sources			
Management		Add VOD Source	Delete			Search by VOD Source Name or II
☑ Channel ^ Assembly		Name \$	ID	Created Time \$	Last Modified \$	Operation
Source Locations		demo_vod1	6650469A0000A8DD0CA7	2024-05-24 15:49:46	2024-05-24 15:49:47	Info Edit Delete
Channels		demo_vod	665040170000DD0EC605	2024-05-24 15:21:59	2024-05-24 15:22:32	Info Edit Delete
		共 2 条				10 - 条/页 🖂 🕴 1 /13

2. Batch delete sources

Select the sources you wish to delete and click **Delete** to batch delete multiple sources.

Channel	Information	Vod Sources	Live Sources			
Management		Add VOD Source	Delete			Search by VOD Source Name or IE
Channel ^ Assembly		Name 🕏	ID	Created Time \$	Last Modified ¢	Operation
Source Locations		demo_vod1	6650469A0000A8DD0CA7	2024-05-24 15:49:46	2024-05-24 15:49:47	Info Edit Delete
Channels		demo_vod	665040170000DD0EC605 🖺	2024-05-24 15:21:59	2024-05-24 15:22:32	Info Edit Delete
		共 2 条				10 ▼ 条/页 🖂 ◀ 1 /1页

Note:

A source cannot be deleted if it is being used by a Channel.

Channel

Last updated : 2024-06-05 18:03:51

A Channel is the basic configuration for Channel Assembly in StreamPackage. By adding programs to a channel and scheduling them, the system outputs the corresponding live stream.

Channels have the following two types:

Basic: Basic Channel; supports only VOD Source, not Live Source.

Standard: Standard Channel; supports both VOD Source and Live Source.

Channels have the following two playback modes:

Loop: Executes cyclically according to the 'Program Scheduled List'.

Linear: Executes in linear sequence according to the 'Program Scheduled List'.

Prerequisites

For the Content Source used in the Channel, the relevant configuration has been completed.

Create Channel

1. log in to the Tencent Cloud StreamPackage Console, choose Channel Assembly > Channels, click Create.

StreamPackage	Channels 🔇 Mumbai 👻
☑ Channel Management	Create Delete Search by
Ad Insertion Configurations	□ Name ‡ ID State T Tier T Playback m T Created Time ‡ Operation
Harvest Jobs	暂无数据
E Channel ^ Assembly	共 0 条 10 ▼ 条/页 📕
Source Locations	
Channels	

2. Fill in the channel settings

StreamPackage	← Create	channel			
전 Channel Management	0	Set channel details	Channel details		
Harvest Jobs		uetails	Name 🛈 •	demo_channel	\odot
Channel ^ Assembly	2	Configure outputs	Hand U	Channel name can only contain digits, letters, and underline, with a length of	
Source Locations			Tier 🚯 *	Basic	•
Channels			Playback mode () •	Linear	r -
			Filler slate		
			Source location (demo_source_name	· Ø
			VOD source 🚯	demo_vod	· Ø
			Next		
			INCAL		

Name: Enter the channel name.

Tier: Choose the channel type, **Basic** or **Standard**. Basic channel supports only VOD and does not support Live. Standard channel supports both VOD and Live.

Playback mode: Choose the playback mode, **Loop** or **Linear**. Loop will execute cyclically according to the Program Scheduled List. Linear will execute in sequence according to the Program Scheduled List.

Filler Slate: If you have chosen a linear type channel, then you need to select the Source Location and **VOD Source** in the Filler Slate as the filler content. When a linear type channel has no program to run, or there are gaps between programs, the channel will use the selected Filler Slate to fill in and play.

3. Click on Next to go to the Configure outputs page

3.1 Click on Add, in the Output details section:

Manifest name: Enter the name of this output's manifest.

Format type: Select the output format.

Source group name: Choose the source group to use.

3.2 In the Manifest settings section:

Manifest window duration: Enter the duration of the manifest window, currently supporting 30-3600 seconds.

Ad markup type: Select the ad marker type for the manifest.

Click Save to save the configuration for this output.

StreamPackage	← c	Create channel		
Channel Management		Set channel	← Output	
Harvest Jobs		details	Output details 🛈	
Channel ^ Assembly		2 Configure outputs	Manifest name () •	output_1
Source Locations				Manifest name can only contain digits, letters, and underline, with a length of 1 to 32 chars.
Channels			Format type () •	HLS
			Source group name 🚯 •	group1 .*
			Manifest settings	
			Manifest window duration (sec) (- 60 +
			Ad markup type 🕥	Date Range 👻
			Save	

3.3 If you need more outputs, click on Add and repeat the above actions. A channel can support up to 4 outputs.

StreamPackage	← Create channel				
 Channel Management Harvest Jobs 	Set channel details	Add			
Channel ^	2 Configure outputs	Manifest Name	Format type	Source group	Action Edit Delete
Source Locations Channels		output_2	HLS	group2	Edit Delete
		previous Save			

4. Click **Save** to save the channel settings.

Note:

Up to 100 Channels can be created.

View Channel

1. Log in to Tencent Cloud StreamPackage Console, enter **Channel Assembly** Channels, where you can see all the channels that have been created.

2. Select a channel, and click on the Schedule Tab to view the current channel's program schedule list.

In the **Time Window**, you can view and adjust the time frame of the program schedule list, which is set to 4 hours by default.

In the **Display time**, you can view and adjust the timezone used by the program schedule list, which defaults to the local time.

Channel Management	Schedule	Channel Details	Outputs Programs	Alerts					
Harvest Jobs		Add program	Delete			Time Window:	4 hour v	Display time:	Local (UTC+08:00)
Channel ^ Assembly									
Source Locations		Program name	Source type	Source name	Source location	Start time	Approximate duration	Schedule ad bre	aks Operation
Channels		program1	VOD	demo_vod	demo_source_name	2024-05-24 11:42:0	01 300 second	0	Info Edit Delete
		program2	VOD	demo_vod	demo_source_name	2024-05-24 11:47:0	300 second	0	Info Edit Delete
		Filler slate	VOD	demo_vod	demo_source_name	2024-05-24 11:52:0	01 2592000 second	0	Info Edit Delete
		共3条						10 - 条/页	8 4 1 /1页

3. Select a channel, on the Outputs Tab, you can view all Outputs of the current channel. Click the copy button to copy the Playback URL and paste it into the player for playback.

	Schedule	Channel Details	Outputs	Programs Ale	erts			
Channel	Schedule	Onarmer Details	Outpute	riograms Aie	n 13			
Management								Search by Manifest Name
Harvest Jobs								
Channel ^ Assembly		Manifest name		Format type T	Source group	Manifest window	Ad markup type T	Playback url
Source Locations		output1		HLS	group1	60	Date Range	http://national.or
Channels								6C2552/output1.m3u8
								http://
		output2		HLS	group2	60	Date Range	package.srclivepull.myqcloud.cr hannel_assembly 6C2552/output2.m3u8

4. Select a channel, on the **Programs** Tab, you can view all Programs that have been added to the current channel.

Channel Management	Schedule	Channel Details	Outputs Programs	Alerts				
Harvest Jobs		Delete						Search by program nan
Channel ^ Assembly		Program Name	Source type	Source name	Source location	Transition type	Schedule ad breaks	Operation
Source Locations		program2	VOD	demo_vod	demo_source_name	Relative	0	Info Edit Delete
Channels		program1	VOD	demo_vod	demo_source_name	Relative	0	Info Edit Delete
		共 2 条					10 ▼ 条/页	H H 1 /1页

Note:

The Programs page is different from the Schedule page. The Schedule page displays the orchestration relationship; the Programs page displays all programs under the channel. For example, after a program of a linear channel has been finished, it cannot be seen on the Schedule page, but it can be found on the Programs page.

5. Select a channel, on the **Alerts** Tab, you can view all alert/error messages of the current channel's programs. Additionally, you can filter by time period or search for a specific Program.

StreamPackage	← dem	o_channel (IDLE)													
전 Channel	Schedule	Channel Details	Outputs	Programs	Alerts										
Management		Programs with alerts				Time Zone	UTC+08:00 -	2024-05-24 00:00:00	~ 2024-05-24 11:53:18	Search		Search by Pr			
Harvest Jobs															
🖂 Channel 🛛 🗠		Program			Catego	ries		Count			Last Modif	ied \$			
Assembly								暂无数据							
Source Locations															
Channels		共 0 条									10 - 条/]		1	/1页)
		Program:													
		Code			Category			Message	e		Last modifie	ed \$			
								No data yet							
		共 0 条									10 - 条/3		1	/1页)
															-

Delete Channel

Delete a single channel

Select a channel from the list, and click **Delete** to delete a single channel.

StreamPackage	Channels 🔇 Mumbai 🔻						
Channel Management	Create	elete					Search by Channel Name
Harvest Jobs	Name \$	ID	State T	Tier T	Playback mode T	Created Time \$	Operation
Channel ^ Assembly	demo_channel	66500C7800001C6C2552	IDLE	Standard	Linear	2024-05-24 11:41:44	Info Edit Start Delete
Source Locations			IDLE	Standard	Linear	2024-05-23 10:34:28	Info Edit Start Delete
Channels			IDLE	Basic	Loop	2024-05-23 10:02:44	Info Edit Start Delete

Batch delete channels

Select the channels you want to delete, and click **Delete** to batch delete multiple channels.

StreamPackage	Channels 🕲 Mumbai 👻						
Channel Management	Create	lete					Search by Channel Name
Harvest Jobs	- Name ‡	ID	State T	Tier Ť	Playback mode T	Created Time \$	Operation
Channel ^ Assembly	demo_channel	66500C7800001C6C2552	IDLE	Standard	Linear	2024-05-24 11:41:44	Info Edit Start Delete
Source Locations			IDLE	Standard	Linear	2024-05-23 10:34:28	Info Edit Start Delete
Channels		6	IDLE	Basic	Loop	2024-05-23 10:02:44	Info Edit Start Delete

Note:

Channels that are running or have an unfinished program cannot be deleted.

Edit Channel



Select a channel from the list, and click Edit to enter the editing page.

StreamPackage	Channels S Mumbai -						
절 Channel Management	Create	elete					Search by Channel Name
Harvest Jobs	Name \$	ID	State T	Tier T	Playback mode 🝸	Created Time \$	Operation
Channel ^ Assembly	demo_channel	66500C7800001C6C2552	IDLE	Standard	Linear	2024-05-24 11:41:44	Infc Edit Start Delete
Source Locations			IDLE	Standard	Linear	2024-05-23 10:34:28	Info Edit Start Delete
Channels		6	IDLE	Basic	Loop	2024-05-23 10:02:44	Info Edit Start Delete

Note :

Channels that are running cannot be edited.

Start Channel

Click on Channel Assembly in the left sidebar, select Channels, and for the channel you wish to launch, click Start.

StreamPackage	Channels	🔇 Mumbai 👻						
Channel Management	Cr	eate Dek	ste					Search by Channel Name
Harvest Jobs		Name \$	ID	State T	Tier T	Playback mode T	Created Time \$	Operation
Channel ^ Assembly		demo_channel	66500C7800001C6C2552	IDLE	Standard	Linear	2024-05-24 11:41:44	Info Edit Start Delete
Source Locations		, and	60	IDLE	Standard	Linear	2024-05-23 10:34:28	Info Edit Start Delete
Channels		•?	66. Jonassononara 501	IDLE	Basic	Loop	2024-05-23 10:02:44	Info Edit Start Delete

Alternatively, enter the channel page and click Start in the upper right corner.

Harvest Jobs Add program Delete Add program Delete Delete	time: Local (UTC+08:00)
	Local (010+08.00)
Assembly Program name Source type Source name Source location Start time Approximate duration Sched	
Source Locations Program name Source type Source name Source location Start time Approximate duration Sched	le ad breaks Operation
Channels VOD demo_vod demo_source_name 2024-05-24 11:42:01 300 second 0	Info Edit Dele
program2 VOD demo_vod demo_source_name 2024-05-24 11:47:01 300 second 0	Info Edit Dele
Filler slate VOD demo_vod demo_source_name 2024-05-24 11:52:01 2592000 second 0	Info Edit Del

Note:

When a channel is started and is in the **Running** state, channel running fees will be incurred. For billing instructions, see Billing Instructions: Channel Operation Fees.



Stop Channel

Click on **Channel Assembly** in the left sidebar, select **Channels**, and for the channel you wish to stop, click **Stop**.

StreamPackage	Channe	Is 🔇 Mumbai 👻						
전 Channel Management		Create	oto					Search by Channel Name
➡ Harvest Jobs		Name \$	ID	State T	Tier T	Playback mode 7	Created Time \$	Operation
⊡ Channel ^ Assembly		demo_channel	66500C7800001C6C2552	Running	Standard	Linear	2024-05-24 11:41:44	Info Edi Stop Pelete
Source Locations			6	IDLE	Standard	Linear	2024-05-23 10:34:28	Info Edit Start Delete
Channels			1000	IDLE	Basic	Loop	2024-05-23 10:02:44	Info Edit Start Delete

Alternatively, enter the channel page and click **Stop** in the upper right corner.

던 Channel Management	Schedule	Channel Details	Outputs Programs	Alerts					
Harvest Jobs		Add program	Delete 🗘			Time Window:	4 hour 👻	Display time: Loca	I (UTC+08:00)
Channel ^ Assembly									
Source Locations		Program name	Source type	Source name	Source location	Start time	Approximate duration	Schedule ad breaks	Operation
Channels		program1	VOD	demo_vod	demo_source_name	2024-05-24 11:42:01	300 second	0	Info Edit Delete
		program2	VOD	demo_vod	demo_source_name	2024-05-24 11:47:01	300 second	0	Info Edit Delete
		Filler slate	VOD	demo_vod	demo_source_name	2024-05-24 11:52:01	2592000 second	0	Info Edit Delete
		共3条						10 ▼ 条/页 🖂 🔻	1 /1页

Program

Last updated : 2024-06-05 18:03:51

A program is the smallest unit of operation for a channel. The channel outputs live streaming according to programs configured by the user. **There are two types of programs:**

Relative: Plays relative to other programs. Only programs that use a VOD source can be set to this type.

Absolute: Specifies an absolute time to start the program. Only linear-type channels support absolute programs. If the program uses a live source, it can only be specified as an absolute type.

Create Program

1. For a channel, in the Schedule tag page click Add program.

Channel Management	Schedule	Channel Details	Outputs Programs	Alerts					
⊒ Harvest Jobs		Add program De	lete 🗘			Time Window:	thour 👻	Display time:	Local (UTC+08:00)
Channel ^									
Source Locations		Program name	Source type	Source name	Source location	Start time	Approximate duration	Schedule ad br	eaks Operation
Channels		Filler slate	VOD	demo_vod	demo_source_name	2024-05-24 11:03:20	14400 second	0	Info Edit Delete
		共 1 条						10 ▼ 条/页	日 4 1 /1页

2. Enter the **Name** in the **Program details** module, select the **Source type**, and choose the **Source location** and **Source**.

3. In the **Playback configuration** module, select the corresponding type.

If you select **Relative**, choose the relative program and the relative relationship.

StreamPackage	← Add program			
Channel Management	Program details			
I Harvest Jobs	Name (i) •	program_1	\odot	
Channel ^ Assembly		Channel name can only contain digits, letters, and underline, with a le		
Source Locations	Source type (3)	O VOD Live		
Channels	Source location (demo_source_name	* 📀	
	VOD source (demo_vod	• 📀	
	Playback configu	uration (j)		
	Transition type 🕥	Relative	Y	
	Relative position (After program Before program		
	Relative program ()	请选择	×	
	Clip range (O Use entire VOD source O Specify a clip range		
	Ad breaks 🛈			Add ad break
	Save			
	an a			

If you select Absolute, select the scheduling time for the program.

StreamPackage	← Add program		
Channel Management	Program details		
🗄 Harvest Jobs	Name () •	program_1	0
Channel ^ Assembly		Channel name can only contain digits, letters, and underline, with a length of 1	
Source Locations	Source type (1)	VOD Live	
Channels	Source location (demo_source_name v	0
	VOD source (demo_vod 👻	0
	Playback configu	ration 🕄	
	Transition type (Absolute	v
	Scheduled start time(Local Time) 2024-05-24 11:07:21	
	Clip range 🕥	O Use entire VOD source O Specify a clip range	
	Ad breaks 🕄		Add ad break
	Save		

Note:

1. If the duration of the previous program exceeds the scheduling time of this program, StreamPackage will stop the previous program at the time boundary and immediately start this program.

2. If there are gaps between scheduling programs, StreamPackage will cyclically use the channel's specified Slate Source to fill these gaps.

If the program specifies a VOD type source, in the **Clip range** option, you can select **Use entire VOD source** to play the entire VOD file; if you select **Specify a clip range**, it means playing the VOD file from 0 seconds to the specified duration.

StreamPackage	Add program	
Channel Management	Program details	
Harvest Jobs	Name () · program_1 ②	
Channel ^ Assembly	Channel name can only contain digits, letters, and underline, with a length of 1 to 32 chars.	
Source Locations	Source type 🕐 🔍 VOD 💿 Live	
Channels	Source location () demo_source_name * 📀	
	WOD source () demo_vod v 📀	
	Playback configuration ()	
	Transition type ① Absolute *	
	Scheduled start time(Local Time) 2024-05-24 11:07:21	
	Clip range () Use entire VOD source Specify a clip range	
	End offset in milliseconds () - 30000 +	

If the program specifies a live type Source, please enter the program **Duration** (60-86400 seconds), and the **Scheduled start time**.

StreamPackage	← Add program
Channel Management	Program details
Harvest Jobs	Name () · demo_live
Channel ^ Assembly	Channel name can only contain digits, letters, and underline, with a length of 1 to 32 chars.
Source Locations	Source type () VOD O Live
Channels	Source location () demo_source_name v
	Live source () demo_live * 📀
	Playback configuration Duration in milliseconds - Transition type Absolute Scheduled start time(Local Time) 2024-05-24 11:11:53

4. If the Program specifies a VOD Source, then you can add an Ad break (programs using a Live source cannot add ad breaks).

Click **Add ad breaks**, select the **Slate source location** and **VOD source** for the ad break, set the time the ad break appears in the program, choose **Splice insert** or **Time signal** type, and fill in the corresponding parameters according to the SCTE-35 standard.

StreamPackage			
⊡ Channel	Ad breaks 🛈		
l Channel Management			
larvest Jobs	Slate source location name (demo_source_name	*
Channel ^ Assembly	VOD source (1)	demo_vod	Ŧ
Source Locations	Offset in milliseconds (- 0 +	
Channels			
	Message type 🚯	Splice insert	•
	Avail number (0	
		Values have to be between 0 and 256, inclusive.	
	Avails expected (1)	0	
		Values have to be between 0 and 256, inclusive.	
	Splice event ID (1	
		Must conform to section 9.7.3.1 of the SCTE-35 specification	
	Unique program ID 🕥	0	
		Values must be between 0 and 65536, inclusive.	

If you need more ad breaks, click **Add ad breaks** again and repeat the above steps. A single program can support up to 5 ad breaks. A channel can add up to 100 programs.

5. After entering the information, click Save to save the program.

Note:

The following situations will cause the addition of the program to fail:

- 1. The VOD source used by the program has compatibility issues.
- 2. The program is incompatible with other programs under the channel.
- 3. Insert before the currently running program.
- 4. The start time of an absolute type program is within the next 1 minute.
- 5. The current program will end within 10 seconds.

Note:

If the program has errors, you can view the specific information on the channel's Alert page.

Delete Program

Delete a single program

Select a channel, in the Schedule tab page, and click Delete to delete a single program.

Channel Management	Schedule	Channel Details	Outputs Programs	Alerts					
Harvest Jobs		Add program	Delete Ø			Time Window:	4 hour 💌	Display time:	Local (UTC+08:00)
☑ Channel ^ Assembly									
Source Locations		Program name	Source type	Source name	Source location	Start time	Approximate duration	Schedule ad bre	aks Operation
Channels		program1	VOD	demo_vod	demo_source_name	2024-05-24 11:42:	01 300 second	0	Info Edit Delete
		program2	VOD	demo_vod	demo_source_name	2024-05-24 11:47:	01 300 second	0	Info Edit Delet
		Filler slate	VOD	demo_vod	demo_source_name	2024-05-24 11:52:	01 2592000 second	0	Info Edit Delet
		共3条						10 - 条/页	1 /1页

Batch delete programs

Select the programs to delete and click **Delete** to batch delete multiple programs.

Channel Management	Schedule	Channel Details	Outputs Programs	Alerts						
I Harvest Jobs		Add program	Delete			Time Window:	4 hour 👻	Display time:	Local (UTC+	+08:00)
Assembly Source Locations		Program name	Source type	Source name	Source location	Start time	Approximate duration	Schedule ad bre	aks 0	Operation
Channels		yrogram1	VOD	demo_vod	demo_source_name	2024-05-24 11:42:0	01 300 second	0	Ir	nfo Edit Delete
		program2	VOD	demo_vod	demo_source_name	2024-05-24 11:47:0	300 second	0	lr	nfo Edit Delete
		Filler slate	VOD	demo_vod	demo_source_name	2024-05-24 11:52:0	2592000 second	0	Ir	nfo Edit Delete
		共 3 条						10 - 条/页	H 4	1 /1页 ▶

Note:

Filler slate is an auto-filled program and cannot be deleted. Programs that are running cannot be deleted.

Edit Program

Select a channel, in the **Schedule** tab page, and click **Edit** to enter the edit page.

Channel Management	Schedule	Channel Details	Outputs Programs	Alerts						
🖆 Harvest Jobs		Add program	Delete			Time Window:	4 hour v	Display time:	Local (UTC+08:00)	
Channel ^										
		Program name	Source type	Source name	Source location	Start time	Approximate duration	Schedule ad br	eaks Operation	
Source Locations Channels		program1	VOD	demo_vod	demo_source_name	2024-05-24 11:42:0	300 second	0	Info Edit	Delete
		program2	VOD	demo_vod	demo_source_name	2024-05-24 11:47:0	01 300 second	0	Info Edit	Delete
		Filler slate	VOD	demo_vod	demo_source_name	2024-05-24 11:52:0	2592000 second	0	Info Edit	Delete
		共3条						10 - 条/页	K K 1 /1	1页 🕨

Note:

For loop type channels, programs cannot be edited. You can delete it and then add a new program.