ApsaraVideo Live

User Guide

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User Guide

Product functions list

Console

Function	Description
ApsaraVideo Live CDN domain management	Supports creation and deletion of ApsaraVideo Live CDN domain names.
Live video transcoding setting	Creates different transcoding templates for different AppNames.
Live stream management	Queries real-time live streams and historical live streams.
Live stream blacklist management	Sets and deletes stream blacklists.
Set NotifyUrl	Sets the target URL the live stream information is pushed to.

API

Function	Description
Query online users	 Gets the number of online users of the RTMP live stream, Supports query by domain name or stream.
Query streaming blacklist	Gets the blacklist of the currently played live stream under the domain name.
Query stream control history	Gets the operation history of a live stream under a domain name or application.
Query the live stream frame rate and bit rate	 Gets the frame rate and bit rate history of a live stream, Supports query by domain name or stream.
Query streaming list	Views the information of all the streams being pushed under a specific domain name (or an application under a specified domain name).

Query streaming history	Views the streaming history of a domain name (or an app under the domain name) within a period of time.
Disable live streaming	Disables the push of a stream. You can set the time to resume the streaming.
Resume live streaming	Resumes the push of a stream.
Set NotifyUrl	Sets the target URL the live stream information is pushed to.

Resource quota limit

Live video CDN domain

You can create up to 20 live video CDN domains under each account. If you require more than 20 live video CDN domains, open a ticket to contact Alibaba Cloud technical support.

Concurrent live streams

Each live video CDN domain under each account can push up to 20 original (non-transcoded) live streams concurrently. If you enable the transcoding function, each CDN domain can push up to 10 transcoded live streams. If you require more than 20 live video CDN domains, **open a ticket** to contact Alibaba Cloud technical support.

Streaming

ApsaraVideo Live does not limit the stream bit rate. It supports common resolutions and corresponding bit rates.

We recommend that you set a bit rate not exceeding 4 Mbps to prevent buffering interference.

Domain name management

Manage a domain name

Add a domain name

Before creating an ApsaraVideo Live activity, you must add an ApsaraVideo Live domain name in the ApsaraVideo Live console.

Prerequisite

If you want to use ApsaraVideo Live service in China, confirm whether your domain name requires ICP record filing. In regions like **China East 2 (Shanghai)** and **China North 2 (Beijing)**, you must complete the ICP record filing. And in the **Singapore** region, you do not require to complete the ICP record filing. If the record-filing is pending, you must first apply for **Website record-filing**.

Procedure

Log on to the ApsaraVideo Live console.

The console checks the activation status of services on which the product depends. Follow the instructions on the status page.

Add a domain name.

Select the expected region.

Click Add New Domain.



Enter the new domain name and click Next step.

Add New Domain					\times
Daga info		Audit		Dana	
Base Info				Done	
Region:	China East 2	2 (Shanghai)			_
* Live domain name:	videolive-e	n.aliyun.com			
* Accelerating Area:	China			Ŧ	
			Next	step Ca	ncel
Add New Domain					×
Provide State		•P1		0	
Base Info		Audit		Done	
Accele Inform	erated doma mation is sul	ain name video omitted for au	olive-en.ali diting	yun.com	
Add a for CN	new domain i IAME binding,	name is comple view <mark>Binding tu</mark>	te to your d Itorial	omain name r	esolver
To lea	rn more, plea	se click here <mark>CD</mark>	N manual		
					OK

After the domain name is sucessfully configured, the domain name automatically configures the CDN live acceleration function. The live acceleration function is ready to use once the domain name completes CNAME binding.

Disable a domain name

Log on to the ApsaraVideo Live console.

Select the region in **Domains**.

Select the domain name, and click **Disable** at the right side.

Live Video Console	Current Billing Type: Bandwidth	urrent Billing Type: Bandwidth					
Domains	Domains Singapore China North 2 (1	Relling) China East 2 (Shanghai)			Refresh Add New Domain		
Streams							
Recording Indexes	Domain Name	CNAME 🞯	Creation Time	Status	2 Actions		
Snapshots	videolive-en.aliyun.com	videolive-en.aliyun.com.w.alikunlun.net	2017-11-13 17:52:07	Normal	Detail Disable Delete		
Resource Monitor	videolive.allyun.com	videolive.aliyun.com.w.alikunlun.net	2017-11-09 11:20:40	Normal	Detail Disable Delete		
	cc.aliyun.com	cc.aliyun.com.w.alikunlun.net	2017-10-28 15:39:09	Normal	Detail Disable Delete		

Click OK.

Shutdown domain	\times
(I) Are you sure you want to shutdown this domain?	
OK Cance	el

The current Status of the domain name is Disabled.

Live Video Console	Current Billing Type: Bandwidth	rrent Billing Type: Bandwidth						
Domains	Domains Singapore China North 2	Singapore China North 2 (Beijing) China East 2 (Shanghai)						
Streams								
Recording Indexes	Domain Name	CNAME 🕖	Creation Time	Status	Actions			
Snapshots	videolive-en.aliyun.com	videolive-en.aliyun.com.w.alikunlun.net	2017-11-13 17:52:07	Disabled	Detail Enable Delete			
 Resource Monitor 	videolive.aliyun.com	videolive.aliyun.com.w.alikunlun.net	2017-11-09 11:20:40	Normal	Detail Disable Delete			
	cc.aliyun.com	cc.aliyun.com.w.alikunlun.net	2017-10-28 15:39:09	Normal	Detail Disable Delete			

Enable a domain name

Log on to the ApsaraVideo Live console.

Select the region in **Domains**.

Select the domain name, and click **Enable** at the right side.

Live Video Console	Current Billing Type: Bandwidth	0			
Domains	Domains Singapore China North 2 (Beljing) China East 2 (Shanghai)			Refresh Add New Domain
Streams					
Recording Indexes	Domain Name	CNAME 🞯	Creation Time	Status	2 Actions
Snapshots	videolive-en.aliyun.com	videolive-en.aliyun.com.w.alikunlun.net	2017-11-13 17:52:07	Disabled	Detail Enable Delete
 Resource Monitor 	videolive.aliyun.com	videolive.aliyun.com.w.alikunlun.net	2017-11-09 11:20:40	Normal	Detail Disable Delete
	cc.aliyun.com	cc.aliyun.com.w.alikunlun.net	2017-10-28 15:39:09	Normal	Detail Disable Delete

Click OK.



The current Status of the domain name is Normal.

Live Video Console	Current Billing Type: Bandwidth	urrent Billing Type: Bandwidth						
Domains	Domains Singapore China Nort	h 2 (Beljing) China East 2 (Shanghai)			Refresh Add New Domain			
Streams								
Recording Indexes	Domain Name	CNAME 🞯	Creation Time	Status	Actions			
Snapshots	videolive-en.aliyun.com	videolive-en.aliyun.com.w.alikunlun.net	2017-11-13 17:52:07	Normal	Detail Disable Delete			
 Resource Monitor 	videolive.aliyun.com	videolive.aliyun.com.w.alikunlun.net	2017-11-09 11:20:40	Normal	Detail Disable Delete			
	cc.aliyun.com	cc.aliyun.com.w.alikunlun.net	2017-10-28 15:39:09	Normal	Detail Disable Delete			

Delete a domain name

A domain name can only be deleted when its status is **Disabled**.

Procedure

Log on to the ApsaraVideo Live console.

Select the region in **Domains**.

Click **Delete** at the right side of the domain which is disabled.

Live Video Console	Current Billing Type: Bandwidth	•				
Domains	Domains Singapore China North 2 (Beljing) China East 2 (Shanghai)			Refresh Add New Domain	
Streams						
Recording Indexes	Domain Name	CNAME 🞯	Creation Time	Status	2 Actions	
Snapshots	videolive-en.aliyun.com	videolive-en.aliyun.com.w.alikunlun.net	2017-11-13 17:52:07	Disabled	Detail Enable Delete	
 Resource Monitor 	videolive.aliyun.com	videolive.aliyun.com.w.alikunlun.net	2017-11-09 11:20:40	Normal	Detail Disable Delete	
	cc.aliyun.com	cc.aliyun.com.w.alikunlun.net	2017-10-28 15:39:09	Normal	Detail Disable Delete	

Click OK.



CNAME resolution

You can bind CNAME at www.net.cn website or other domain name registrars.

Procedure

Log on to the ApsaraVideo Live console.

Select the region.

Select the domain name and get the CNAME corresponding to the domain name.

Current Billing Type: Bandwidth	Current Billing Type: Bandwidth						
Domains Singapore China North 2 (Be	eljing) China East 2 (Shanghai)			Refresh	Add New Domain		
Domain Name	CNAME @	Creation Time	Status		Actions		
document4.aliyun.com	document4.aliyun.com.w.kunlunpi.com	2017-09-14 09:54:46	Normal	Deta	il Disable Delete		
cc.aliyun.com	cc.aliyun.com.w.alikunlun.net	2017-10-28 15:39:09	Normal	Deta	il Disable Delete		
videolive.aliyun.com	videolive.aliyun.com.w.alikunlun.net	2017-11-09 11:20:40	Normal	Deta	II Disable Delete		
videolive-en.aliyun.com	videolive-en.aliyun.com.w.alikunlun.net	2017-11-13 17:52:07	Normal	Deta	il Disable Delete		

Log on to the Domain console.

Click Domain Names.

Click Resolve.

	Domain	Domain Name List Go to Alibaba Clou	d DNS product list >>					Buy	Domain
•	Domain Names Bulk Operations	All To Be Renewed To Be Redee	rmed				Export Search Results	Export Dor	main List
-	Registrant Profiles	Domain Name:	Domain Name Type: All	 Date o 	f Registration:	-			
۲	Domain Transfer	Expiration Date:		Query					
-	Change Log	Domain Name	Domain Name Type	Status	Date of Registration (UTC) •	Expiration Date (UTC) •			Action
2		© 51ii.com	gTLD	Normal	Jul 19,2017 09:34:15	Jul 19,2018 09:34:15	Renew	Resolve	Manage

Click Add Record.

DNS	DNS Settings 51.ii.com							
DNS Server: vip7 alidns.com, vip8 alidns.com								
Searc	h for record.	Q						Add Record
	Туре	Host	Line(ISP)	Value	MX Priority	ΠL	Sta tus	Actions
	A	www	Default	114.55.48.61		2 minute(s)		Edit Disable Delete Remark
	CNAME	videolive	Default	videolive.aliyun.com.w.al ikunlun.net		10 minute(s)		Edit Disable Delete Remark
	А	gfdg	China Unicom	11.11.11.11		10 minute(s)		Edit Disable Delete Remark
	CNAME	@	Default	ew-2hlx8XXX.aliapp.co m		10 minute(s)		Edit Disable Delete Remark
	CNAME	document4	Default	document4.aliyun.com. w.kunlunpi.com		10 minute(s)		Edit Disable Delete Remark
	A	www	Default	120.55.21.95		30 minute(s)		Edit Disable Delete Remark



Add Record		×
Туре:	CNAME - Canonical name	
Host:	videolive-en .51ili.com (?)	
ISP Line:	Default - Return to the default value when th \checkmark (?)	
Value:	videolive-en.aliyun.com.w.alikunlun.net	
TTL:	10 minute(s) V	
	Confirm Ca	ancel

Select CNAME-Canonical name in Type.

Enter the secondary domain name of the streaming address in **Host**. For example, if the streaming address is videolive-en.aliyun.com, then the secondary domain name is videolive-en.

Enter the CNAME into Value of the domain name list.

- If it is a newly created domain name, the resolution does not require to refresh the DNS.
- Different data is cached on different DNSs. And, if the CNAME changes, it may take up to 48 hours to complete the updates.

Streaming management

Live streaming

A complete live video process includes collection, processing, encoding, packaging, streaming, transmission, transcoding, distribution, decoding, and playing steps. Streaming refers to the process of transmitting live content to the server using streaming tools and other content capturing softwares.

Procedure

Add a domain name.

Log on to the ApsaraVideo Live console.

Select the region in **Domains**.

Note: You can select **Singapore**, **China East 2 (Shanghai)** or **China North 2** (**Beijing)** in the ApsaraVideo Live console. After selecting a region, the stream is pushed to the corresponding streaming center. If you select **China East 2** (**Shanghai**) or **China North 2 (Beijing)**, the stream undergoes domestic video acceleration. If you select **Singapore**, the stream undergoes foreign video acceleration.



Enter the **Live domain name** and click **Next Step**. Your domain name is submitted for auditing.



Get the streaming URL.

Select the region in **Domains**.

Select the domain name and click **Detail** at the right side.

Live Video Console	Ve Current Billing Type: Bandwidth				
Domains Streams	Domains Singapore China North 2 (Beijing) China East 2 (Shanghai)			Refresh Add New Domain
Recording Indexes	Domain Name	CNAME 🖉	Creation Time	Status	2 Actions
Snapshots	videolive-en.aliyun.com	videolive-en.aliyun.com.w.alikunlun.net	2017-11-13 17:52:07	Normal	Detail Disable Delete
 Resource Monitor 	videolive.aliyun.com	videolive.aliyun.com.w.alikunlun.net	2017-11-09 11:20:40	Normal	Detail Disable Delete
	cc.aliyun.com	cc.aliyun.com.w.alikunlun.net	2017-10-28 15:39:09	Normal	Detail Disable Delete

In Base Information > Center streaming information, get authrntication URL.

Note: The authentication is enabled by default, you must use the **authrntication URL** for streaming. For details, see **Live authentication**.

Click **Go to generate authentication URL** at the right side of **Authentication settings**.



On the Generate authentication URL page, click Start to generate.

Click to copy the generated authentication URL.

Click OK.

The generated authentication URLrtmp://videocenter.alivecdn.com/AppName/StreamName?vhost=videoliveen.aliyun.com&auth_key=********can be used for streaming.

Generate auth	entication URL ×
Original URL:	rtmp://video-center.alivecdn.com/AppName/StreamName?vhos How to set streaming URL
Auth type:	Type A
Auth KEY:	abcd1234
Expire time:	1800 S Expire time need to be modified in authentication settings
URL authenticatio address:	Start to generate Click to copy rtmp://video-center.alivecdn.com/AppName/StreamName? vhost=videolive-en.alivun.com&auth_key=
	OK Cancel

Streaming operations.

Copy the streaming address to the streaming tool for the streaming operation.

Common streaming test tools are OBS official download, XSplit official download and FMLE official download.

AppName and StreamName

Live broadcasting address structure

A live video service address consists of three levels of live video management units, that is, the domain name (Domain), an application (AppName) and a live stream (StreamName). You can create multiple apps (AppName) under each domain name (Domain), and multiple live streams (StreamName) under each app.

AppName and StreamName can be edited and customized. Different values generate different streaming and playback addresses.

If an app is named aslive, for example, you can create multiple live streams underlive. The streaming addresses are then as follows:

```
rtmp://video-center.alivecdn.com/{live}/{3}?vhost={live video domain name}
rtmp://video-center.alivecdn.com/{live}/{1}?vhost={live video domain name}
```

rtmp://video-center.alivecdn.com/{live}/{2}?vhost={live video domain name}

You can also create multiple live streams for the app.

rtmp://video-center.alivecdn.com/{live1}/{Stream}?vhost={live video domain name} rtmp://video-center.alivecdn.com/{live2}/{Stream}?vhost={live video domain name} rtmp://video-center.alivecdn.com/{live3}/{Stream}?vhost={live video domain name}

Live authentication

URL authentication function aims to protect the user' s website content from the illegal or malicious activity.

It is a safe and reliable anti-theft mechanism that protects site resources by coordinating Alibaba Cloud CDN acceleration node with customer resources site. The customer site provides customer with an encrypted URL (including authentication information), which the user then uses to make a request to the acceleration node. The acceleration node verifies the authentication information in the encrypted URL to determine the validity of the request (that is, whether to respond normally to a valid response or refuse an invalid response), thus effectively protecting customer site resources.

Note: The authentication function is enabled by default for the newly created domain name since Janurary 1, 2018. You can adopt the authentication by default, or custimize it on the Apsaravideo Live console.

Authentication URL composition

Components

Live streaming address/playaddress+verification string, the verification string is caculated according to md5 algorithm by using authentication key+expiration time. This address is applicable to PC end, mobile end, third-party streaming and play tools.

The Auth KEY field can be set by the user,

If the **Expire time** in which user visits customer source server exceeds the self-defined time (**timestamp** field designation), the authentication is invalid. For example, if the expire time is 1800s, and the user sets the visit time as 2020-08-15 15:00:00, the link expires at 2020-08-15 15:30:00.

URL authentication concept

Encrypted URL component

http://DomainName/Filename?auth_key=timestamp-rand-uid-md5hash

Authentication field description

Field	Description
timestamp	expire time, positive integer, fixed length 10, seconds measured from 1970-01-01. Used to control expire time, integer of 10 digit, expire time 1800s.
rand	random number, usually set to 0
uid	not used yet (set to 0)
md5hash	verification string caculated according to md5 algorithm, lowercase letters and digits are supported, fixed length 32

When the server receives the request, it first determines whether the timestamp in the request is shorter than the current time. If it is shorter, then the expire time is thought to be invalid and it returns an HTTP 403 error. If the timestamp is longer than the current time, then a same string is structured (refer to the following composition mode of sstring). The server then calculates the HashValue according to MD5 algorithm, and compares this value with md5hash in the request. If the values are the same, then the authentication is successful; otherwise, it returns an HTTP 403 error.

HashValue is calculated with the following strings,

```
sstring = "URI-Timestamp-rand-uid-PrivateKey" (URI is the address corresponding to the user's request object, not including parameters , for example : /Filename )
HashValue = md5sum(sstring)
```

Examples

Pass req_auth request object

http://cdn.example.com/video/standard/1K.html

Set the key to: aliyuncdnexp1234 (set by the user)

The expire time of authentication is 2015-10-10 00:00:00, the seconds calculated is: 1444435200.

The server structures a signature string used to calculate Hashvalue

/video/standard/1K.html-1444435200-0-0-aliyuncdnexp1234

The server calculates HashValue according to the signature string

HashValue = md5sum("/video/standard/1K.html-1444435200-0-0-aliyuncdnexp1234") = 80cd3862d699b7118eed99103f2a3a4f

The URL, when making a request, is

http://cdn.example.com/video/standard/1K.html?auth_key=1444435200-0-0-80cd3862d699b7118eed99103f2a3a4f

The calculated HashValue is consistent with md5hash = 80cd3862d699b7118eed99103f2a3a4f in the user' s request, and the authentication succeeds.

Note: We recommend that the streaming address performs encryption and authentication operations for enhanced security.

Procedure

Authentication by default.

The authentication function is in the **Opened** state by default. The **Main KEY** is abcd1234 , and the **Expire time** is 1800s. The authentication expires if the time exceeds 1800s.

Log on to the ApsaraVideo Live console.

Click **Domains** in the left-side navigation pane.

Select the region.

Select the domain name, and click **Detail** at the right side.

Live Video Console	onnsole Current Billing Type: Bandwidth					
Domains 1 Streams	Domains Singapore China North 2 (E	Alijing) China East 2 (Shanghai)			Refresh	Add New Domain
Recording Indexes	Domain Name	CNAME 🚳	Creation Time	Status		Actions
Snapshots	videolive-en.aliyun.com	videolive-en.allyun.com.w.alikunlun.net	2017-11-13 17:52:07	Normal	Detail	Disable Delete
 Resource Monitor 	videolive.aliyun.com	videolive.aliyun.com.w.alikunlun.net	2017-11-09 11:20:40	Normal	Detail	Disable Delete
	cc.aliyun.com	cc.aliyun.com.w.alikunlun.net	2017-10-28 15:39:09	Normal	Detail	Disable Delete

In Base Information > Center streaming information, click Go to generate authentication URL at the right side of Authentication settings.

< Domains			
Base Information	videolive-en-aliyun.com		
Transcoding setti Recording settings	Base Information Transcoding settings Recording settings Snapshot settings		
Snapshot settings	Domain Information		
	Media Center: China East 2 (Shanghai)	Play Area: China	
	Creation Time: 2017-11-13 17:52:07	Status: Normal	
	Center streaming information		
Center streaming URL : rtmp://video-center.alivecdn.com/AppName/StreamName?vhost=videolive-en.aliyun.com How		aliyun.com How to set streaming URL	
	Center streaming notify URL : 🗾		
	Authentication settings: Opened (KEY abcd1234 , Expire time 1800 S) 📝 Go to generate authentic	ation URL	

In the Generate authentication URL page, click Start to generate.

Note: A demo streaming URL is generated in the **Original URL** field, the playback address is custimized according to your playing requirement. If you want to set a new custom AppName and StreamName, you need to replace the AppName and StreamName in the streaming URL with the AppName and StreamName you customize respectively, and then generate **authentication URL**.

Click to copy the generated URL authentication address.

Generate auth	entication URL X
Original URL:	rtmp://video-center.alivecdn.com/AppName/StreamName?vhos How to set streaming URL
Auth type:	Туре А
Auth KEY:	abcd1234
Expire time:	1800 S Expire time need to be modified in authentication settings
URL authenticatio address:	Start to generate Click to copy rtmp://video-center.alivecdn.com/AppName/StreamName? vhost=videolive-en.alivun.com&auth_key=
	OK Cancel

Click OK.

Note: The authentication is set at the domain name level. If the authentication function is enabled under the domain name, all the streaming addresses under the domain name must perform authentication operation. Meanwhile, the playback address corresponding to the streaming address must perform authrntication. We recommend that you use the authentication URL for playback operation.

Customize authentication

If you don' t adopt the configration by default, you can also customize **Main KEY**, **Standby KEY**, **Expire time**, **AppName** and **StreamName**, and then generate **Authentication URL** for streaming and playback.

In Base Information > Center streaming information, click the



the right side of Authentication settings.

In the **Authentication settings** page, customize the **Main KEY**, **Standby KEY**, and **Expire time** and click **OK**.

Authentication	Authentication settings $\qquad \qquad \qquad$				
 Address of Center push-flow and broadcasting share a set of Live authentication keys. After opening Live authentication, you need to use the URL pushing or playing. 					
State:					
Auth type:	Туре А				
*Main KEY:	abcd1234				
	6~32 characters, supporting upper case, lower case and numbers				
Standby	abc123				
KEY:	6~32 characters, supporting upper case, lower case and numbers				
Expire	1800 S				
time:					
	OK Cancel				

Note:

• Main KEY is a key for calculating encrypted string. If the Main KEY is changed, all addresses using the Main KEY instantly becomes invalid. If the Standby KEY is changed to the Main KEY, the streaming or playback address using the Main KEY does not become invalid instantly, but uses the Standby KEY as a mechanism for performing the switch.

Click **Go to generate authentication URL** at the right side of **Authentication settings** to set the **AppName** and **StreamName** on the **Generate authentication URL** page.

Original URL : rtmp://video-

center.alivecdn.com/AppName/StreamName?vhost=videolive-en.aliyun.com, wherein,

Thevideo-center.alivecdn.comis a server of the live video center and can be customized. For example, if your domain name isvideoliveen.aliyun.com(Note: This domain name cannot be the same with your CDN domain name), you can set the DNS and point your domain name CNAME tovideo-center.alivecdn.com.

AppNameis the app name. This parameter can be customized.

StreamNameis the stream name. This parameter can be customized.

Thevhostparameter specifies a domain name for eventual playback on an edge node, namely your live video CDN domain name.

Streaming notification URL

Function overview

Streaming notification URL or callback URL, is mainly used to call back stream-status real-time information and promptly notify users about the video streaming results.

You can add a callback URL of your background server in the console to Alibaba Cloud, so that when the stream status changes, Alibaba Cloud can send a GET request to your server using the HTTP interface and send the real-time feedback on whether the video streaming suceeds or fails.

Attentions

Principle: The real-time stream status feedback is implemented through GET requests sent to the user's server through the HTTP interface. The user server returns 200 responses to the interface. You do not have to identify the URL if normal access is allowed. The following requirements are imposed on the URL responses: In case of access time-out, the URL can be retried. The current time-out duration is 5 seconds, the number of retries is 5, and the interval is 1 second.

It supports the HTTPS address authorized by the certificate authority.

Procedure

Log on to the ApsaraVideo Live console.

Click Domains.

Select the region.

Select the domain name and click **Detail** at the right side.

Live Video Console	Current Billing Type: Bandwidth					
Domains 1	Domains Singapore China North 2 (Be	ifjing) China East 2 (Shanghai)			Refresh	Add New Domain
Recording Indexes	Domain Name	CNAME Ø	Creation Time	Status	0	Actions
Snapshots	videolive-en.aliyun.com	videolive-en.aliyun.com.w.alikunlun.net	2017-11-13 17:52:07	Normal	Detail	Disable Delete
 Resource Monitor 	videolive.aliyun.com	videolive.aliyun.com.w.alikunlun.net	2017-11-09 11:20:40	Normal	Detail	Disable Delete
	cc.allyun.com	cc.aliyun.com.w.alikunlun.net	2017-10-28 15:39:09	Normal	Detail	Disable Delete

In Base Information > Center streaming information, set the Center streaming notify URL.

Center streaming information		
Center streaming URL @ : rtmp://video-center.alivecdn.com/AppName/StreamName?vhost=videolive-en.aliyun.com How to set streaming URL		
Center streaming notify URL:		
Authentication settings: Opened (KEY abcd1234 , Expire time 1800 S) 📝 Go to generate authentication URL		

Example:

https://live.aliyunlive.com/pub? action=publish & app=xc.cdnpe.com & appname=test01 & id=test01 & ip=42.120.74.183 & node=cdnvideocenter010207116011.cm3

Configuration in the console is supported, and is optional.

Parameters	Value description
time	Unix timestamp.
usrargs	Streaming parameters.
action	Publish indicates push streaming, and publish_done indicates completion of push streaming.
арр	The default value is the custom streaming domain name. If no streaming domain name is bound, it is the playback domain name.
appname	Application name.
id	Stream name. Note: You must convert Stream name to lowercase.
node	The name of the node or machine in the CDN that receives the stream.
IP	IP address of the client that pushes the stream.

HTTPS secure acceleration configuration

Function overview

Hypertext Transfer Protocol over Secure Socket Layer (HTTPS) is a secuity suite of the normal HTTP channel focusing on security. It encapsulates HTTP with the SSL/TLS protocol with SSL/TLS protocol as its security base.

Advantages of HTTPS acceleration

Key user data is encrypted during transmission to prevent sensitive information from the leakage, such as session IDs or cookies that can be maliciously used by attackers.

Data integrity verification is performed during transmission to prevent the hidden danger of man in the middle (MITM) such as DNS or content hijacked or tampered by an unverified third party.

Alibaba Cloud ApsaraVideo Live provides HTTPS secure acceleration schemes. You must enable the secure acceleration mode and then upload the certificate/private key of the CDN domain. The ApsaraVideo Live console also supports viewing, disabling, enabling, and editing the certificates.

If the certificate is configured correctly and enabled, both HTTP access and HTTPS access are supported. If the certificate does not match or is disabled, only HTTP access is supported.

Notes

Configuration restrictions

Feature	Description
Disable and Enable HTTPS status	Disable : No HTTPS requests are supported and no certificate/private key information is retained. Enable : You must re-upload the certificate/private key to enable the certificate again.
View certificate	It allows you to view the certificate only. Viewing private key information is not supported.
Modify and edit certificate	Modification and editing of the certificate are supported, but the effective period for performing these operations is 1 hour. Perform the operation with caution.

Certificate restrictions

The certificate and private key of a CDN domain for which **HTTPS secure acceleration** is enabled, must be uploaded. Both the certificate and private key must be in PEM format.

Note: Tengine used in ApsaraVideo Live is based on Nginx, which means certificates that can be read by Nginx are supported (the certificates must be in PEM format).

Only SSL/TLS handshakes containing SNI information is supported.

The certificate and private key that you upload must have a one-to-one correspondence with each other; otherwise, the verification fails.

The effective period of the updated certificate is 1 hour.

Private key with a password is not supported.

Configuration guide

Step 1. Buy a certificate.

To enable **HTTPS secure acceleration**, you must have a certificate that matches the CDN domain. Click **Buy Now** at the Alibaba Cloud Certificates Service to buy a certificate.



Step 2. Configure the live video domain name.

Enable HTTPS secure acceleration.

Log on to the ApsaraVideo Live console.

Select the region in **Domains**.

Select the domain name and click **Detail** at the right side.

Live Video Console	Current Billing Type: Bandwidth				
Domains	Domains Singapore China North 2 (B	eijing) China East 2 (Shanghai)			Refresh Add New Domain
Snapshots	Domain Name	CNAME 🖗	Creation Time	Status	2 Actions
 Resource Monitor 	videolive-en.aliyun.com	videolive-en.aliyun.com.w.alikunlun.net	2017-11-13 17:52:07	Normal	Detail Disable Delete
Traffic & Bandwi	videolive.aliyun.com	videolive.aliyun.com.w.alikunlun.net	2017-11-09 11:20:40	Normal	Detail Disable Delete
Overview User Access Data	cc.aliyun.com	cc.aliyun.com.w.alikunlun.net	2017-10-28 15:39:09	Normal	Detail Disable Delete
Hot point	document4.aliyun.com	document4.aliyun.com.w.kunlunpi.com	2017-09-14 09:54:46	Normal	Detail Disable Delete
Secure Monitor					

Click Base Information > Settings to perform HTTPS Settings.

Click **HTTPS secure acceleration** to go to the setting page, and then enable **Certificate Status**.

Certificate Manager	nent	\times
* Certificate status:		
		OK Cancel

Select a certificate.

Alibaba Cloud ApsaraVideo Live supports two types of certificates for deployment.

Self-owned certificate: You must set the certificate name and then upload the certificate content and private key. The certificate is then saved in the Alibaba Cloud SSL Certificates console. You can view it under **My Certificates** tab.

Alibaba Cloud certificate: Certificates purchased from the Alibaba Cloud Certificates Service are supported. You can select a certificate name to adapt to the CDN domain.



NOTE: Only certificates in PEM format are supported.

Set the redirection type.

Forced redirection is supported: The system forces redirection of the users' original

request methods by default.

For example, if **HTTP > HTTPS** redirection is enabled and a user initiates an HTTP request, the server returns a 302 redirect response and the original HTTP request is forcibly redirected to the HTTPS request.

Default: HTTP and HTTPS requests are compatible.

HTTP > HTTPS redirect: Users' HTTP requests are forcibly redirected to the HTTPS requests.

HTTPS > HTTP redirect: Users' HTTPS requests are forcibly redirected to the HTTP requests.

Step 3. Verify whether the certificate has taken effect.

You can access resources by HTTPS when the settings are completed and the certificate are active now. If a green HTTPS mark appears in your browser, it indicates that currently a private connection is established with the website and HTTPS secure acceleration is effective.



View the stream information

Procedure

Log on to the ApsaraVideo Live console.

Click Streams in the left-side navigation pane.

Select the region.

Select the domain name.

You can then select **History**, **Publish** or **Black List** based on your needs to check the streams information under different status.



Bit rate and frame rate monitoring

In a live video environment, buffering interference often leaves a biggest impact on the live video streaming. The general cause is poor bandwidth stability of the uplink transmission.

The ApsaraVideo Live console monitors the uplink traffic. This can easily view the uplink transmission status of the live stream to check if there is any problem.

View the monitoring data

Log on to the ApsaraVideo Live console.

Click Streams in the left-side navigation pane.

Select the region.

Select the domain name.

Select the stream status.

Select the streaming address and click **Stream Detail** at the right side.

Live Video Console	Streams Singapore China North 2 (Beijing) China East 2 (Shangha	i) 2				
Domains	videolive-en.aliyun.com v					
Streams	Publish V 4					C Refresh
Recording Indexes	Address	App-Name	Quality	Time	Actions	
Snapshots Resource Monitor	rtmp://videolive-en.aliyun.com/AppName/StreamName	AppName	 Original NarrowbandHD-HD NarrowbandHD-LD NarrowbandHD-SD NarrowbandHD-UD 	From: 2018-01-15 14:02:47 To: -	5 Stream Detail Add to black list	Address

View the stream data such as Publish info, Video FPS, Audio FPS and Bit Rate.

Publish Info



On an average, the stream data is updated every minute. You can view the uplink transmission on the **Stream Detail** page.

When the data status appears to be smooth, the valley and the peak values are comparatively stable. This indicates that the uplink transmission is comparatively stable too. If sharp fluctuations occur, we recommend that you check the stability of the uplink transmission.

Causes of choppy streaming

Several factors can cause video playback to buffer incorrectly. The following recommendations are troubleshooting tips that may help resolve streaming issues:

Mobile phone configuration.

Streaming consumes CPU resources. During the streaming process, low-end mobile phones with poor hardware configuration may encounter poor quality video if the overall CPU usage exceeds 80%. This affects the video collection and viewing experience on the user terminals.

Video collection parameter settings.

A video must have at least 15 frames per second (FPS) or higher to make sure smooth playback. An FPS set lower than this rate may result in unstable video quality. Note that if the frame rate is set for more than 30 FPS, the image content may not be viewed naturally by most of the viewers. Additionally, a higher frame rate also increases the bandwidth cost of the video transmission.

Network bandwidth.

Common network factors include:

Network bandwidth size

Confirm the bandwidth size provided by the network operator and whether the bandwidth is sufficient for this live video transmission.

Downlink bandwidth usage

Check whether any data downloading activity occupies the network bandwidth.

System resource usage

Check whether a large number of programs are running in the background, and terminate any unnecessary programs to save the resources.

Add a streaming address to the blacklist

After the streaming address is added to the blacklist, the streaming operations under this domain name, and any operations thereafter, are suspended. To continue the streaming operations, you must restore the address from the blacklist.

Add the address to the blacklist

Log on to the ApsaraVideo Live console.

Click Streams in the left-side navigation pane.

Select the region.

Select the domain name.

Select the status of the stream.

Select the address and click Add to blacklist at the right side.



Click Confirm.

Add to black list	×
Are you sure you want to add stream StreamName to black list?	
Confirm Cance	əl

The address is added to the blacklist successfully.

Restore the address from the blacklist

If you want to restore the address from the blacklist, you must find the adresss in the blacklist first and then restore it.

Log on to the ApsaraVideo Live console.

Click Streams in the left-side navigation pane.

Select the region.

Select the domain name.

Select BlackList.

Select the address and click **Restore** from the **Actions** column, from the selected address.

Live Video Console	Streams Singapore China North 2 (Beijing) China East 2 (Shanghai)				
Domains Streams	videolive-én-aliyun.com v 3 Biack List 🔹 4				C Refresh
Recording Indexes	Address	App-Name	Quality	Time	Actions
Snapshots	videolive-en-aliyun.com/AppName/StreamName	AppName			5 Restore

Click Confirm.

Restore	stream	×
0	Are you sure you want to restore stream StreamName from black li st?	
	Confirm Cancel	

The address is restored from the blacklist successfully.

Streaming address

The live streaming includes Center Streaming and Edge Streaming.

Center Streaming: Pushes the video streams to the live center. It is applicable to the scenarios where the live video is played in a single region.

Edge Streaming: Preferentially pushes the video content to the CDN node closest to user, and then to the live center through the intranet. Alibaba Cloud has more than 1,000 CDN nodes, covers the big or small cities, and is appropriate for the scenarios where the host or hostess is located in different regions.

The structure of the streaming address

A streaming address consists of three live management units, that is Domain, AppName and StreamName. More than one AppName can be created under each Domain, and more than one StreamName can be created under each AppName.

Center streaming

Address example:rtmp://video-center.alivecdn.com/AppName/StreamName?vhost= stream playing domain

For example: You have an App. The stream playing domain ispull.aliyunlive.com; the Appnameislive; and more than one live streams can be created underlive.

RTMP format: rtmp: //video-center.alivecdn.com/live/stream01?vhost=pull.aliyunlive.com

Edge streaming

Address example:rtmp://streaming domain/AppName/StreamName

For example: You have an APP. The streaming domain ispush.aliyunlive.com; the stream playing domain ispull.aliyunlive.com; theappnameislive; and more than one streams can be created underlive. The streaming address is:

RTMP format : rtmp:// push.aliyunlive.com/live/stream01

The corresponding relationship between the streaming address and the palying addess

TheAppNameandStreamNamein the live streaming address can be customized. Different name generates different streaming and playing addresses.

The corresponding relationship between center streaming address and the playing address

```
Streaming address: rtmp://video-center.aliveced.com/liveApp/livestream?vhost=pull.alivunlive.com
```

Playing address: rtmp://pull.aliyunlive.com/liveApp/liveStream

Note: The rules of playing address for FLV and HLS and those for RTMP are the same.

http:// pull.aliyunlive.com/liveApp/liveStream.flv

http:// pull.aliyunlive.com/liveApp/liveStream.m3u8

The corresponding relationship between edge streaming address and the playing address

Streaming address: rtmp://push.aliyunlive.com/liveApp/liveStream

Playing address: rtmp://pull.aliyunlive.com/liveApp/liveStream

Note: The rules of playing address for FLV and HLS and those for RTMP are the same.

http:// play.aliyunlive.com/liveApp/liveStream.flv

http:// play.aliyunlive.com/liveApp/liveStream.m3u8

Playback address

Original image address

Live video addresses can be classified into original image addresses and transcoded addresses.

Original image address

Original images are original video streams that are not transcoded. The original image address is in the format of Playback domain name+AppName+StreamName.

Alibaba Cloud provides three playback protocols that can be applied to the multiple terminals and platforms.

	Advantage	Disadvantag e	Latency	Feature	Applicable terminal
RTMP	Low latency	Unstable during high concurrency Players that support related protocols must be developed for iOS. Usage of the non- standard TCP ports	1s to 3s	TCP persistent connection	PC end
HLS	Cross- platform Playing using HTML5 decompress ed packet	High latency	>10s	HTTP short connection	PC end and mobile end
HTTP-FLV	Low latency Playing using HTML5 decompress	Playing through the integrated SDKs	1s to 3s	TCP persistent connection	PC end

ed packet

Playback addresses of different specifications:

RTMP format: rtmp:// live.aliyun.com/{AppName}/{StreamName}
FLV format: http:// live.aliyun.com/{AppName}/{StreamName}.flv
M3U8 format: http:// live.aliyun.com/{AppName}/{StreamName}.m3u8

Example

The streaming address is:

rtmp://video-center.alivecdn.com/{live}/{3}?vhost={Live video domain name}

The corresponding playback addresses are:

rtmp:// play.aliyunlive.com/{live}/{3}

http:// play.aliyunlive.com/{live}/{3}.flv

http:// play.aliyunlive.com/{live}/{3}.m3u8

Transcoding address

Transcoding template

The ApsaraVideo Live transcoding service provides NarrowbandHD templates.

- The **NarrowbandHD template** relies on Alibaba Cloud' s proprietary narrowband HD image processing technology to achieve a higher compression ratio while maintaining the same image quality and saving more live broadcast traffic.

Playback address

Different transcoding temlates correspond to different playback addresses. The playback address are spliced based on different transcoding rules.

Rule of playback address splicing:Live video domain name+AppName+StreamName+Transcoding template ID

Template\Speci fication	LD	SD	HD	UHD
Original image	None	None	None	None
High-quality transcoding template	ld	sd	hd	ud

Transcoded template IDs corresponding to different specifications and templates:

Example of playback address splicing:

RTMP format:rtmp://+{Live video domain name}+/{AppName}/+/{StreamName}+{Trancoding template ID}

Example:rtmp://live.aliyunlive.com/AppName/StreamName_sd

FLV format: http://+{Live video domain name}+/{AppName}/+/{StreamName}+{Transcoding template ID}.flv

Example:http://live.aliyunlive.com/AppName/StreamName_sd.flv

M3U8 format:http://+{Live video domain name}+/{AppName}/+/{StreamName}.m3u8

Example:http://livetest01.aliyunlive.com/AppName/StreamName.m3u8

Note: Currently playback in the M3U8 format is not supported.

Template parameters

NarrowbandHD template

Template name	Template ID	Resolution (self- adaptive height and width)	Bit rate (kbps)
LD	ld	360	≤420
SD	sd	432	≤580
HD	hd	648	≤1100
UHD	ud	1080	≤1900

Restrictions
Only one transcoding template type is supported for each AppName.

Each domain name supports a maximum of two channels of transcoding concurrent streams. That is, a maximum of two channels of live broadcast using transcoding templates can be conducted under one domain name.

If the provided ApsaraVideo Live service cannot meet your current business needs, you can open a ticket to describe your needs or contact your customer service manager.

Transcoding rules

ApsaraVideo Live supports latancy-based transcoding. If the system detects that a channel of live stream is not being watched, the system does not perform transcoding. If the system detects watching behavior, transcoding is immediately performed. Transcoding stops if no watching behavior is detected in 10 minutes.

After a channel of video is transcoded, transcoded video is played for viewers.

Transcoding is a not required service. You can configure transcoding as needed.

Currently transcoding supports FLV and RTMP formats.

Width self-adaptation

Transcoding uses self-adaptive width algorithms. Width of transcoded video is self-adaptive according to the height of the original streaming video.



Transcoding

For details about transcoding address splicing rules, see Transcoding address.

Procedure

Log on to the ApsaraVideo Live console.

Click Domains.

Select the region.

Select the domain name and click **Detail** from the **Actions** column.

Live Video Console	Current Billing Type: Bandwidth	urrent Billing Type: Bandwidth						
Domains 1 Streams	Domains Singapore China North 2 (B	eijing) China East 2 (Shanghai) 2		Refresh	Add New D	Domain		
Recording Indexes	Domain Name	CNAME 🚱	Creation Time	Status	3		Actions	
Snapshots	videolive-en.aliyun.com	videolive-en.aliyun.com.w.alikunlun.net	2017-11-13 17:52:07	Normal	Detail	Disable	Delete	
 Resource Monitor 	videolive.aliyun.com	videolive-aliyun.com.w.alikunlun.net	2017-11-09 11:20:40	Normal	Detail	Disable	Delete	
	cc.aliyun.com	cc.aliyun.com.w.alikunlun.net	2017-10-28 15:39:09	Normal	Detail	Disable	Delete	

Click Transcoding settings and click Create transcoding.

<	Domains	
Base Information	videolive-en-allyun.com	
Transcoding setti Snapshot settings	Base Information Transcoding settings Snapshot settings Authenticate	
Authenticate	Create transcoding Refresh	
	AppName Templates A	uctions

Set the transcoding parameters and click OK.

Enter the AppName.

The transcoding template becomes effective only when the entered AppName matches that in the streaming address.

Create trans	coding				\times				
۹.									
AppName:	AppNa	opName							
Templates	Narro	owbandHD templates 🕜							
		Name	ID 🕜						
		LD	ld						
	۲	SD	sd						
		HD	hd						
		UD	ud						
				OK Can	cel				

Select the transcoding template name.

Note: The high-quality (narrowband HD) transcoding template contains four transcoding templates: LD, SD, HD, and UHD.

Video playback.

After the transcoding template is created, you can perform video streaming. Video transcodes automatically according to the transcoding template. The transcoded video can be previewed on the ApsaraVideo Live console.

For more details about live video streaming, see Live streaming.

Click Streams in the left-side navigation pane.

Select the region.

Select the domain name.

Select the stream status from the drop-down list.

Select the streaming address, and click Address from the Actions column.



The playback addresses of the transcoded video and original video are displayed in the address list.

Hover the cursor over an address, the Copy and Play link are displayed.

Click **Copy** > **Confirm**. To play the video, paste the address in the address field. You can also click **Play** to play the video in the dialog box of the web player.



ОК

Recording management

Store live recordings in OSS

ApsaraVideo Live allows you to record source video streams. It supports m3u8 (.ts fragment files), mp4, and flv format, along with recording duration settings. Video files are saved in OSS. After a streaming ends, a recording index file for the streaming is generated automatically. The service also supports the generation of custom recording index files (m3u8, mp4, or flv files) based on your specified recording start time and end time.

Under a live video CDN domain name, the livestream recording settings are differentiated by the AppName of the livestream. That is, streams under the same AppName all perform recording operations following the settings for this AppName.

To facilitate the playback of your recorded content, the live recordings must be stored in OSS and your media bucket. If they are stored in the media bucket, you must first activate Media Transcoding (MTS) and then set the input and output media buckets. This document takes the recordings stored in OSS as an example. For recordings stored in media bucket, see **Convert live recordings to media** files.

Procedure

Step 1. Create an OSS bucket

When creating a live recording service, you must store videos in an OSS bucket. Therefore, you must first create an OSS bucket.

Object Storage	Basic Data			Get Started Developer Guide Download SDK More 🕶
Overview	Data in the Overview page and Bucket Overview page			
Bucket + ↓ 18	Storage Used Total Used	Internet Traffic This Inbound 💛 Month	Requests This PUT V Month	9 buckets Create Bucket AccessKey
 citest-intl 	43.46 _{GB}	1.96 GB	8,199	
ecsdoc-text mytestbucket1	Month-On-Month 5.93% ↑ Day-On-Day 0.14% ↑	Internet Traffic Last Month 0Byte Requests Last Month 0		0 alarm rules, 0 triggered, 0 alerts, 0 disabled ③ Set Alarm Rule
 ossvolume tensorflow-sam 	Basic Settings			
 test-zhao 	Domain Names	Cross-Region Replication	Security Token	
 videolive-bucket 	1 buckets configured.	1 buckets configured.	Grant temporary access permissions to the sub-account	
 videolivebucket 			through RAM and STS.	
 videolivebucket 				

Log on to the OSS console and click Create Bucket.

Enter the bucket information.

Select the region where the live video domain name is located as the **Region**. The live video domain name is located in **China East 2 (Shanghai)**. Therefore, you must select **China East 2 (Shanghai)**.

Create Bucket	Documentation
Bucket Name	
	Naming rules:
	 Bucket name can contain lowercase letters, numbers, and hyphens.
	2. Bucket name must begin and end with lowercase letters or numbers.
	3. Bucket name must be 3-64 characters in length.
Region	China East 2 (Shanghai)
	Products in the same region can intercommunicate via intranet. The region cannot be changed after purchase. Be careful when selecting the region.
Endpoint	oss-cn-shanghai.aliyuncs.com
Storage Class	Standard StorageInfrequent Access StorageArchive StorageHigh reliability, high availability, highperformance, frequent access
ACL	Private Public Read Public Read/Write Private: Requires authentication for all
	OK Cancel

Note: After the bucket is created, check that the region of the bucket is consistent with that of the live video domain name. You can also create bucket folders as needed.

In Files, click Create Directory.

If you have many recording files, you can create folders to classify them so as to facilitate recording management.



Enter the Directory Name and click OK.

Create Directory	×
Directory Name	7/254
	OK Cancel

Configure the CDN domain name.

Recordings are stored in OSS. You can configure a CDN domain name and use CDN acceleration to view the recordings. CDN delivers videos stored in your OSS to nodes throughout China. Users can access the nearest CDN node to read files without accessing the original files in OSS and consuming OSS Internet traffic. By using CDN, the access rate and experience of your edge users are improved, and the CDN Internet traffic cost is only 50% of the OSS Internet traffic cost. This efficiently reduces the network fees for your applications.

Click **Domain Names** > **Bind User Domain** to configure CDN domain name.

videolive-buck	et		Standard Storage	Region C	Bind User Domain	
Overview F	Files Basic Settings Domain Na	nes Image Processing 👘 Basic Data	Hotspot Statisti	s API Stati	User Domain	
Bind User Domain	n Refresh Configuration Guide				Alibaba Cloud	
					CDIV	
User Domain	Bound OSS Domain	CDN Domain		Auto Refresh	Add CNAME Record Automatically	The current domain name does not support automatic adding of CNAME record. Add a record manually.
						 This domain name has completed cloud resolution under another Alibaba Cloud account, so you cannot automatically add a CNAME record for this domain name under your account.
						 You can submit this form and add a CNAME record manually at your domain name resolution service provider before the domain name binding takes effect. See CNAME resolution help.
						Submit Cancel

You do not need to configure a CDN domain name if you only store your videos.

Note: The CDN domain name and the live video domain name cannot be the same. Set different domain names.

Step 2. Create a live recording

Log on to the ApsaraVideo Live console.

Click Domains.

Select the region.

Select the expected domain name and click **Detail** at the right side.

Live Video Console	Current Billing Type: Bandwidth	urrent Billing Type: Bandwidth					
Domains 1 Streams	Domains Singapore China North 2 (B	elijing) China East 2 (Shanghai)			Refresh Add New Domain		
Recording Indexes	Domain Name	CNAME Ø	Creation Time	Status	Actions		
Snapshots	videolive-en.aliyun.com	videolive-en.aliyun.com.w.alikunlun.net	2017-11-13 17:52:07	Normal	Detail Disable Delete		
 Resource Monitor 	videolive.aliyun.com	videolive.aliyun.com.w.alikunlun.net	2017-11-09 11:20:40	Normal	Detail Disable Delete		
	cc.allyun.com	cc.aliyun.com.w.alikunlun.net	2017-10-28 15:39:09	Normal	Detail Disable Delete		

Click Recording settings and click Create Recording.

Domains				
videolive-en.aliyun.co	m			
Base Information	Transcoding settings	Recording settings	apshot settings	
Create recording	Refresh			

Configure recording settings.

In the recording settings window, enter the AppNamefor which to enable the recording function.

Create recording	g	\times
Region:	China East 2 (Shanghai)	
AppName:	AppName	
Record Format:	⊠ m3u8 ≡ mp4 ≡ flv	
Storage Rules:		
m3u8:	record/{Date}/AppName/{StreamName}/{StartTime}_{End	
ts:	record/{Date}/AppName/{StreamName}/{UnixTimestamp}	1
Store Path:	Select videolive-bucket/	
Recording Period:	15 Minutes	
	OK Cancel	

Note: The recording AppName and the AppName in the stream push address must be the same. For example, if the 'AppName' in your stream push address is set to 'videolive-en', the recording 'AppName' must also be 'videolive-en'. For more information about the settings, see Live streaming.

Record Format.

Three record formats are supported: flv, mp4, and m3u8. Here, m3u8 format simultaneously outputs ts fragment addresses.

Storage Rules.

The default storage path for recordings is:

m3u8:record/{Date}/{AppName}/{StreamName}/{StartTime}_{EndTime}

ts:record/{Date}/{AppName}/{StreamName}/{UnixTimestamp}_{Sequence}

mp4:record/{Date}/{AppName}/{StreamName}/{StartTime}_{EndTime}

flv:record/{Date}/{AppName}/{StreamName}/{StartTime}_{EndTime}

In the example screenshot, the app name is AppName, so the m3u8 and ts recording files are stored in the following path:

m3u8:record/{Date}/APPName/{StreamName}/{StartTime}_{EndTime}

ts:record/{Date}/APPName/{StreamName}/{UnixTimestamp}_{Sequence}

If the default recording file storage path cannot meet your requirements, you can change it.

Set the Store Path.

Click **Select**, then click **Standard buckets** in the dialogue box and select the expected bucket name.

Ρ	lease select the store path \times							
Region: China East 2 (Shanghai)								
	Standard buckets 📀	Media buckets 🕜						
	Name							
	Tell State							
				ОК	Cancel			

Recording Period.

The system supports recording period from 15 to 360 minutes (6 hours). After a recording exceeds six hours, a new file is generated according to the recording naming rules. However, the default length of ts fragments is 30 seconds.

Recording file names.

Here, **{ }** represents a variable. The flv, mp4, and m3u8 formats support names in the following format: {AppName}, {StreamName}, {Date}, {Sequence}, {StartTime} and {EndTime}. Except for {StartTime} and {EndTime} the other variables can be retained or deleted as needed. TS recording files supports names in the format: {AppName}, {StreamName}, {Date}, {Sequence}, {UnixTimestamp}. These variables

can be retained or deleted as needed.

{date} classifies recording files into folders by date. The default date format is "YYY-MM-DD" .

{StreamName} automatically fetches the StreamName and uses it as the storage path. You can manually change this as needed. You can customize the {streamName} according to your needs.

{Sequence} is the sequence variable.

{StartTime} is the recording start time and {EndTime} is the end time. The parameters of flv, mp4, and m3u8 files must have these variables.

{UnixTimestamp}_{Sequence} is the timestamp and sequence variable. In the names of ts files, this variable is automatically specified based on the file generation time and sequence.

To maintain compatibility with the streaming process, the recording system judge a livestream to have ended when an interruption caused by network jitter or another problem persists for **180 seconds** and the stream is not restored. The system independently stores the default recording index files in the format:{AppName}/{StreamName}/{Date}.m3u8(m3u8 format).

Click **OK** to complete recording settings.

In the **Recording Settings** tab, all the recording settings under the selected domain name are listed.

Domains							
videolive-en.ali	ideolive-en.aliyun.com						
Base Informat	ion Transcoding settin	gs Recording settings	Snapshot settings				
Create record	Create recording Refresh						
AppName	Recording Period	Store Path				Creation Time	Actions
AppName 15 Minutes m3u8: videolive-bucket/record/(Date)/AppName/(StreamName)/(StartTime)_{EntTime} ts: videolive-bucket/record/(Date)/AppName/(StreamName)/(UnixTimestamp)_(Sequence)			2018-01-18 11:11:04	Delete			

As a result, all the livestreams withAppNameas the AppName under the domain name follow these recording rules. Livestreams that occur before you finish configuring the settings do not trigger recording. Only new livestreams trigger recording (or an existing livestream that is interrupted for more than 180 seconds).

Recording files playback.

You can play back recorded videos on demand.

Note: The AppName in the stream push address and the AppName in the playback address must be consistent with that in the recording template.

Step 3. View recording files

Recording files are stored in the OSS list. You can use OSS to view, download, and play the recordings. You can also perform list view and playback on the ApsaraVideo Live console.

View recording files on the OSS console.

Find the video storage folder on the OSS console. Recording files are stored in OSS in compliance with the aforementioned rules. You can obtain the playback addresses from OSS.

The complete video files are stored in the record/date/AppName/StreamName directory, which is the same as the directory for the TS fragment files. You can click **Object Name** to obtain the address for playback.

videolive-bucket	Type Standard Storage	Region China East 2 (Shanghai)	Created At 11/09/2017, 17:19	Delete Bucket
Overview Files Basic Settings Domain Names Image Processing	Basic Data Hotspot Statistics	API Statistics Object Access Stat	istics	
Manage files more easily w	ith OSS client. Download not	WI OSS Client Download		×
Upload Create Directory Delete Set HTTP Header Fragments Refre	esh Selected: 1 / 8		Enter the fi	le name prefix Q
File Name (Object Name)	File Size	Storage Class	Time Updated	Action
Back (record/2018-01-18/AppName/StreamName/)				
1516256371_1.ts	3.03MB	Standard Storage	01/18/2018, 14:19	Edit
1516256401_2.ts	1.37MB	Standard Storage	01/18/2018, 14:20	Edit
□ I516256432_3.ts	1.564MB	Standard Storage	01/18/2018, 14:20	Edit

View recording files on the ApsaraVideo Live console.

You can also use the **Recording Indexes** function on the ApsaraVideo Live console to view the recording files.

Live Video Console	Recording Indexes Singapore China North 2 (Beijing) China East 2 (Shanghai)				
Domains	videolive-en.aliyun.com v				
Streams	Create record index 01/17/2018 - 01/18/200 AppName V StreamName V				
Recording Indexes	Nama	Resolution	Record Time	Time Length	Actions
Snanshots	Num.	The submitted of the	Necord Time	Time bangar	Pictoria
Resource Monitor	record/2018-01-18/AppName/StreamName/2018-01-18-14:18:55_2018-01-18-14:33:21.m3u8	1536×864	From: 2018-01-18 14:19:00 To: 2018-01-18 14:33:22	00:14:18	Play 🚱 Address

Convert live recordings to media files

Live recordings use the original video resolution. You can use Media Processing (MPS) to convert a recorded original-resolution video to multiple media formats. To do this, you must first associate the live recordings with MPS.

Note: The input bucket for the MPS workflow and the bucket set for the live recordings must be the same. Otherwise, MPS console operations cannot be performed on the live recordings and the videos are not displayed on the MPS console.

Procedure

Step 1. Create a workflow

Before creating an MPS workflow, you must have created a **Media Bucket** on the MPS console. For details, see **Library Settings**. Then, create a workflow on the MPS console. Finally, select a workflow region. Only live videos in the **China East 2 (Shanghai)** and **China North 2 (Beijing)** regions are currently supported. The region in the **Library Settings** must be consistent with the region in the ApsaraVideo Live.

Log on to the MPS console.

Select the region.

Click Library > Library Settings.



Click Media Buckets.

Click Add and set the Input Media Bucket and Output Media Bucket.

Media Settings	US West 1 (Silicon Valley)	China North 2 (Beijing)	China South 1 (Shenzhen)	Singapore	China East 1 (Hangzhou)	Hong Kong	China East 2 (Shanghai)	
	Germany 1 (Frankfurt)							
Workflows	Executed Tasks Media E	Buckets						
Input Media Buck	ket							Add
Name								Actions
videolivebucket	-in							Unauthorize
Output Media Bu	cket							Add
Name								Actions
videolivebucket	-out							Unauthorize

Note:

- To use MPS , you must create an **Input Media Bucket** and **Output Media Bucket**. The **Input Media Bucket** stores the original video files and the **Output Media Bucket** stores the transcoded video files. After the workflow is created, it obtains the original video files automatically from the **Input Media Bucket** and performs the corresponding transcoding operations.
- Only **Input Media Bucket** in **China East 2** are currently supported. When creating a media bucket, select **China East 2**.

Create a workflow.

In Workflows, click Create Workflow to go to the Workflow Manager page.

Enter the workflow name.

Set the Preset.

Select **Customize** as the **Preset**. The **Preset** is the output scheme after transcoding and can be configured as needed.

Workflow Manager			
Workflow Manager Run Workflow Settings			
Configure Workflow	Configure Content Delivery Network (CDN) >	Complete
Workflow Name mtstest			
Preset Customize	• 2		
Topology			
	∎Input / +	Publish	
	Next		

Set the workflow parameters.

The following describes the simplest operations to display quick experience of the live recording to video-on-demand process. For details, see Workflow settings.

In the **Topology** field, add the **Transcode** node in the **Input** drop-down list.

Workflow Manager					
Workflow Manager Run Workflow Settings					
Configure Workflow		Configure Content Delivery Network (CDN)	>	Complete	
Workflow Name					
mtstest					
Preset					
Customize	T				
Topology					
	Input :	×	Publish		
	Transcode	Next			

Click the editting icon at the right side of the **Input** node.

Workflow Manager			
Workflow Manager Run Workflow Settings			
Configure Workflow	Configure Content Delivery Network (CDN)		Complete
Workflow Name			
mtstest			
Preset			
Customize			
Topology			
Elinput 🖉 +	∎ Transcode [#] [®] +	Publish	
	Next		

Select the Input Bucket you created.

Input		\times
Input Bucket:	videolivebucket-in	Select
Input Path:		
MTS Queue:	mts-service-pipeline	'
Message Type:	Do Not Send Message	,
		OK Cancel

Set Transcode node.

Click the editting icon at the right side of the **Transcode** node, select the **Template** and **Output Bucket** and click **OK**.

Transcode		\times
Basic Settings	Advanced Settings	
Name:	TRANSCODE_1516260579171	
Template:	FLV-COPY Select	
Output Bucket:	videolivebucket-out Select	
Output Location:	{RunId}/transcode_151626057917	
Watermark:	Do Not Use Watermark	
	OK Car	ncel

Click Next and enter the CDN domain name.

Workflow Manager			
Workflow Manager Run Workflow Settings			
Configure Workflow	Configure Content Delivery Network (CDN)	Complete	
CDN Acceleration Domain Name (Optional)			
Output Bucket	Domain Name		
videolivebucket-out	-com + Add		
Complete			

Note: The CDN domain name must complete an ICP filing and CNAME resolution.

The workflow is added.

Workflow Manager		
Workflow Manager Run Workflow Settings		
Configure Workflow	Configure Content Delivery Network (CDN)	Complete
	0	
	The workflow was added.	
	according to workflow configuration.	
	Upload to Video Manager Manage Workflow	

Step 2. Create a live recording

Log on to the ApsaraVideo Live console.

Click Domains.

Select the region.

Select the expected domain name and click **Detail** at the right side.

Live Video Console	Current Billing Type: Bandwidth					
Domains 1 Streams	Domains Singapore China North 2 (B	eijing) China East 2 (Shanghai)			Refresh Add New Domai	in
Recording Indexes	Domain Name	CNAME Ø	Creation Time	Status	Actio	ons
Snapshots	videolive-en.aliyun.com	videolive-en.aliyun.com.w.alikunlun.net	2017-11-13 17:52:07	Normal	Detail Disable Dele	ete
 Resource Monitor 	videolive.aliyun.com	videolive.aliyun.com.w.alikunlun.net	2017-11-09 11:20:40	Normal	Detail Disable Dele	əte
	cc.allyun.com	cc.aliyun.com.w.alikunlun.net	2017-10-28 15:39:09	Normal	Detail Disable Dele	ete

Click Recording settings and click Create recording.

Domains	
videolive-en.aliyun.com	
Base Information Transcoding settings Recording settings Sna	pshot settings
Create recording Refresh	

Add recording settings.

On the **Create recording** page, enter theAppNamefor which to enable the recording function.

Create recording	g	×
Region: AppName:	China East 2 (Shanghai) AppName1	
Record Format:	⊠ m3u8 ≡ mp4 ≡ flv	
Storage Rules:		
m3u8:	record/{Date}/AppName1/{StreamName}/{StartTime}_{En	
ts:	record/{Date}/AppName1/{StreamName}/{UnixTimestamp	
Store Path:	Select videolivebucket-in/	
Recording Period:	15 Minutes	
	OK Cancel	

Note: The recordingAppNameand theAppNamein the stream push address must be the same. For example, if theAppNamein your stream push address is set tovideolive-en, the recordingAppNamemust also be videolive-en. For details, see Live streaming.

Record format.

Three Record formats are supported: flv, mp4, and m3u8. Here, m3u8 format simultaneously outputs ts fragment addresses.

Storage Rules.

The default storage path for recordings is:

m3u8:record/{Date}/{AppName}/{StreamName}/{StartTime}_{EndTime}

ts:record/{Date}/{AppName}/{StreamName}/{UnixTimestamp}_{Sequence}

mp4:record/{Date}/{AppName}/{StreamName}/{StartTime}_{EndTime}

flv:record/{Date}/{AppName}/{StreamName}/{StartTime}_{EndTime}

In the example screenshot, the AppName is AppName, so the m3u8 and ts recording files are stored in the following path:

m3u8:record/{Date}/APPName1/{StreamName}/{StartTime}_{EndTime}

ts:record/{Date}/APPName1/{StreamName}/{UnixTimestamp}_{Sequence}

If the default recording file storage path cannot meet your requirements, you can change it.

Set the Store Path.

Click **Select**, and in the dialogue box, click **media Buckets** and select the expected bucket name.

Please select the store pat	h	>	<
Region: China East 2 (Sh	anghai)		
Standard buckets 🕜	Media buckets 🕜		
Name		Туре	
vic		Input	
		OK Cancel	

Note: Media buckets are primarily used to store videos for secondary transcoding. The live recordings can perform the transcoding workflow operation only when the bucket for storing the live recordings and the media bucket are the same input media bucket, If you haven' t activated the MPS and created a media bucket, this tag is not displayed.

Recording Period.

The system supports recording durations from 15 to 360 minutes (6 hours). After a recording exceeds six hours, a new file is generated according to the recording naming rules. However, the default length of ts fragments is 30 seconds.

Recording file names.

Here, { } represents a variable. The flv, mp4, and m3u8 formats support names in

the following format: {AppName}, {StreamName}, {Date}, {Sequence}, {StartTime}, {EndTime}.Except for {StartTime} and {EndTime} the other variables can be retained or deleted as needed.TS recording files supports names in the format: {AppName}, {StreamName}, {Date}, {Sequence}, {UnixTimestamp}. These variables can be retained or deleted as needed.

{date} classifies recording files into folders by date. The default date format is "YYY-MM-DD" .

{StreamName} automatically fetches the StreamName and uses it as the storage path. You can manually change this as needed.You can customize the {streamName} according to your needs.

{Sequence} is the sequence variable.

{StartTime} is the recording start time and {EndTime} is the end time. The parameters of flv, mp4, and m3u8 files must have these variables.

{UnixTimestamp}_{Sequence} is the timestamp and sequence variable.In the names of ts files, this variable is automatically specified based on the file generation time and sequence.

To maintain compatibility with the livestream push process, the live recording system judge a livestream to have ended when an interruption caused by network jitter or another problem persists for **180 seconds** and the stream is not restored. The system independently stores the default recording index files in the format:{AppName}/{StreamName}/{Date}.m3u8(m3u8 format).

Click OK to complete recording settings.

In the **Recording Settings** tab, all the recording settings for the selected domain name are listed.

<	Domains				
Base Information	videolive-en.ali	yun.com			
Recording settings	Base Informat	ion Transcoding settin	gs Recording settings Snapshot settings		
Snapshot settings	Create record	ing Refresh			
	AppName	Recording Period	Store Path	Creation Time	Actions
	AppName	15 Minutes	m3u8: videolive-bucket/record/{Date}/AppName/{StreamName}/{StartTime}_{EndTime} ts: videolive-bucket/record/{Date}/AppName/{StreamName}/{UnixTimestamp}(Sequence}	2018-01-18 11:11:04	Delete
=	AppName1	15 Minutes	m3u8: videolivebucket-in/record/{Date}/AppName1/{StreamName}}{StartTime}{EndTime} ts: videolivebucket-in/record/{Date}/AppName1/{StreamName}/{UnixTimestamp}{Sequence}	2018-01-18 15:55:39	Delete

As a result, all the livestreams withAppName1as the AppName under the domain name follow these recording rules. Livestreams that occur before you finish configuring the settings do not trigger recording. Only new livestreams trigger recording (or an existing

livestream that is interrupted for more than 180 seconds).

Step 3. Recording playback

After MTS transcoding, live recordings are stored in MTS. You can use MTS to play back the videos.

You can obtain the playback address and media ID of a single video file in **Media Files** on the MPS console, and play back the video.

Media Transcoding	OSS Transcoding Tasks	US West 1 (Silicon Va	alley) China North	2 (Beijing)	China South 1 (Shenzhen) Singap	oore China B	ast 1 (Hangzhou)	Hong Kong	China East 2 (Sh	anghai)	
Overview		Germany 1 (Frankfur	t)									
Transcoding Tasks	MTS Queue : All	• Status : All	 Date Range 	: Jan 11,	2018	- Jan 18, 2018		Search		Help	C Refresh	Create Task
 Library 	Transcoding ID			Transcoding	g Template	Status		Created At	Obj	ect Endpoint		
Media Files Library Settings	2017-08-16 13-09-51.flv ID:4110ec3cdf3e44d88e	94fea20bb0edb6		FLV-COPY		Failed		Jan 17, 2018 7:1	2 PM http sha	://videolivebucket nghai.aliyuncs.com	-in.oss-cn- 1/2017	
Settings	2017-08-16 13-06-52.fbr ID: 60:	and a second second		FLV-COPY		Completed		Jan 17, 2018 7:1	2 PM http sha	o:/ nghai.allyuncs.com	s-cn- 1/2017	

Note:

The **Transcoding ID** is the ID of the on-demand video created from the recording file.

The Object Endpoint is the original file address of the live recording.

Transcoding Task Details	
Transcoding Details	
Transcode ID : f60c9aa3fd134313b674355500f67750	Watermark Template ID :
Status : Completed	Clip Output : No
Progress : 100%	Rotate Angle : Odegrees
MTS Queue ID : 17a2461a13ef45c880480bb791e65b5c	
Created At : Jan 17, 2018 7:12 PM	
Completed on : Jan 17, 2018 7:12 PM	
Template ID : \$00000001-000000	
Input	
Bucket : videolivebucket-in	
Location : oss-cn-shanghai	
Object : 2017-08-16 13-06-52.flv	
Transcoding Output	
Bucket : videolivebucket-out	
Location : oss-cn-shanghai	
Object : f5fa3234ef944c5fb45e2af1dff4eb01/transcode_1516097807918/2017-08-16 13-06-52.flv	

Note: Click Copy To to copy the recording file playback address.

To obtain the playback addresses of transcoded videos in batches, if you do not know the media IDs, you can use the media input addresses (the addresses used to store the original recording files) to query the media information using the API QueryMediaListByURL. For details, see Media ID query example.

Note: Encrypted videos must be played using media IDs to ensure their security. Use Flash

Player (HTML 5 does not support playback of encrypted videos) to play encrypted videos on web terminals. For details, see Introduction to media playback.

Recording callback

Function overview

The system calls back the new status of the live recording stream and informs the user of related results and the recording status after recording is completed.

Notes

HTTP/HTTPS URL configurations are supported. The POST request is sent to the user server. The message body is in JSON format. Real-time feedback of the recording result and status information is provided to the user. The user server returns results in the form of 200 responses to the interface. The URL does not need to be identified, but must be accessed properly. If the access times out, you can retry up to five times. The interval between retries is a random value between 100ms and 10s.

Configuration guide

The recording callback address can be manually configured on the console.

```
Center streaming information
Center streaming URL © : tmp://video-center.alivecdn.com/AppName/StreamName?vhost=videolive-en.aliyun.com How to set streaming URL
Center streaming notify URL® : 
Authentication settings: Opened ( KEY abcd1234 , Expire time 1800 S ) 
Go to generate authentication URL
```

Example

User callback address: http:// 1.1.1.1/notify/record, the returned body content is as follows:

File generation event callback example

This indicates that the target recording file was generated.

```
{
"domain": "live.aliyunlive.com",
"app": "live",
```

```
"stream": "hello",

"uri": "live/hello/0_2017-03-08-23:09:46_2017-03-08-23:10:40.flv",

"duration": 69.403,

"start_time": 1488985786,

"stop_time": 1488985840

}
```

Here,domain,app,streamare the recording domain name, application name, and stream name respectively.uriis the path of the target recording file in the user recording OSS bucket.duration,start_time,stop_timeare the duration, start time, and end time of the target recording file respectively.

Example of recording status callback, generated when NeedStatusNotify=true

- Recording start event callback, indicating the recording has started successfully.

```
{
  "domain": "live.aliyunlive.com",
  "app": "live",
  "stream": "hello",
  "event": "record_started"
}
```

Here, domain,app, andstreamare the recording domain name, application name and stream name respectively.eventis the event name and it can berecord_started/record_paused/record_resumed.

- Recording pause event callback, indicating the recording is successfully paused

```
{
    "domain": "live.aliyunlive.com",
    "app": "gs_app",
    "stream": "gs_stream",
    "event": "record_paused"
}
```

- Recording error callback, indicating an error occurred during recording

```
{
"domain": "gs_domain",
"app": "gs_app",
"stream": "gs_stream",
"event": "record_error"
```

}

View live recordings

You can view recording files in the console' s recording index manager.

Log on to the ApsaraVideo Live console.

Click Recording Indexes.

Select the expected region.

Select the expected domain name.

Select the recording time range, AppName and StreamName to view recordings.

Live Video Console	Recording Indexes Singapore China North 2 (Beijing) China East 2 (Shanghai)				
Domains	videolive-en.aliyun.com ~				
Streams	Create record index 01/17/2018 - 01/18/200 AppName				
Recording Indexes	Name	Resolution	Record Time	Time Length	Actions
Resource Monitor	record/2018-01-18/AppName/StreamName/2018-01-18-14:18:55_2018-01-18-14:33:21.m3u8	1536×864	From: 2018-01-18 14:19:00 To: 2018-01-18 14:33:22	00:14:18	Play 🕘 Address

Note: You can click **Create Record Index** to edit existing recording files to create new files. Click **Address** to view the recording playback address. Click **Play** to play back the video recordings.

Create record index

When recording live videos, you can view the recorded content in the recording index area, or perform secondary edits on the recorded videos. After editing the video, a new m3u8 file is generated in the OSS system.

Procedure

Log on to the ApsaraVideo Live console.

Click Recording Indexes in the left-side navigation pane.

Select the expected region.

Select the expected domain name.

Click Create record index.

Live Video Console	Recording Indexes Singapore China North 2 (Beijing) China East 2 (Shanghai)				
Domains	videolive-en.aliyun.com ~				
Streams	Create record index 01/17/2018 - 01/18/200 AppName V StreamName V				
Recording Indexes	Name	Resolution	Record Time	Time Length	Actions
Resource Monitor	record/2018-01-18/AppName/StreamName/2018-01-18-14:18:55_2018-01-18-14:33:21.m3u8	1536×864	From: 2018-01-18 14:19:00 To: 2018-01-18 14:33:22	00:14:18	Play 🕘 📋 Address

On the **Create record index** page, select the period of the recording file, the AppName and the StreamName.

Create record index		
Select a file:	01/17/2018 - 01/18/20: AppName	\ominus \oplus
	13.10	
	13:30	
	13:40	
	13:50	
	14:00	
	14:10	
	14:20 videolive-bucke	
	14:30	
	14:40	
	14:50	
	x 0.00	

Note:

- When broadcasting a livestream, if it is interrupted for more than **180 seconds** , a new recording file is automatically generated and displayed in the timeline. You can splice the recording fragments together.
- videolive-bucket is the name of the bucket. For details on media buckets setting, see Library settings.
- In the green area, you can set the start time and end time to determine the video data that needs to be spliced or clipped. All the live recording fragments in this area can be selected for splicing.

Set the **Starting time** and **End time** to splice or clip the selected recording. You can further edit the spliced or clipped video.

Name the new file in **ObjectName** and click **OK**.

Starting Time:	8: 2018-01-18 🗰 14 V 18 V 55 V	
End Time:	e: 2018-01-18 🗰 14 🔻 33 🔻 22 ¥	
Store Path:	h: videolive-bucket/recording.m3u8	
ObjectName :	: recording .m3uB	
	OK	

Note: The stored m3u8 file can be found in the OSS storage directory indicated by the storage location.

View recording playback address

Directly obtain playback information

Log on to the AppsaraVideo Live console.

Select the expected Region.

Select the expected domain name and click Detail at the right side.

Live Video Console	Current Billing Type: Bandwidth				
Domains 1 Streams	Domains Singapore China North 2	(Beljing) China East 2 (Shanghai)			Refresh Add New Domain
Recording Indexes	Domain Name	CNAME Ø	Creation Time	Status	Actions
Snapshots	videolive-en.aliyun.com	videolive-en.aliyun.com.w.alikunlun.net	2017-11-13 17:52:07	Normal	Detail Disable Delete
Resource Monitor	videolive.aliyun.com	videolive.aliyun.com.w.alikunlun.net	2017-11-09 11:20:40	Normal	Detail Disable Delete
	cc.aliyun.com	cc.aliyun.com.w.alikunlun.net	2017-10-28 15:39:09	Normal	Detail Disable Delete

In Base Information > Play Information, obtain the Playback Information.



Note: The authentication is set at the domain name level. If the authentication status is **Opened**, all the streaming addresses under the domain name must perform authentication operation. Meanwhile, the playback address corresponding to the streaming URL must complete authentication operation. Use the authenticated adderss for playback operation.

Preview at the webpage background

Use OBS for streaming by adopting an authenticated URL, and go to the ApsaraVideo Live

console > Streams.

Select the expected region.

Select the expected domain name.

Select the expected stream status.

Select the expected streaming address, and click **Address** at the right side to view the playback address and preview the video.



 Playing video wi. 	
NarrowbandHD-UD	
RTMP Format: rtm	1p://videolive-
en,anyun,com/App	
FLV Format: http:/	//videolive-en.aliyun.com/AppName/StreamName
NarrowbandHD-HD	
RTMP Format: <i>rtm</i>	np://videolive-
en.aliyun.com/App	nName/StreamName
FLV Format: <i>http:</i> ,	//videolive-en.aliyun.com/AppName/StreamName
NarrowbandHD-SD	
RTMP Format: rtm	np://videolive-
en.aliyun.com/App	nName/StreamName
FLV Format: http:/	//videolive-en.aliyun.com/AppName/StreamName
NarrowbandHD-LD	
RTMP Format: rtm	nn*//videolive-
en.aliyun.com/App	pName/StreamName
FLV Format: <i>http:</i> ,	//videolive-en.aliyun.com/AppName/StreamName
Original	
DTMD Coursely at a	np://videolive-en.aliyun.com/AppName/StreamName?
RIMP Format: rtm	
FLV Format: <i>http:</i>	//videolive-en.aliyun.com/AppName/StreamName

Play back live recordings

After recording a video, you can directly preview the video in the webpage background, or preview it using VLC.

Direct webpage background preview

Use OBS for streaming by adopting an authenticated URL, and go to the **ApsaraVideo Live** console > Streams.

Select the expected region.

Select the expected domain name.

Select the expected stream status.

Selected the expected streaming address, and click **Address** at the right side to view the playback address and preview the video.



Daving video will cause traffic costs	
 Flaying video will cause traffic costs. 	
NarrowbandHD-UD	
RTMP Format: <i>rtmp://videolive-</i> <i>en.aliyun.com/AppName/StreamName</i>	
FLV Format: http://videolive-en.aliyun.com/	AppName/StreamName
NarrowbandHD-HD	Copy Play
RTMP Format: <i>rtmp://videolive-</i> <i>en.aliyun.com/AppName/StreamName</i>	
FLV Format: http://videolive-en.aliyun.com/	AppName/StreamName
NarrowbandHD-SD	
RTMP Format: <i>rtmp://videolive-</i> <i>en.aliyun.com/AppName/StreamName</i>	
FLV Format: http://videolive-en.aliyun.com/	AppName/StreamName
NarrowbandHD-LD	
RTMP Format: <i>rtmp://videolive-</i> <i>en.aliyun.com/AppName/StreamName</i>	
FLV Format: http://videolive-en.aliyun.com/	AppName/StreamName
Original	
RTMP Format: rtmp://videolive-en.alivun.co	m/AppName/StreamName?
FLV Format: http://videolive-en.aliyun.com/	AppName/StreamName

VLC preview

Download VLC. After installing it, you do not need to modify the settings. Click **Media** > **Open Network Streaming**, enter the livestream address, and click **Play** to play the video.

Snapshot management

Create a live snapshot

Live video snapshot service supports taking snapshots of the live video being played at a set interval and saving the snapshots as .jpg files to a specified location in OSS.

Under a live video CDN domain, the live snapshot settings are differentiated by the AppName of the live video streaming. That is, streams under the same AppName all perform snapshot operations following the settings of this AppName. The AppName can be set to *, indicating that all the streams under the live video CDN domain follow the snapshot settings.

To conveniently view the snapshots, set a bucket for storage first.

Procedure

Log on to the ApsaraVideo Live console.

Click Domains.

Select the region.

Select the domain name and click Detail from the Actions column.

Live Video Console	Current Billing Type: Bandwidth							
Domains 1 Streams	Domains Singapore China North 2 (B	Refresh Add New Domain						
Recording Indexes	Domain Name	CNAME Ø	Creation Time	Status	Actions			
Snapshots	videolive-en.aliyun.com	videolive-en.aliyun.com.w.alikunlun.net	2017-11-13 17:52:07	Normal	Detail Disable Delete			
 Resource Monitor 	videolive.aliyun.com	videolive.aliyun.com.w.alikunlun.net	2017-11-09 11:20:40	Normal	Detail Disable Delete			
	cc.aliyun.com	cc.aliyun.com.w.alikunlun.net	2017-10-28 15:39:09	Normal	Detail Disable Delete			

Click Snapshot settings, and click Create snapshot.

Domains					
videolive-en.aliyun.	com	1			
Base Information	Transcoding settings	Snapshot settings	Authenticate		
Create snapshot	Refresh 2				
AppName		Store Path		Frequency	Actions

Set the snapshot parameters and click OK.

Create snapshot		\times
AppName:	AppName	
Frequency:	5 Seconds (between 5 ~ 3600 seconds)	
Store Path:	videolive-bucket Select	
ObjectName	 Overwrite: oss://videolive- bucket/AppName/StreamName/AppName/{StreamName}.jpg No Overwrite: oss://videolive- bucket/AppName/StreamName/AppName/{StreamName} 	
	OK Cance	el

Enter the **AppName** for which the snapshot function must be enabled.

Enter the frequency. It is the snapshot interval. It can be between 5 and 3,600 seconds.

OSS file management				×
videolive. 🔻				\mathcal{Z} Refresh
Path:				
File Name	Size	Туре	Creation Tir	ne
AppName/	-	-	-	
		pre	next	OK Cancel

Select the bucket in which the snapshot files are stored, and click **OK**.

Note: The bucket and the current domain name must be in the same region. For example, if the current domain name is located in **China East 2** (Shanghai), the bucket must also be located in China East 2 (Shanghai). If no bucket list is available in the panel, check that the OSS bucket and the domain name are in the same region.

Select a snapshot type, Overwrite or No Overwrite. Multiple types can be selected.

Overwrite: The video snapshots are taken in sequence based on the set interval, and the new snapshot can overwrite the previous one.

No Overwrite: The video snapshots are taken in sequence based on the set interval, and the new snapshots are stored in OSS in the order of N+1 (N \geq 0).

All snapshot settings under the domain name are listed on the **Snapshot settings** tab. For example, the snapshots of all the live video streams with AppName as the app name under the domain name are captured and exported according to this rule.

Note: The modified snapshot settings are applied to the next live video streaming.

View the live snapshots

Procedure

Log on to the ApsaraVideo Live console.

Click **Snapshots** in the left-side navigation pane.

Select the region.

Select the domain name.

Select the expected time period, and select the AppName and StreamName from the dropdown list. The snapshots list is displayed on the basis of your selection.

Live Video Console	Snapshots Singapore China	North 2 (Beijing) China East 2 (Sha	anghai) 2			
Domains	videolive-en.aliyun.com ~ 3					
Streams	01/14/2018 18:00 - 01/15/2018	AppName StreamName	9 🔻			
Recording Indexes						
Snapshots 1						
 Resource Monitor 						
	3847.jpg	3848.jpg	3849.jpg	3850.jpg	3851.jpg	3852.jpg
=						
	3853.jpg	3854.jpg	3855.jpg	3856.jpg	3857.jpg	3858.jpg

Hover your cursor over a snapshot in the list. Buttons to enlarge the image and copy the URL are displayed. You can perform the operations as required.

Live Video Console	Snapshots Singapore China	North 2 (Beijing) China East 2 (Sh	anghai)			
Domains	videolive-en.aliyun.com v					
Streams	01/14/2018 18:00 - 01/15/2018	AppName V StreamNam	1e 🔻			
Recording Indexes						
Snapshots	Droving Copy URL					
Resource Monitor	Plenew Copy one					
	3847.jpg	3848.jpg	3849.jpg	3850.jpg	3851.jpg	3852.jpg
=						
	3853.jpg	3854.jpg	3855.jpg	3856.jpg	3857.jpg	3858.jpg

Delete snapshots

You cannot delete the snapshots directly in the ApsaraVideo Live console. Instead, you must perform the deletion operation in the OSS console.

Procedure

Log on to the OSS console.

On the **Overview** page, select the bucket where the snapshots are stored and click its name.

Object Storage	videolive-bucket	Type Standard Stor	age Region China East 2 (Shanghai)	Created At 11/09/2017,	17:19 Delete Bucket				
Overview	Overview Files Basic Settings Domain Names	Image Processing Basic Data Hotspot S	itatistics API Statistics Object Access St	tatistics					
Bucket + ↓ 8	Basic Data								
- ciltoet.intl	Data in the Overview page and Bucket Overview page is not in	real time. It is delayed for two to three hours.							
 ecsdoc-text 	Storage Used 🗸 Total Used 🗸	Internet Traffic This Month \square Inbound \checkmark	Requests This Month 🛛 PUT 🔍	Files	File Fragments ③				
 mytestbucket1 ossvolume 	2.5 св	1.78 дв	6,940	15,231	0				
tensorflow-sam	Month-On-Month 641.30% Day-On-Day 29.64%	Internet Traffic Last Month OByte	Requests Last Month 0						
test-zhao videolive-bucket	Access Domain Name								
videolivebucket		Endpoint (2)	Access Domain Name 🖪	D	HTTPS				
 VIGEOIIVEDUCKET 	Internet Access (?)	oss-cn-shanghai.aliyuncs.com	videolive-bucket.oss-cn-s	shanghai.aliyuncs.com	Suppor				
	ECS Address for Classic Network Access (Intranet) ③	oss-cn-shanghai-internal.aliyuncs.com	videolive-bucket.oss-cn-s	shanghai-internal.aliyuncs.co	om Suppor				
	ECS Address for VPC Network Access (Intranet) $ \oslash $	oss-cn-shanghai-internal.aliyuncs.com	videolive-bucket.oss-cn-s	shanghai-internal.aliyuncs.co	om Suppor				

Click Files.

Select the folder name.

Object Storage	videolive-bucket Type Standard Storag	e Region China East 2 (Shanghai)	Created At 11/09/2017, 17:19	Delete Bucket
Overview	Overview Files Basic Settings Domain Names Image Processing Basic Data Hotspot Statisti	cs API Statistics Object Access Sta	tistics	
Bucket + ↓ 2	Manage files more easily with OSS client. Download	now! OSS Client Download		×
 cjitest-inti ecsdoc-text 	Upload Create Directory Delete Set HTTP Header Fragments Refresh		Enter the fil	e name prefix Q
 mytestbucket1 	File Name (Object Name) File Size	Storage Class	Time Updated	Action
 tensorflow-sam 	🗆 🦢 AppName/			
 test-zhao 	🗆 🧰 record/			
 videolive-bucket 				
 videolivebucket 				
 videolivebucket… 				

Select the snapshot to be deleted, and click **Delete**.

To delete multiple snapshots at once, select multiple snapshots and click Delete.

Object Storage	videolive-bucket	Type Standard Storage Regio	n China East 2 (Shanghai) Crea	ated At 11/09/2017, 17:19 Dele	te Bucket
Overview	Overview Files Basic Settings Domain Names Image Processing Ba	sic Data Hotspot Statistics Al	PI Statistics Object Access Statis	tics	
Bucket + Jh 83	Manage files more easily with 0	DSS client. Download now!	OSS Client Download		×
cjitest-intl ecsdoc-text	Upload Create Directory Delete Set HTTP Header Fragments Refresh	Selected: 1 / 100		Enter the file name	prefix Q
mytestbucket1	File Name (Object Name)	File Size	Storage Class	Time Updated	Action
 tensorflow-sam 	Back (record/2018-01-15/AppName/StreamName/)				
 test-zhao 	🔽 💻 1515984425_414.ts	2.78MB	Standard Storage	01/15/2018, 10:47	Edit
videolive-bucket videolivebucket	D 1515984457_415.ts	1.525MB	Standard Storage	01/15/2018, 10:47	Edit
 videolivebucket 	1515984486_416.ts	2.545MB	Standard Storage	01/15/2018, 10:48	Edit

Click OK.

Delete File	\times
Are you sure you want to delete these objects? record/2018-01-15/AppName/StreamName/1515984425_414.ts	
OK Canc	el

Note: To verify whether the selected snapshot has been deleted, you must return to the **snapshots** page of the ApsaraVideo Live console.

Set subaccounts to log on to the ApsaraVideo Live console by using RAM set
What is RAM

Through Alibaba Cloud Resource Access Management (RAM), you can provide required permissions to the subaccounts for the live broadcast in the ApsaraVideo Live console.

One primary account can create multiple subaccounts. By authorizing the subaccounts certain access functions, you can restrict their use of resources and functions for the purpose of unified management. For more inforamtion, see What is RAM.

Subaccount permissions mainly include authorization to use ApsaraVideo Live and OSS and CDN resource objects. We recommend that you plan the resource instances of such services for a subaccount, create authorization policies based on the corresponding authorization templates, and then grant the permissions to the subaccount.

RAM restrictions

RAM users cannot possess resources and they are not billed independently. These users are centrally controlled and billed under your Alibaba Cloud account. You can create separate passwords or keys for each RAM user, but these users do not have any operation permissions by default. RAM provides an access-policy-based authorization to help you grant fine-grained authority to the RAM users.

You must grant the following permissions to your subaccounts to use ApsaraVideo Live console functions:

Live (Required): Grants permission to use ApsaraVideo Live and uses the built-in AliyunLiveFullAccess authorization policy;

OSS (Required): Grants permission to use the screenshot storage service, which can be customized as needed;

CDN (Required): Grants permission to play videos, which can be customized as needed.

Authorization operations

Authorization on ApsaraVideo Live

If a subaccount is required to use ApsaraVideo Live, you must grant the subaccount the permission to use ApsaraVideo Live. You can directly use the built-inAliyunLiveFullAccessauthorization policy as follows:

Log on to the RAM console.

Click Users.

Select **User Name** and click **Authorize** from the **Actions** column to grant theAliyunLiveFullAccesspermission to the specified subaccount.

RAM	User Management				Create User C Refresh
Dashboard	User Name Search by User Name	Search			
Groups	User Name/Display Name	Description		Created At	Actions
Policies	acs_ram_account_c9b0ccb95e9cd4 acs_ram_account	aliyun container service use	this account to provide enhan	ce 2017-09-16 14:28:15	Manage Authorize Delete Join Group
Roles Settings	acs_ram_account_cfe91179222fa4 acs_ram_account	aliyun container service use	this account to provide enhan	ce 2017-09-16 14:27:41	Manage Authorize Delete Join Group
Edit User Memb added Availat live	r-Level Authorization ers added to this grou I to the same group m ble Authorization Polic	p have all the ore than once y Names TypeQ	permissions	of this group. A member ca	nnot be
			4	Selected Authorization Pol	icy Name
					Туре
				AliyunACSDefaultAccess aliyun container s	Custom
				AliyunLiveFullAccess Provides full acce	System
				C	Close

Description of custom authorization policy creation

You can customize authorization policies and assign them to specified subaccounts as follows:

Log on to the RAM console.

Click Policies.

Click Custom Policy .

Click **Create Authorization Policy** to create custom authorization policies as the following samples for the specified resource instance and grant the policies to the specified subaccount.

	ш		Dolicy Management		Crosto Authoriza	tion Delicy	Cashach
	Base services	KAPI	Poicy Heliegement		Create Addition28	don Policy	✓ Refresh
	Object Storage	Dashboard					
5	Message Service	Users	System Policy Custom Policy				
	Resource Acces.	Groups					
4	Table Store	Policies	Policy Name or Description Search Keywords	Search			
	Virtual Private	Roles	Authorization Policy Name	Description	Number of References		Actions
	Express Connect	Settings	AliyunACSDefaultAccess	aliyun container service use this account to provide enhance	2	View Modify	/ Delete
	Elastic IP Addre		MNStest	topicid47577	1	view Modify	/ Delete
	Alibaba Cloud C		MNStest-attri	test2	1	view Modify	/ Delete
	Elastic Comput	9	MNStest-looservicelistoolicy	lagervice	1	View Modify	/ Delete
	ApsaraDB for R						
	Server Load Bal		MNStest-OSSIistbuckets	test	1	view Modify	C Delete
	CloudMonitor		AliyunACSResourcesAccess_container_user_1	aliyun container service use this policy to allocate resourc	1	view Modify	/ Delete

Create Authorization Policy	×
Step 1: Select an Step 2: Edit p	ermissions and $ ightarrow$ Policy creation complete.
All Templates	amically filter the templates below.
Blank Template	System AdministratorAccess Provides full access to
System AliyunOSSFullAccess Provides full access to	System AliyunOSSReadOnlyAccess Provides read-only acces
System AliyunECSFullAccess Provides full access to	System AliyunECSReadOnlyAccess Provides read-only acces
System AliyunRDSFullAccess Provides full access to	System AliyunRDSReadOnlyAccess Provides read-only acces

user1-oss1-live

Create Authorization Poli	icy		\times
Step 1: Select a	n Step 2: Edit permissions ar	d Policy creation co	mplete.
* Authorization Delicy	usar1-oss1-liva		
Name :	Names must be 1-128 characters lon contain the letters A-Z, numbers 0-9	g. They may only , and hyphens.	
Description :			
Policy Content :	1 { 2 "Version": "1", 3 "Statement": [4 { 5 "Effect": "Allow", 6 "Action": [7 "ossl:*" 8], 9 "Resource": [10 "acs: ossl:*:*:\$Buc 12] Authorization Policy Format Authorization Policy FAQ	ket", ket/*"	
	Previous Crea	ate Authorization Policy	Cancel
Create Authorization Poli	сy		×
Stan 1: Salart a	n Stan 2: Edit normissions a	Dolicy creation co	molete
Policy create You have cre s, go to the	ed successfully. eated an authorization policy. To view policy page.	details and manage policy	version
	View Policy Details	Create Another Policy	Close
Policy Management		Create Authoriz	ation Policy C Refresh
System Policy Custom Policy			
Policy Name or Description V Search Keywords	Search		
Authorization Policy Name	Description	Number of References	Action
AliyunACSDefaultAccess	aliyun container service use this account to provide enhance	2	View Modify Delete
MNStest	topicid47577	1	View Modify Delete
MNStest-attri	test2	1	View Modify Delete
MNStest-logservicelistpolicy	logservice	1	View Modify Delete
MNStest-OSSlistbuckets	test	1	View Modify Delete
Alleun ACCR and uncertained uncer 1	aliven container service use this policy to allocate resource		

Note: After the authorization policies are created for various service resource objects,

0

View | Modify | Delete

you can grant the permissions to the corresponding subaccounts.

The following are OSS and CDN authorization policies. You can grant corresponding permissions to subaccounts as needed.

OSS authorization policy

Permission description:

```
All operation permissions on specified buckets;
Permission to view the bucket list;
```

```
{
"Version": "1",
"Statement": [
{
"Action": [
"oss:*"
],
"Resource": [
"acs:oss:*:*:$Bucket",
"acs:oss:*:*:$Bucket/*"
],
"Effect": "Allow"
},
{
"Action": [
"oss:ListBuckets"
],
"Resource": "*",
"Effect": "Allow"
}
]
}
```

CDN authorization policy

Permission description:

```
All permissions on specified CDN domains;
Permission to query CDN domains;
```

```
{
"Version": "1",
"Statement": [
{
"Action": "cdn:*",
"Resource": [
```

The following variables are used in the resource authorization policies of each service. Replace them with your actual resource instance name:

Description of variables

Uid

\$Uid: Alibaba Cloud account ID. You can query it through **Alibaba Cloud console** > **Account Management** > **Security Settings**.

Products -				Message 131	Billing Management	Support	ICP D	ocumentation	ali****@ser	rvice.aliyun.com	English
Account Manage	Security Settings								8	a 🔒	
Security Settings Basic Information Real-name Regist	Change Avatar	Logn Account : alt****@service.altyun.com Change (You have passed identity verification) Account ID : %30*###TIT #####E# Registration Time : 05-02-2017 16:47:00 Change Avatar						User Info Sett accesskeys Sign	out Security Console		
	Login Password A more secure password will improve the security of your account. It's recommended that you change your password regularly, and choose a password containing at least two types of characters (letters, symbols or numbers) and with a length of no less than six characters.								 Already Set Change 	I	
Ξ	Security mobile You have added a mobile phone 4*-1861217**** [Your mobile phone is a secure phone number, which can phone be used for retrieving your password. The number cannot be used as a login account number.]							 Already Set Change Virtual MFA has 	s been X		
	Account Protection	After turning on Account Protection logging in or modifying account in	n, verifica formation	tion(TOTP verificatio	n / SMS verification) is rec	quired when				view the settin	gs.
	Delete Account	I understand that by clicking the Please ensure that all your clou charges and all outstanding che Note that the account cannot be	iis checkb id service arges of b ie reopen	ox my account will b s must be terminated ooth parties must be ed once deleted.	e removed. I before deleting your acc settled.	ount to avoid	further			Delete My Acco	punt

Bucket

\$Bucket: OSS Bucket.

CDN

\$DomainName: Name of the CDN domain.

Resource monitoring

Monitoring index

You can view the **traffic bandwidth**, **access overview**, **user access data**, **hot point**, and **security monitor** information on the ApsaraVideo Live console, and select the domain name and time segment to be monitored for each metric. Available metrics that you can monitor are as follows.

Monitoring Metric	Monitoring index			
Traffic bandwidth	 Network bandwidth: The total traffic and peak bandwidth under the current domain name in the selected acceleration region and ISP within a certain time segment. Origin retrieval bandwidth: The origin retrieval traffic monitored under the current domain name within a certain time segment. Daily traffic statistics: Indexes for which statistics is performed daily, including the traffic, peak bandwidth, peak time point, peak origin retrieval bandwidth time point, and number of visits. 			
Access overview	 Hit rate: Traffic hit rate and request hit rate, among which, Traffic hit rate = Number of traffic that is hit/Total traffic; while Request hit rate = Number of requests that are hit/Total requests. Access QPS: The number of accesses per second under the current domain name within a certain time segment. HTTP CODE: The HTTP status code. 			
User access data	 - PV: The number of times resource files under the current domain name are accessed within a certain time segment. - UV: The number of unique IP addresses that request resources under the current domain name within a certain time segment. - User region distribution: Distribution of users in terms of accessed sites, response time, and download speed under the current domain name within a certain time segment. - Carrier proportions: Shares of the carrier under the current domain name within a certain time segment. 			
Hot point	- Popular URLs : Popular URLs with a high number of access requests, and popular URLs			

	with heavy traffic. - Popular referers : Popular referers with a high number of access requests, and popular referers with heavy traffic. - File response proportions : Response of files with a high number of access requests, and response of files with heavy traffic.
Security monitor	- CC monitoring : Number of attacks under the current domain name within a certain time segment.

View the monitoring information

You can select **Traffic&Bandwidth**, **Overview**, **User Access Data**, **Hot point** and **Security Monitor** from the **Resource Monitoring** page.

Log on to the ApsaraVideo Live console.

Click Resource Monitor in the left-side navigation pane.

Click Traffic&Bandwidth.

Select Monitored Domain Names.

Click Select CDN Name.

Select the domain names.

Click OK.

Select CDN Name					
Select All		^			
Enter the domain name for fuzz	y search				
1 item(s) selected					
✓ videolive-en.aliyun.com	videolive.aliyun.com				
cc.aliyun.com	document4.aliyun.com				
live.51ili.com	live7.aliyuntest.club	-			
	OK Cance	el			

Select a monitoring metric.

Select the time period you want to monitor.

Select the acceleration region and ISP.

Live Video Console	Resource Monitoring	Monitor and Alarm settings						
Domains	Traffic Bandwidth							
Streams								
Recording Indexes	Monitored Domain Names: 1 domain name(s) selected [Select CDN Name]							
Snapshots	Metrics: Network Bandwidth Back-to-source Bandwidth Daily Traffic Statistics							
 Resource Monitor 	Select Time: Today Yesterday 7 days 30 days 2018-01-15 00:00 - 2018-01-15 23:59 🖀 5	🛓 Export Raw Data						
Traffic & Bandwi.	2							
Overview	Acceleration Region: All Regions 6 Carriers Carr							
User Access Data	Total Traffic: 0 B Peak Bandwidth: 0 bps (2018-01-15 00:00 to 2018-01-15 23:59)							

Create a monitoring alarm

You can access **Monitor and Alarm settings** from **Traffic Bandwidth**, **Access Overview**, **Visitor Data**, **Hot Spot Analysis** or **Security Monitoring** pages.

Procedure

Log on to the ApsaraVideo Live console.

Click **Resource Monitoring** in the left-side navigation pane.

Click Traffic & Bandwidth.

Click **Monitor and Alarm settings** in the upper-right corner to go to the **CloudMonitor** console.

Live Video Console	Resource Monitoring	Monitor and Alarm settings			
Domains	Traffic Bandwidth				
Streams	. Mnnitroad Domain Namee: 1 domain name(s) selected [Select CDN Name]				
Recording Indexes					
Snapshots	Metrics: Network Bandwidth Back-to-source Bandwidth Daily Traffic Statistics				
 Resource Monitor 	Select Time: Today Yesterday 7 days 30 days 2018-01-15 00:00 - 2018-01-15 23:59	🛓 Export Raw Data			
Traffic & Bandwi					
Overview	Acceleration Region: All Regions Select ISP: All Carriers				
User Access Data	Total Traffic: 0 B Peak Bandwidth: 0 bps (2018-01-15 00:00 to 2018-01-15 23:59)				

Select the domain name, and click **Alarm Rules** at the right side or **Set alarm rules** at the lower-left corner.

CloudMonitor	CDN						Application Groups	Go to Alibaba Cloud CDN Console	C Refresh
Overview	Users	Domain Name List	Alarm Rules					Monthly Data (Deadline:2018.0)	1.15 19:02:37)
Dashboard	Enter th	e domain name		Search					
Application Groups		Domain Name		Status	Peak Bandwidth	Hit Rate			Actions
Host Monitoring	×	videolive-en.aliyun.com	n	Normal	-			Monitoring Char	ts Alarm Rules
Cloud Service Mo		videolive.aliyun.com		Normal		-		Monitoring Char	ts Alarm Rules
 Alarms 	•	cc.aliyun.com		Normal				Monitoring Char	ts Alarm Rules
-		live7.aliyuntest.club		Normal	-			Monitoring Char	ts Alarm Rules
-		live.51ili.com		Normal				Monitoring Char	ts Alarm Rules
		Set Alarm Rules						Total 5 10 ¥ « <	1 > >

Click Create Alarm Rule in the upper-right corner to go to Create Alarm Rule page.

Create Alarm Rule	± Back to						
1 Related Re	source						
Products :	CDN ·						
Resource Range :	Domain Name • 🔍 When selecting an application group, you can u	se an alarm template. Click View alarm template best practices.					
Domain Name :	videolive-en.aliyun •						
2 Set Alarm	Rules						
Alarm Rule :	@Where is the alarm template?						
Rule Describe :	Peak Bandwidth • Smins • Average • >= • Thresho Mbits/s	No Data					
+Add A	arm Rule						
Mute for :	24h • Ø						
Triggered when threshold is exceeded	1						
for :							
Effective Period :	00:00 - To: 23:59 -						

For more details, see Alarm template best practices.

Notification Contact :	Contact Group	All	Selected Groups 0 count	Al
	Default Contact Group	~		
	GPU			
	Quickly create a contact	group		
Notification Methods :	Email ID+ Ali	•		
Email Subject :	The default format of email theme is Product Name + Metric Name + Instance			
Email Remark :	rk : Obtoral			
HTTP CallBack -	for example: http://alart.a	aliyun.com:808	I0/callback	