

# ApsaraVideo Live

## User Guide

# User Guide

## 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 respectively.
Live stream blacklist management	Sets and deletes stream blacklists.
Set NotifyUrl	Sets the target URL of live stream information push.

## API

Function	Description
Query online users	Gets the number of online users of the RTMP live stream. Query by domain name or stream is supported.
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. Query by domain name or stream is supported.
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 a time to resume the streaming.
Resume live streaming	Resumes the push of a stream.
Set NotifyUrl	Sets the target URL of live stream information

	push.
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### Live video CDN domain

You can create 20 live video CDN domains under each account by default. If you have special requirements, [open a ticket](#) to contact us.

### Concurrent live streams

Each live video CDN domain under each account can push 20 original (non-transcoded) live streams concurrently by default. If the transcoding function is enabled, each CDN domain can push up to 10 transcoded live streams. If you have special requirements, [open a ticket](#) to contact us.

### Streaming

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

To prevent choppy streaming, we recommend you set a bit rate not higher than 4 Mbps.

### Concurrent viewing

There is no limit to the number of concurrent live video viewers, and the service supports tens of millions of concurrent watchers at the same time.

## Domain name management

Before creating an ApsaraLive Video activity, you need to add an ApsaraLive Video domain name in the Live Video console.

### Prerequisite

The domain name must have completed the ICP record filing formalities (if you choose the region **China East 2 Shanghai** or **China North 2 Beijing**, you must complete the ICP record filing formalities;

and if you choose the region Singapore, you do not need to complete the ICP record filing formalities.) to provide ApsaraLive Video services and organize ApsaraLive Video activities in China. If the domain name hasn't completed the record-filing process, first apply for website record-filing

## Operations

Log on to the Live Video console.

The console will check the activation status of services on which the product is dependent. Follow the instructions on the page for operations.

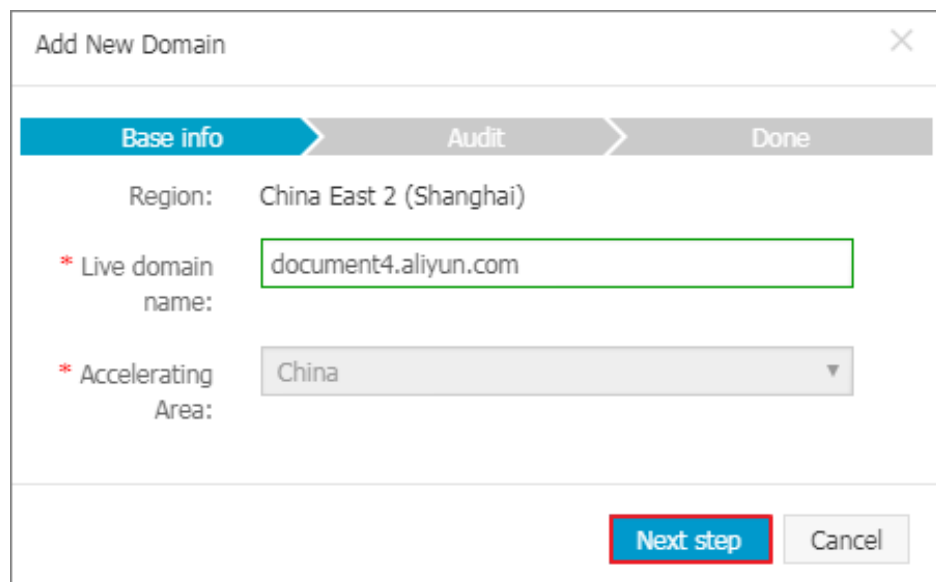
Add domain name.

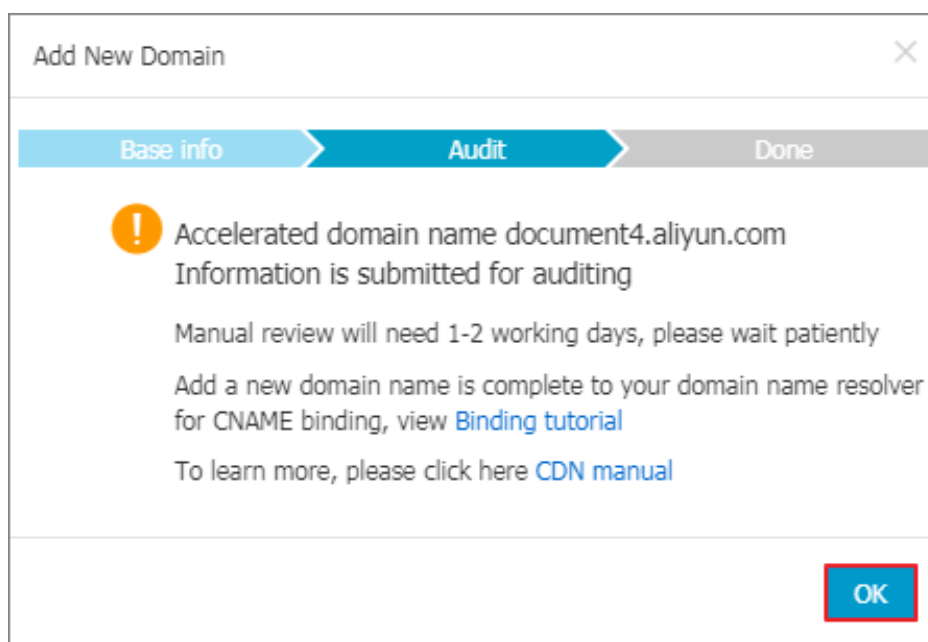
Select the desired region.

Click **Add New Domain**.



Enter the new domain name and click **Next step**.

The screenshot shows a modal dialog box titled 'Add New Domain'. It has a close button (X) in the top right corner. The dialog has three tabs: 'Base info' (selected), 'Audit', and 'Done'. Under the 'Base info' tab, there are three fields: 'Region:' with the value 'China East 2 (Shanghai)', '\* Live domain name:' with the value 'document4.aliyun.com', and '\* Accelerating Area:' with a dropdown menu showing 'China'. At the bottom right of the dialog, there are two buttons: 'Next step' (highlighted with a red border) and 'Cancel'.



After the domain name is configured successfully, the domain name will automatically configure the CDN live acceleration function. You can use live acceleration function after the domain name completes Cname binding.

Note:

- If your domain name is filed at www.net.cn, follow the following operations.
- If your domain name is not filed at www.net.cn, you can firstly transfer your domain name to www.net.cn for management before carrying out Cname binding operations according to steps.

## Operations

Get the CNAME corresponding to the live video domain name of the Live console.

Live Video Console

Current Billing Type: Bandwidth

Domains

Domains

Singapore

China East 2 (Shanghai)

Refresh

Add New Domain

Streams

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Traffic & Bandwidth

Overview

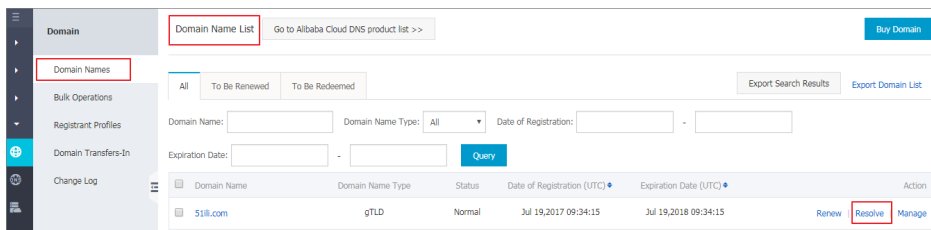
User Access Data

Hot point

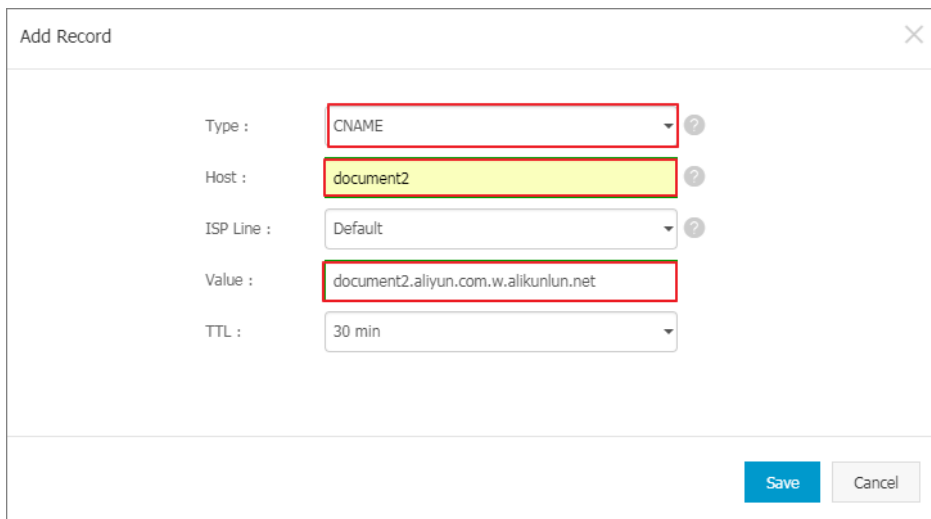
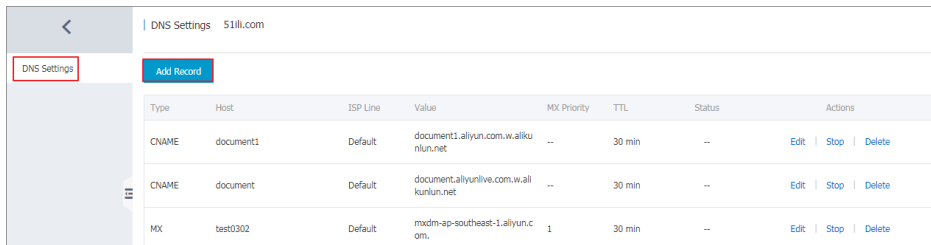
Secure Monitor

Domain Name	CNAME	Creation Time	Status	Detail	Disable	Delete
document.aliyunlive.com	document.aliyunlive.com.w.alikunlun.net	2017-08-01 14:02:40	Normal	Detail	Disable	Delete
doc.aliyun.com	doc.aliyun.com.w.alikunlun.net	2017-08-01 19:12:12	Normal	Detail	Disable	Delete
abc.aliyun.com	abc.aliyun.com.w.alikunlun.net	2017-08-01 19:59:22	Normal	Detail	Disable	Delete
livea.aliyun.com	livea.aliyun.com.w.alikunlun.net	2017-08-21 10:17:44	Normal	Detail	Disable	Delete
document.aliyun.com	document.aliyun.com.w.alikunlun.net	2017-08-21 10:21:34	Normal	Detail	Disable	Delete
document1.aliyun.com	document1.aliyun.com.w.alikunlun.net	2017-08-21 10:44:20	Normal	Detail	Disable	Delete
document2.aliyun.com	document2.aliyun.com.w.alikunlun.net	2017-08-24 14:54:23	Normal	Detail	Disable	Delete

Log on to Live Video console, choose the domain name you want to bind and click **Resolve**.



Click **Add Record**, set resolution parameters and click **Save**.



Choose **CNAME** in **Type**.

Enter second-level domain in **Host**. For example, the streaming address is document2.aliyun.com, then the second-level domain is document2.

Enter into the **Value** the content in the CNAME column in the domain names of the Live Video Console.

The resolution normally will take effect soon.

- If it is a newly created domain name, the resolution won't involve DNS refreshing.
- If the CNAME is changed, there will be cached data on different DNSs, and it may take a maximum of 48 hours to finish the updates.

## Disable a domain name

Log on to the Live Video console.

Click **Domains** in the left-side navigation pane and select the desired region.

Select the desired domain name, and click **Disable** in **Actions** on the right side.


Live Video Console | Current Billing Type: Bandwidth

Domains | Singapore | China North 2 (Beijing) | **China East 2 (Shanghai)** 1 Refresh Add New Domain

Domain Name	CNAME	Creation Time	Status	Actions
document.aliyunlive.com	document.aliyunlive.com.w.alikunlun.net	2017-08-01 14:02:40	Normal	<a href="#">Detail</a>   <a href="#">Disable</a>   <a href="#">Delete</a>
doc.aliyun.com	doc.aliyun.com.w.alikunlun.net	2017-08-01 19:12:12	Normal	<a href="#">Detail</a>   <a href="#">Disable</a>   <a href="#">Delete</a>
abc.aliyun.com	abc.aliyun.com.w.alikunlun.net	2017-08-01 19:59:22	Normal	<a href="#">Detail</a>   <a href="#">Disable</a>   <a href="#">Delete</a>
livea.aliyun.com	livea.aliyun.com.w.alikunlun.net	2017-08-21 10:17:44	Normal	<a href="#">Detail</a>   <a href="#">Disable</a>   <a href="#">Delete</a>
document.aliyun.com	document.aliyun.com.w.alikunlun.net	2017-08-21 10:21:34	Normal	<a href="#">Detail</a>   <a href="#">Disable</a>   <a href="#">Delete</a>
document1.aliyun.com	document1.aliyun.com.w.alikunlun.net	2017-08-21 10:44:20	Normal	<a href="#">Detail</a>   <a href="#">Disable</a>   <a href="#">Delete</a>
document2.aliyun.com	document2.aliyun.com.w.alikunlun.net	2017-08-24 14:54:23	Normal	<a href="#">Detail</a>   <a href="#">Disable</a>   <a href="#">Delete</a>
document3.aliyun.com	document3.aliyun.com.w.alikunlun.net	2017-08-28 14:47:23	Normal	<a href="#">Detail</a>   <a href="#">Disable</a>   <a href="#">Delete</a>
<b>document4.aliyun.com</b>	document4.aliyun.com.w.alikunlun.net	2017-09-14 09:54:46	Normal	<a href="#">Detail</a>   <b><a href="#">Disable</a></b>   <a href="#">Delete</a> <span>2</span>

Click **OK** in the confirmation dialog box.

Shutdown domain ×

 Are you sure you want to shutdown this domain?

OK Cancel

The **Status** of the current domain name is seen as **Disabled**.

Live Video Console | Current Billing Type: Bandwidth

Domains | Singapore | China North 2 (Beijing) | **China East 2 (Shanghai)** Refresh Add New Domain

Domain Name	CNAME	Creation Time	Status	Actions
document.aliyunlive.com	document.aliyunlive.com.w.alikunlun.net	2017-08-01 14:02:40	Normal	<a href="#">Detail</a>   <a href="#">Disable</a>   <a href="#">Delete</a>
doc.aliyun.com	doc.aliyun.com.w.alikunlun.net	2017-08-01 19:12:12	Normal	<a href="#">Detail</a>   <a href="#">Disable</a>   <a href="#">Delete</a>
abc.aliyun.com	abc.aliyun.com.w.alikunlun.net	2017-08-01 19:59:22	Normal	<a href="#">Detail</a>   <a href="#">Disable</a>   <a href="#">Delete</a>
livea.aliyun.com	livea.aliyun.com.w.alikunlun.net	2017-08-21 10:17:44	Normal	<a href="#">Detail</a>   <a href="#">Disable</a>   <a href="#">Delete</a>
document.aliyun.com	document.aliyun.com.w.alikunlun.net	2017-08-21 10:21:34	Normal	<a href="#">Detail</a>   <a href="#">Disable</a>   <a href="#">Delete</a>
document1.aliyun.com	document1.aliyun.com.w.alikunlun.net	2017-08-21 10:44:20	Normal	<a href="#">Detail</a>   <a href="#">Disable</a>   <a href="#">Delete</a>
document2.aliyun.com	document2.aliyun.com.w.alikunlun.net	2017-08-24 14:54:23	Normal	<a href="#">Detail</a>   <a href="#">Disable</a>   <a href="#">Delete</a>
document3.aliyun.com	document3.aliyun.com.w.alikunlun.net	2017-08-28 14:47:23	Normal	<a href="#">Detail</a>   <a href="#">Disable</a>   <a href="#">Delete</a>
document4.aliyun.com	document4.aliyun.com.w.alikunlun.net	2017-09-14 09:54:46	<b>Disabled</b>	<a href="#">Detail</a>   <a href="#">Enable</a>   <a href="#">Delete</a>

## Enable a domain name

Log on to the Live Video console.

Click **Domains** in the left-side navigation pane and select the desired region.

Select the desired domain name, and click **Enable** in **Actions** on the right side.

Live Video Console

Current Billing Type: Bandwidth

Domains

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Domains

Singapore

China North 2 (Beijing)

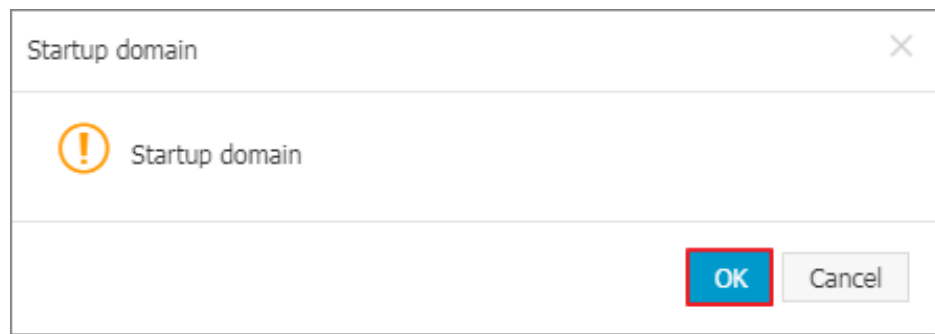
China East 2 (Shanghai)

Refresh

Add New Domain

Domain Name	CNAME	Creation Time	Status	Detail	Disable	Delete
document1.aliyunlive.com	document1.aliyunlive.com.walikunlun.net	2017-08-01 14:02:40	Normal	Detail	Disable	Delete
doc1.aliyun.com	doc1.aliyun.com.walikunlun.net	2017-08-01 19:12:12	Normal	Detail	Disable	Delete
abc1.aliyun.com	abc1.aliyun.com.walikunlun.net	2017-08-01 19:59:22	Normal	Detail	Disable	Delete
livea.aliyun.com	livea.aliyun.com.walikunlun.net	2017-08-21 10:17:44	Normal	Detail	Disable	Delete
document1.aliyun.com	document1.aliyun.com.walikunlun.net	2017-08-21 10:21:34	Normal	Detail	Disable	Delete
document11.aliyun.com	document11.aliyun.com.walikunlun.net	2017-08-21 10:44:20	Normal	Detail	Disable	Delete
document2.aliyun.com	document2.aliyun.com.walikunlun.net	2017-08-24 14:54:23	Normal	Detail	Disable	Delete
document3.aliyun.com	document3.aliyun.com.walikunlun.net	2017-08-28 14:47:23	Normal	Detail	Disable	Delete
document4.aliyun.com	document4.aliyun.com.walikunlunpi.com	2017-09-14 09:54:46	Disabled	Detail	Enable	Delete

Click **OK** in the confirmation dialog box.



The **Status** of the current domain name is seen as **Normal**.

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Current Billing Type: Bandwidth

Domains

Singapore

China North 2 (Beijing)

China East 2 (Shanghai)

Refresh

Add New Domain

Domain Name	CNAME	Creation Time	Status	Detail	Disable	Delete
document1.aliyunlive.com	document1.aliyunlive.com.walikunlun.net	2017-08-01 14:02:40	Normal	Detail	Disable	Delete
doc1.aliyun.com	doc1.aliyun.com.walikunlun.net	2017-08-01 19:12:12	Normal	Detail	Disable	Delete
abc1.aliyun.com	abc1.aliyun.com.walikunlun.net	2017-08-01 19:59:22	Normal	Detail	Disable	Delete
livea.aliyun.com	livea.aliyun.com.walikunlun.net	2017-08-21 10:17:44	Normal	Detail	Disable	Delete
document1.aliyun.com	document1.aliyun.com.walikunlun.net	2017-08-21 10:21:34	Normal	Detail	Disable	Delete
document11.aliyun.com	document11.aliyun.com.walikunlun.net	2017-08-21 10:44:20	Normal	Detail	Disable	Delete
document2.aliyun.com	document2.aliyun.com.walikunlun.net	2017-08-24 14:54:23	Normal	Detail	Disable	Delete
document3.aliyun.com	document3.aliyun.com.walikunlun.net	2017-08-28 14:47:23	Normal	Detail	Disable	Delete
document4.aliyun.com	document4.aliyun.com.walikunlun.net	2017-09-14 09:54:46	Normal	Detail	Disable	Delete

Domain name can only be deleted under the status of **Disabled**. Therefore, you should first disable the undesired domain name before deleting it.

## Operation procedure



Log on to the Live Video console.

Go to **Domains** and select the desired region.

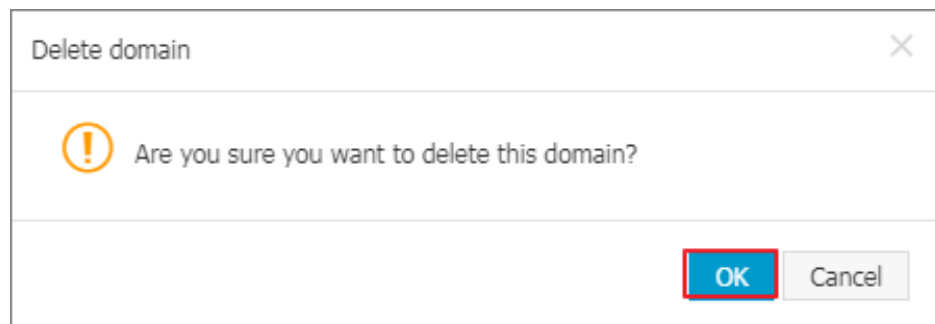
Click **Delete** on the right side of the domain name you have disabled.

Live Video Console | Current Billing Type: Bandwidth

Domains | Singapore | China North 2 (Beijing) | **China East 2 (Shanghai)** | Refresh | Add New Domain

Domain Name	CNAME	Creation Time	Status	Actions
document1.aliyunlive.com	document1.aliyunlive.com.walikunlun.net	2017-08-01 14:02:40	Normal	Detail   Disable   Delete
doc.aliyun.com	doc.aliyun.com.walikunlun.net	2017-08-01 19:12:12	Normal	Detail   Disable   Delete
abc.aliyun.com	abc.aliyun.com.walikunlun.net	2017-08-01 19:59:22	Normal	Detail   Disable   Delete
livea.aliyun.com	livea.aliyun.com.walikunlun.net	2017-08-21 10:17:44	Normal	Detail   Disable   Delete
document.aliyun.com	document.aliyun.com.walikunlun.net	2017-08-21 10:21:34	Normal	Detail   Disable   Delete
document1.aliyun.com	document1.aliyun.com.walikunlun.net	2017-08-21 10:44:20	Normal	Detail   Disable   Delete
document2.aliyun.com	document2.aliyun.com.walikunlun.net	2017-08-24 14:54:23	Normal	Detail   Disable   Delete
document3.aliyun.com	document3.aliyun.com.walikunlun.net	2017-08-28 14:47:23	Normal	Detail   Disable   Delete
<b>document4.aliyun.com</b>	document4.aliyun.com.walikunlunpi.com	2017-09-14 09:54:46	Disabled	Detail   Enable   <b>Delete</b>

Click **OK**.



## Streaming management

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 software.

### Streaming operations

Add a domain name.

Log on to the Live Video console.

Select the region.

Note: You can select Singapore, China East 2 (Shanghai) or China North 2 (Beijing) on the Live Video console. If you select China East 2 (Shanghai) or China North 2 (Beijing), the stream will be pushed to China East 2 (Shanghai) or China North 2 (Beijing) and perform domestic video acceleration. If you select Singapore, the stream will be pushed to Singapore and perform foreign video acceleration.

Click **Add New Domain**.

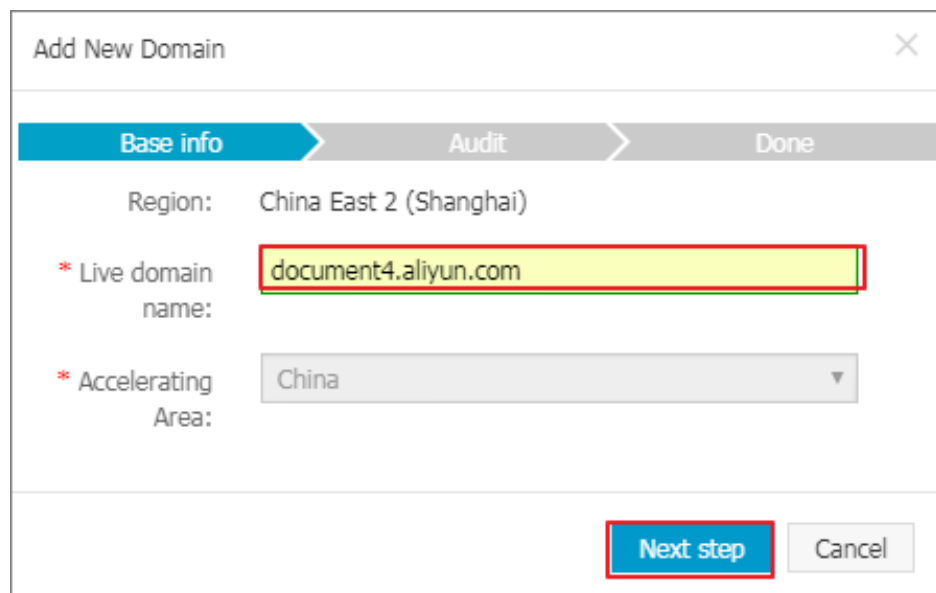


Current Billing Type: Bandwidth

Domains Singapore China North 2 (Beijing) **China East 2 (Shanghai)**

Refresh **Add New Domain**

Enter the domain name information and click **Next Step**.



Add New Domain

Base info Audit Done

Region: China East 2 (Shanghai)

\* Live domain name: **document4.aliyun.com**

\* Accelerating Area: China

**Next step** Cancel

Get the streaming address.

Select the region and click **Detail** at the right side.

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Domains

Singapore

China North 2 (Beijing)

China East 2 (Shanghai)

Refresh

Add New Domain

Domain Name	CNAME	Creation Time	Status	Actions		
document.aliyunlive.com	document.aliyunlive.com.w.aliyun.com	2017-08-01 14:02:40	Normal	Detail	Disable	Delete
doc.aliyun.com	doc.aliyun.com.w.aliyun.com	2017-08-01 19:12:12	Normal	Detail	Disable	Delete
abc.aliyun.com	abc.aliyun.com.w.aliyun.com	2017-08-01 19:59:22	Normal	Detail	Disable	Delete
livea.aliyun.com	livea.aliyun.com.w.aliyun.com	2017-08-21 10:17:44	Normal	Detail	Disable	Delete
document.aliyun.com	document.aliyun.com.w.aliyun.com	2017-08-21 10:21:34	Normal	Detail	Disable	Delete
document1.aliyun.com	document1.aliyun.com.w.aliyun.com	2017-08-21 10:44:20	Normal	Detail	Disable	Delete
document2.aliyun.com	document2.aliyun.com.w.aliyun.com	2017-08-24 14:54:23	Normal	Detail	Disable	Delete
document3.aliyun.com	document3.aliyun.com.w.aliyun.com	2017-08-28 14:47:23	Normal	Detail	Disable	Delete
document4.aliyun.com	document4.aliyun.com.w.kunlunpi.com	2017-09-14 09:54:46	Normal	Detail	Disable	Delete

Get the streaming address in the **Stream Information** on the page of **Base Information**.

<	Domains
Base Information	document4.aliyun.com
Transcoding setti...	
Snapshott settings	
Authenticate	
Domain Information	
Domain: document4.aliyun.com	Region: cn-shanghai
Source site: live-origin.alivecdn.com:80	Accelerating Area: China
BitType: Video cloud live acceleration	Creation Time: 2017-09-14 09:54:46
Stream Information	
Stream url @ : rtmp://video-center.alivecdn.com/{AppName}/StreamName?vhost=document4.aliyun.com	
CNAME: document4.aliyun.com.w.kunlunpi.com	

Streaming operations.

- Copy the streaming address to the streaming tool for the push operation. You can refer to OBS Operation Guidelines below for Streaming steps. Common streaming test tools are OBS official download, XSplit official download and FMLE official download.

We strongly recommend that you perform encryption and authentication on the streaming address to reduce the risks of live video bootlegging and broadcasting without consent from the copyrighter. For detailed operation procedures, see **Live Video Authentication**.

## AppName and StreamName

### Live broadcasting address structure

A live video service address consists of three levels of live video management units, namely the domain name (Domain), app (APPName) and 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 will generate different streaming and playback addresses.

For example, an app is named live. You can create multiple live streams under live. The streaming addresses are:

```
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}
```

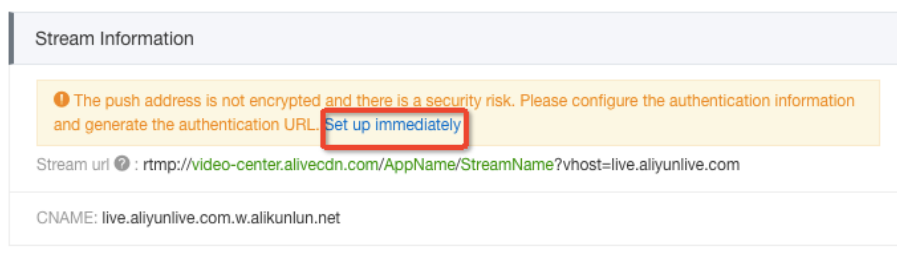
## Authentication of streaming address

☆ We strongly recommend that you perform encryption and authentication on the streaming address to reduce the risks of live video bootlegging and broadcasting without consent from the copyrighter.

### Step 1: Authentication configuration

- Enter the domain name management page.

1. Users who haven't enabled authentication can go to Domain Name Management - Basic Information page - Streaming Address, click Configure Now to enter the Authentication Configuration page.



1. Users who have enabled authentication can enter the page from the tab page of the Domain Name Management.

### Step 2: Enable authentication

1. Switch on the authentication feature.

#### Authentication settings

Auth function ? : ☐ [View the authentication instructions](#)

## 1. Enter the primary key and the backup key for authentication.

The primary key is a private key for calculating the encryption character string, and is mandatory.


If the primary key is changed, all the addresses that use the primary key will be invalidated immediately. When the backup key is changed to the primary key, the streaming or playback addresses that use the primary key will not go invalid immediately and the backup key will be used first as the transition for the change.

Domains

live.aliyunlive.com

Base Information Transcoding settings Snapshot settings **Authenticate**

Authentication settings

Auth function  View the authentication instructions

Auth type: **Type A**

Auth KEY:

\* Main KEY:

Standby KEY:

Note: Authentication KEY can only enter uppercase and lowercase letters, numbers, length 6 to 32

OK Cancel

## Authentication URL Calculator [View the authentication instructions](#)

Stream URL:  **Step 1**

Auth type: **Type A**

Auth KEY:

Expire time:  live.second: **Step 2**

Timestamp:

Auth URL:

**Generate** **Step 3**

Prompt: The authentication feature is configured at the domain name level. If the domain name has the authentication feature enabled, all the streaming addresses under the domain name must implement the authentication encryption. At the same time, the playback address corresponding to the streaming address should also implement authentication encryption. Please use the encrypted address for playback.

## Description

Set the URL which the live stream information should be pushed to.

## Request parameters

Parameter	Type	Required?	Description
Action	String	Yes	Operation interface name, system-required parameter. Value: SetLiveStreamsNotifyUrlConfig
DomainName	String	Yes	Your CDN domain name
NotifyUrl	String	Yes	Set the URL which the live stream information should be pushed to. It must start with http://

## Return parameters

Name	Type	Description
RequestId	String	The ID of the job request

## Special error code

Error Code	Description	HTTP Status Code	Meaning
InternalServerError	The request processing has failed due to some unknown error.	500	Unknown error in the background
InvalidDomain.NotFound	The domain provided does not exist in our records.	404	No domain name found for the current account
IllegalOperation	Illegal domain operate is not permitted.	403	Current operation not supported. For example, it is not a live video domain name

MissingParameter	The input parameter <parameter name> that is mandatory for processing this request is not supplied	400	A parameter is missing
------------------	--	-----	------------------------

## Example

### Request example

```
https://cdn.aliyuncs.com?Action=ResumeLiveStream&DomainName=test101.cdnpe.com&NotifyUrl=http://api.cdnpe.com&<Public Request Parameter>
```

### Return example

- JSON format

```
{
  "RequestId": "4C747C97-7ECD-4C61-8A92-67AD806331FF"
}
```

- XML format

```
<?xml version="1.0" encoding="UTF-8" ?>
<SetLiveStreamsNotifyUrlConfigResponse>
  <RequestId>16BFE188-B193-4C3C-ADC5-79A7E31486EA</RequestId>
</SetLiveStreamsNotifyUrlConfigResponse>
```

The ApsaraVideo Live playback address is spliced by different parameters:play domain name+AppName+StreamName+\_+transcoding template name.

The SD transcoding template name is **sd** and the splicing rule of the ApsaraVideo Live play address is as follows:

**RTMP format:** `rtmp:// document4.aliyun.com/AppName/{StreamName} _sd`  
**FLV format:** `http:// document4.aliyun.com/AppName/{StreamName} _sd.flv`

The HD transcoding template name is **hd** and the splicing rule of the ApsaraVideo Live play address is as follows:

**RTMP format:** `rtmp:// document4.aliyun.com/AppName/{StreamName} _hd`  
**FLV format:** `http:// document4.aliyun.com/AppName/{StreamName} _hd.flv`

The original image is the original video stream without transcoding. The splicing rule of the ApsaraVideo Live play address is:

**RTMP format:** `rtmp:// document4.aliyun.com/AppName/{StreamName}`

**FLV format:** `http:// document4.aliyun.com/AppName/{StreamName}.flv`

**M3U8 format:** `http: //document4.aliyun.com/AppName/{StreamName}.m3u8`

In a live video environment, choppy live video has the biggest impact on the live video effect. Among the many causes for choppy live streaming is poor bandwidth stability of the uplink transmission. Poor bandwidth stability of the uplink transmission has a huge impact on the viewing experience and may lead to choppy videos at all audience clients.

The ApsaraVideo Live console allows you to monitor the uplink traffic, and you can easily view the uplink transmission status of the live stream.

## View data

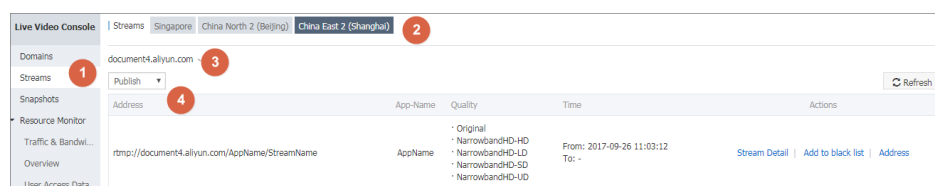
Log on to the Live Video console.

Click **Stream Management** in the left-side navigation pane.

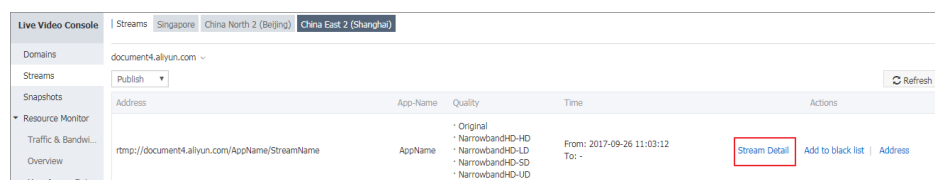
Select the desired region.

Select the desired live domain name.

Select the desired stream status.



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



View the stream management data.

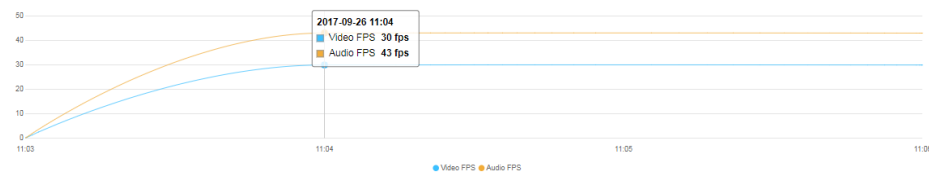


On the **Stream Monitor** page, you can view the streaming information, video frame rate, audio frame rate, and bit rate.

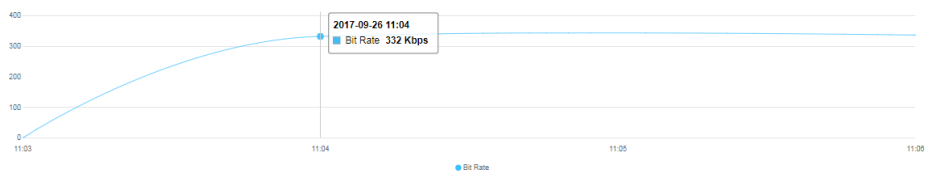
### Streaming information section

Stream Detail		
Publish info		
Stream URL: rtmp://document4.aliyun.com/AppName/StreamName		
Domain: document4.aliyun.com	AppName: AppName	StreamName: StreamName
Time duration: 00:06:48	AVG Bit Rate: 337.79 Kbps	AVG FPS: 29.98 fps [video]   43.06 fps [audio]

### Frame rate display section



### Bit rate display section



The stream management data is updated every minute on average. You can open the interface any time to view the uplink data transmission status.

When the data status is displayed as smooth and the peak and valley values are comparatively stable, it indicates that the uplink transmission is comparatively stable. If sharp fluctuations occur, you can try to locate the problems in uplink transmission as soon as possible.

## Causes of choppy streaming

Choppy playback is largely caused by choppiness during the course of streaming. Several major contributors are listed as follows. When the stream gets choppy, you can troubleshoot the issue one by one.

Mobile phone configuration.

Streaming consumes some CPU resources. Low-end mobile phones with poor hardware configuration may encounter choppy videos or blurred images to varied degrees if the

overall CPU usage exceeds 80% during the streaming process, which may affect the video collection and viewing experience on the user terminals.

Video collection parameter settings.

The video must have at least 15 frames per second or higher to ensure smooth human vision recognition. If the FPS is lower than 10 frames per second, the video becomes obviously choppy. We suggest you set the frame rate to more than 15 frames per second when possible, if there are no special circumstances.

Although the higher the video frame rate, the smoother the video, when the frame rate is over 30 FPS, viewer's eyes are not be able to identify the image content. Higher frame rate also increases the bandwidth cost for video transmission. We suggest you set the video parameters reasonably.

Network bandwidth.

The network is a major cause of choppy videos. The following are some common impact factors.

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 if any data downloading activity occupies the network bandwidth.

System resource usage: Check whether a large number of programs are running in the background. You can remove and terminate running programs reasonably to save some resources.

Live console currently provides **SD** and **HD** transcoding templates to choose from as needed.

Log on to the Live Video Console and enter the domain name management page.

Domains		Asia Pacific SE 1 (Singapore)	China East 2 (Shanghai)	Video Chat Quick Start	Refresh	Add New Domain
Domain Name	CNAME	Creation Time	Status	Actions		
live.aliyunlive.com	live.aliyunlive.com.w.alikunlun.net	2017-02-14 11:54:08	Normal	Detail	Disable	Delete

Select the **Transcoding settings** tab and click **Create transcoding** button.

## Domains

live.aliyunlive.com

Base Information

Transcoding settings

Create transcoding

Refresh

AppName

Enter the AppName in the newly created transcoding template. The AppName should match that in the streaming address for the transcoding template to work properly.

Create transcoding

AppName:

Templates ? :

High quality templates

<input type="checkbox"/>	Name	ID ?
<input type="checkbox"/>	LD	ld
<input type="checkbox"/>	SD	sd
<input type="checkbox"/>	HD	hd
<input type="checkbox"/>	UD	ud

OK

Cancel

You can select multiple transcoding templates at the same time.

The transcoding template is created successfully.

Create transcoding

Refresh

AppName	Templates			
livetest	High-quality-HD	High-quality-LD	High-quality-SD	High-quality-UD

recording-management

screenshot-management

Video screenshot service supports taking screenshots on the live video being played at a set interval and saving the screenshots as .jpg files to a specified location in OSS.

Under a live video CDN domain, the live screenshot settings are differentiated by the AppName of the live video streaming. That is, streams under the same AppName all perform screenshot 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 screenshot settings.

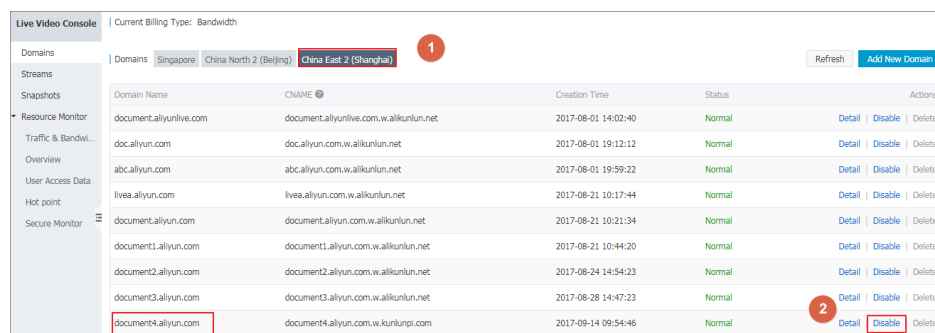
To conveniently view the screenshot content, set a bucket for storage first.

## Procedure

Log on to the Live Video console.

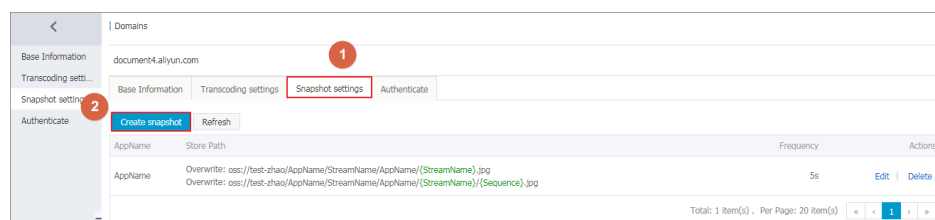
Select the desired region.

Select the desired domain name and click **Manage** at the right side of the domain name.

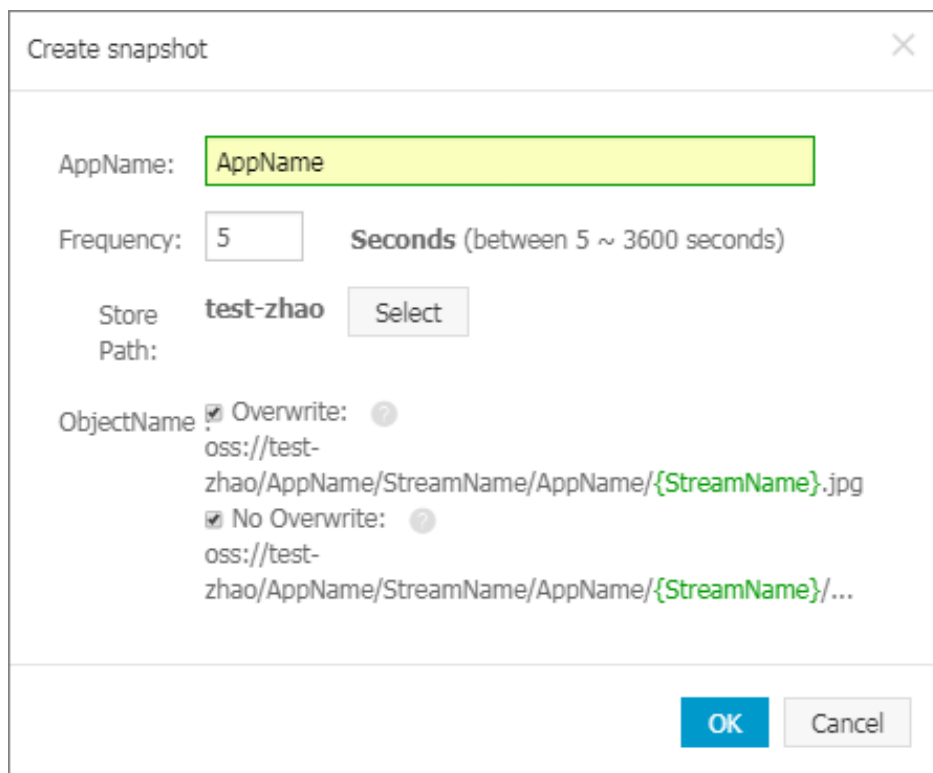


Click **Screenshot Settings** to go to the Screenshot Settings tab.



Click **Create Screenshot** to open the screenshot setting window.



Set the screenshot parameters and click **OK**.



The image shows a 'Create snapshot' dialog box with the following fields and options:

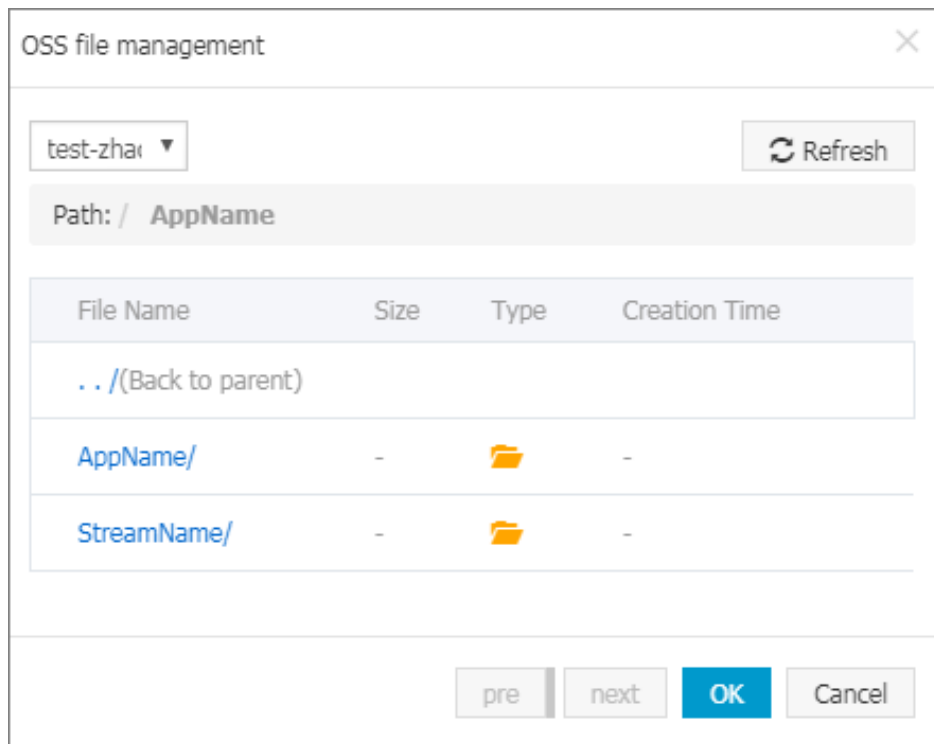
- AppName:** A text input field containing 'AppName'.
- Frequency:** A text input field containing '5', followed by the text 'Seconds (between 5 ~ 3600 seconds)'.
- Store Path:** A text input field containing 'test-zhao', followed by a 'Select' button.
- ObjectName:** A section with two options:
  - ☒ **Overwrite:**  oss://test-zhao/AppName/StreamName/AppName/{StreamName}.jpg
  - ☒ **No Overwrite:**  oss://test-zhao/AppName/StreamName/AppName/{StreamName}/...

At the bottom right, there are 'OK' and 'Cancel' buttons.

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

Enter the screenshot interval, which is within the range of 5 to 3,600 seconds.

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



NOTE: The bucket must be in the same region as that of your current domain name. 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, make sure that the OSS bucket and the domain name are in the same region.

Select an image screenshot type, Overwrite or Do Not Overwrite. Multiple types can be selected.

Overwrite: The video screenshots are taken in sequence based on the set interval, and the new screenshot can overwrite the older one.

Do Not Overwrite: The video screenshots are taken in sequence based on the set interval, and the new screenshots are stored in OSS in the order of  $N+1$  ( $N \geq 0$ ).

All the screenshot settings under the domain name are listed on the **Screenshot Settings** tab. For example, the screenshots of all the live video streams with "live8" as the Appname under the domain name are captured and output according to this rule.

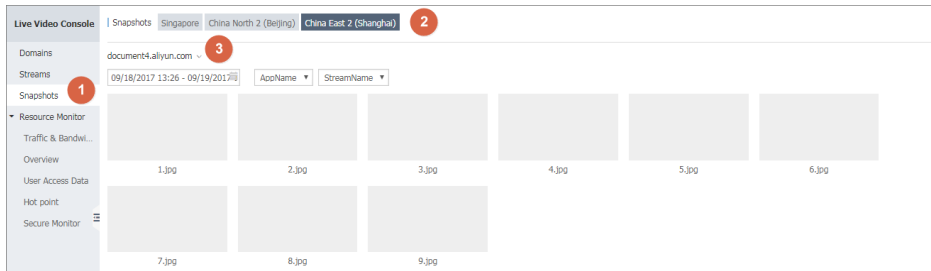
NOTE: The modified screenshot settings take effect in the next live video streaming.

Log on to Live Video console.

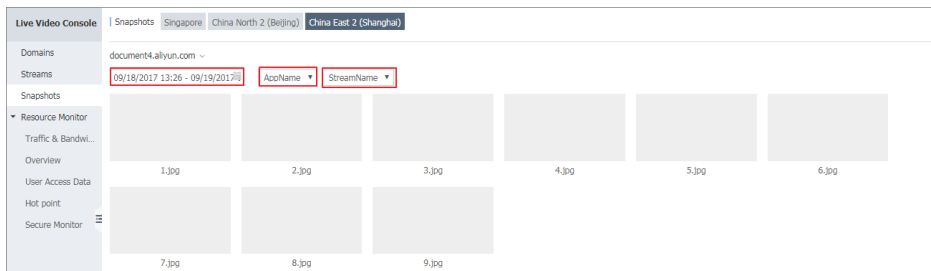
Click **Snapshots** to go to **Snapshots** page.

Select the desired region.

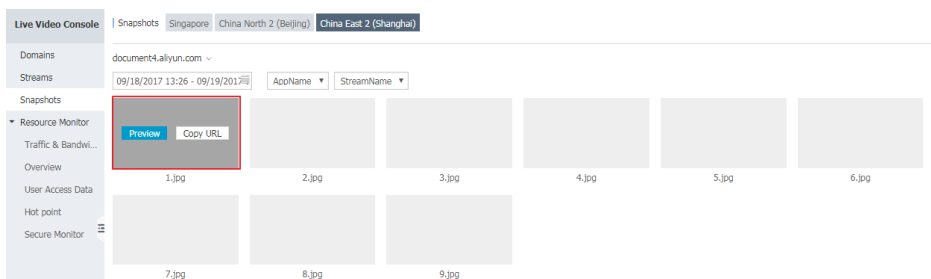
Select the domain name desired to be checked.



Select the time period and select AppName and StreamName, and the snapshots list will be shown based on your selection.



Move the cursor over a snapshot in the list, and the buttons for enlarging the image and copying the URL will be displayed. You can perform the operations as needed.

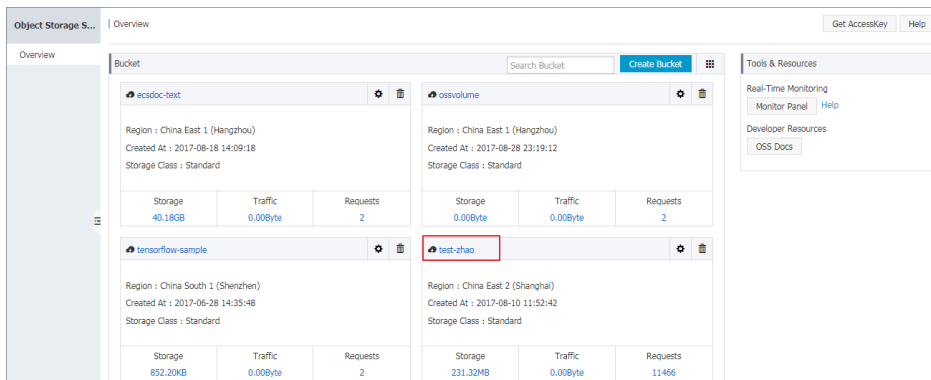


You need to delete the snapshot in OSS.

Log on to OSS Management console.

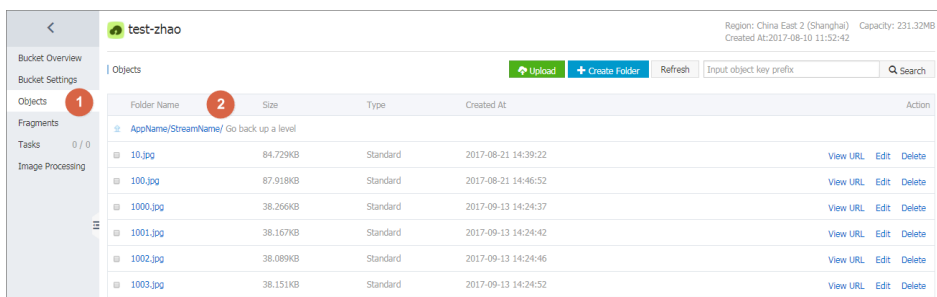


Select the name of the bucket for in which the snapshots are stored on **overview** page.

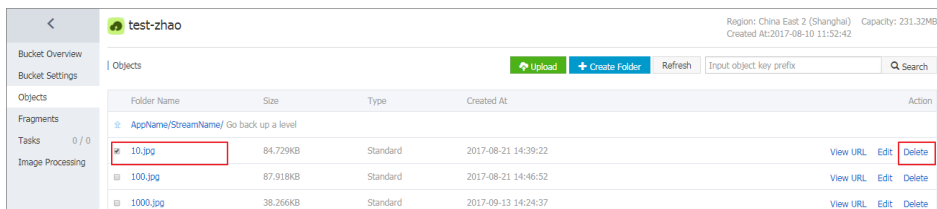


Click **Objects**.

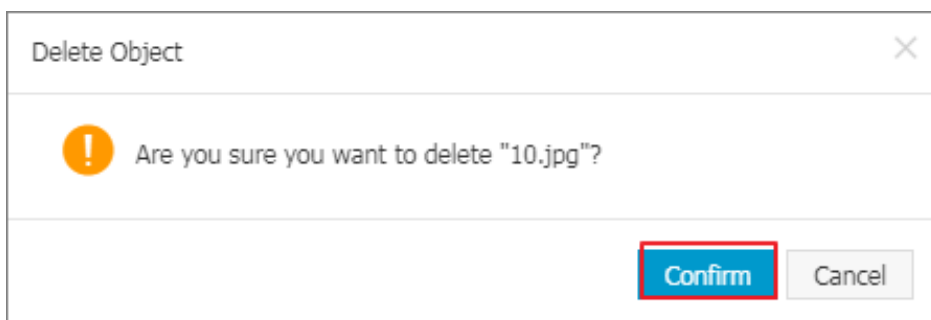
Select the desired Folder Name, and click.



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



Click **Confirm**.



Note: You need to return to the **snapshots** page of the Live Video console to check and verify whether the snapshot selected has been deleted.

## resource-monitoring

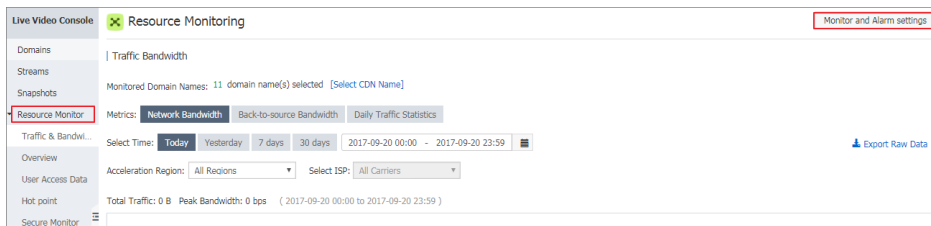
You can go to **Monitor and Alarm settings** from the page of **Traffic Bandwidth**, **Access Overview**, **Visitor Data**, **Hot Spot Analysis** or **Security Monitoring**.

Log on to Live Video console.

Click **Resource Monitoring**.

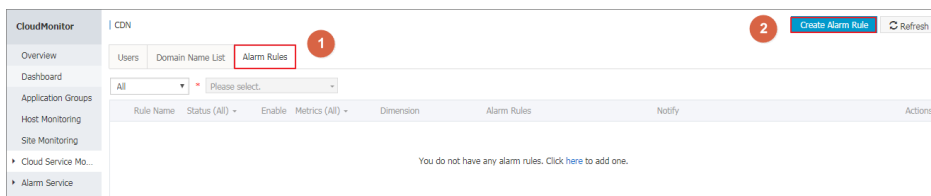
Click **Traffic Bandwidth**.

Click **Monitor and Alarm settings** on the upper right side to go to ClouMonitor console.



Click **Alarm Rules**.

Click **Create Alarm Rule** on the upper right side to go to **Create Alarm Rule** page. for details, Refer to **View alarm template best practices**.



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