

Alibaba Cloud ApsaraVideo for Media Processing

User Guide

Issue: 20181129

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Generic conventions

Table -1: Style conventions

Style	Description	Example
	This warning information indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	 Danger: Resetting will result in the loss of user configuration data.
	This warning information indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	 Warning: Restarting will cause business interruption. About 10 minutes are required to restore business.
	This indicates warning information, supplementary instructions, and other content that the user must understand.	 Note: Take the necessary precautions to save exported data containing sensitive information.
	This indicates supplemental instructions, best practices, tips, and other content that is good to know for the user.	 Note: You can use Ctrl + A to select all files.
>	Multi-level menu cascade.	Settings > Network > Set network type
Bold	It is used for buttons, menus, page names, and other UI elements.	Click OK .
Courier font	It is used for commands.	Run the <code>cd /d C:/windows</code> command to enter the Windows system folder.
<i>Italics</i>	It is used for parameters and variables.	<code>bae log list --instanceid Instance_ID</code>
[] or [a b]	It indicates that it is an optional value, and only one item can be selected.	<code>ipconfig [-all -t]</code>
{ } or {a b}	It indicates that it is a required value, and only one item can be selected.	<code>swich {stand slave}</code>

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1 Service regions

MPS is available in China North 2 (Beijing), China East 1 (Hangzhou), China East 2 (Shanghai), China South 1 (Shenzhen), Hong Kong, US West 1 (Silicon Valley), Asia-Pacific Southeast 1 (Singapore), Asia-Pacific Northeast 1 (Tokyo), Central Europe 1 (Frankfurt) and Asia-Pacific South 1 (Mumbai) service regions. The following table lists the access URL of the service in each region.

Region	Service URL	Service URL in VPC
China North 2 (Beijing)	mts.cn-beijing.aliyuncs.com	mts-vpc.cn-beijing.aliyuncs.com
China East 1 (Hangzhou)	mts.cn-hangzhou.aliyuncs.com	mts-vpc.cn-hangzhou.aliyuncs.com
China East 2 (Shanghai)	mts.cn-shanghai.aliyuncs.com	mts-vpc.cn-shanghai.aliyuncs.com
China South 1 (Shenzhen)	mts.cn-shenzhen.aliyuncs.com	mts-vpc.cn-shenzhen.aliyuncs.com
Hong Kong	mts.cn-hongkong.aliyuncs.com	-
US West 1 (Silicon Valley)	mts.us-west-1.aliyuncs.com	-
Asia-Pacific Southeast 1 (Singapore)	mts.ap-southeast-1.aliyuncs.com	-
Asia-Pacific Northeast 1 (Tokyo)	mts.ap-northeast-1.aliyuncs.com	-
Central Europe 1 (Frankfurt)	mts.eu-central-1.aliyuncs.com	-
Europe West 1 (London)	mts.eu-west-1.aliyuncs.com	-
Asia-Pacific South 1 (Mumbai)	mts.ap-south-1.aliyuncs.com	-

2 Limits

MPS queue

Currently, each user can have one MPS queue in each service region.

Each MPS queue contains a maximum of 10,000 tasks in queue.

Custom template

Each user can create 10 custom transcoding templates in each service region.

Each user can create 10 custom watermark templates in each service region.

Media workflow

Each user can create a maximum of 10 workflows in each service region.

Transcoding task

A user can submit tasks for a maximum of 100 times per second.

A user can query tasks for a maximum of 100 times per second.

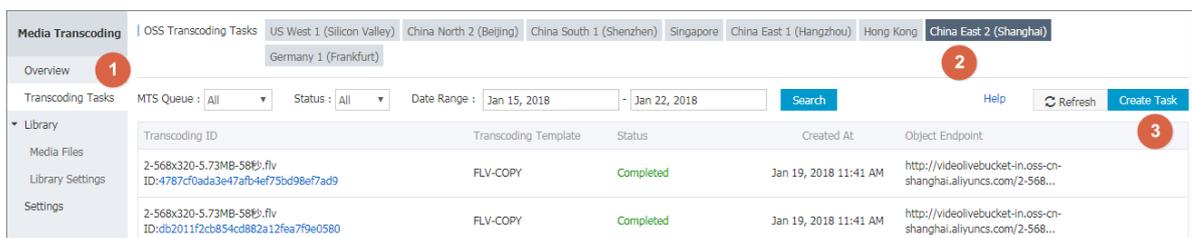
**Note:**

In the API description section, whenever there is a conflict with the resource or specification constraints given on the official website concerning optional parameter values or available specifications, the information on the official website prevails.

3 Submit a transcoding task

Complete the initialization of MPS service on the MPS console according to [Activate MPS](#), and the instructions on submitting a transcoding task as follows.

1. Log on to the [Media Processing console](#).
2. Click **Transcoding Tasks**.
3. Select the region.
4. Click **Create Task**.



5. In **Submit > Settings**, at the right side of **Input** and **Output Location** respectively, click **Browse**.
6. Enter the **Output Name**, and click **Next**.

Submit

Settings | Template

*Input : **Browse**

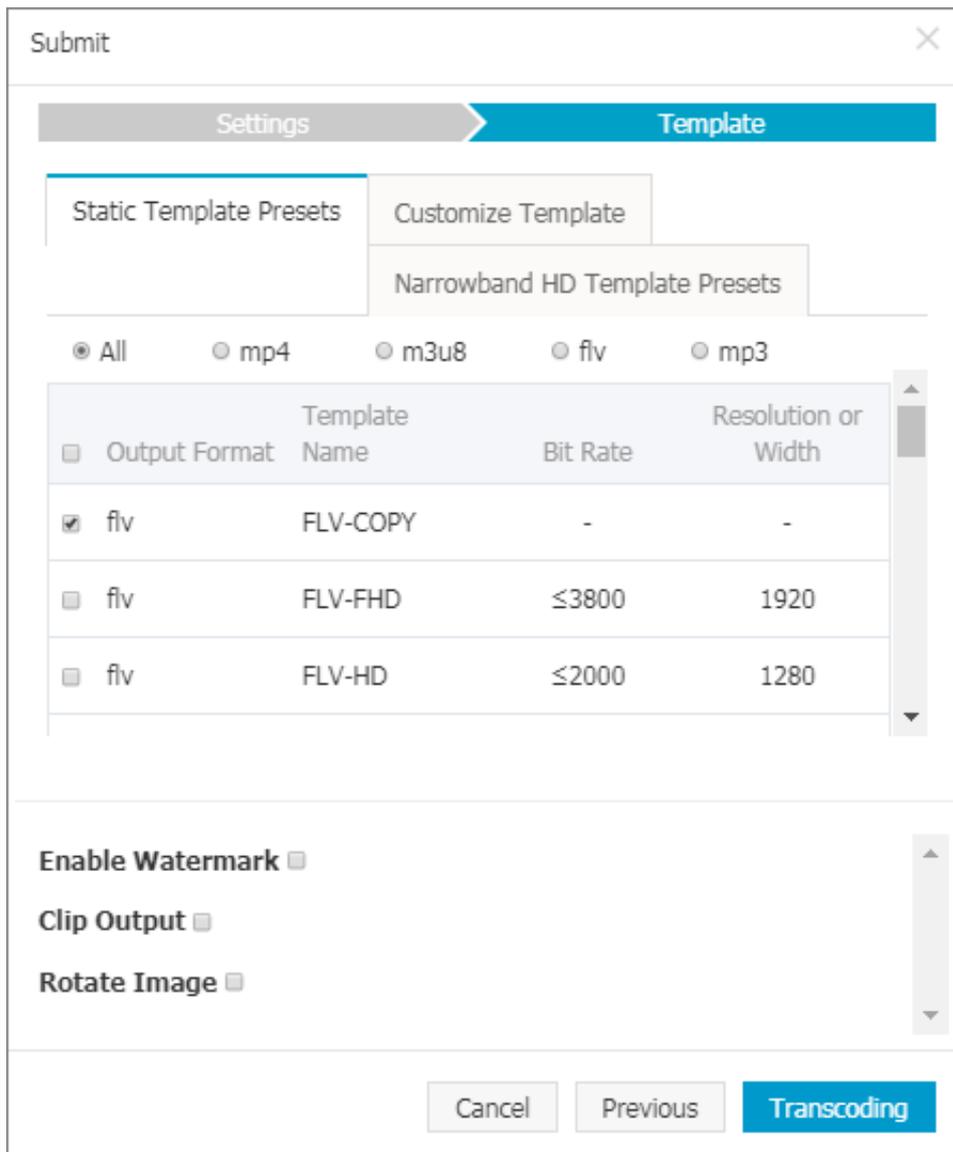
*Transcoding MTS Queue :

*Output Name :

*Output Location : **Browse**

Cancel **Next**

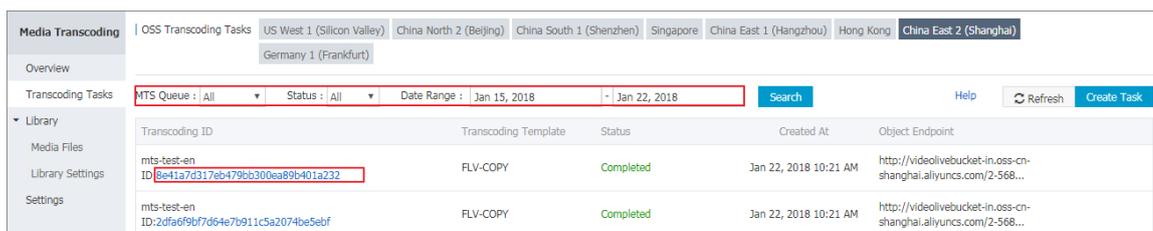
7. In **Template > Static Template Presets**, select an Output Format, and click **Transcoding**.



8. View transcoding progress and result.

In **Transcoding Tasks > OSS Transcoding Tasks**, select **MPS Queue**, **Status** and **Data Range**, and click **Search** to view the transcoding tasks.

- **View transcoding tasks and transcoding progress.**



- Click **Transcode ID** to **View transcoding task details**.

< Transcoding Task Details

Details

Transcoding Details

Transcode ID : 8e41a7d317eb479bb300ea89b401a232	Watermark Template ID :
Status : Completed	Clip Output : No
Progress : 100%	Rotate Angle : 0degrees
MTS Queue ID : 17a2461a13ef45c680480bb791e65b5c	
Created At : Jan 22, 2018 10:21 AM	
Completed on : Jan 22, 2018 10:22 AM	
Template ID : S00000001-000000	

Input

Bucket : videolivebucket-in
Location : oss-cn-shanghai
Object : 2-568x320-5.73MB-S8E.mp4

Transcoding Output [Copy To](#)

Bucket : videolivebucket-out
Location : oss-cn-shanghai
Object : mts-test-en

4 Transcoding message notifications

MPS fully supports message queue and message notification functions of MNS. The following takes the message notification service as an example. The operation of using the message queue to receive messages is performed in a similar way. Enable the transcoding message notification function before use.

1. Create Notification Topics.

Create the topic in the same region on the MNS console and complete subscription.

a. Create a topic.

A. Click **Topics**.

B. Select the region.

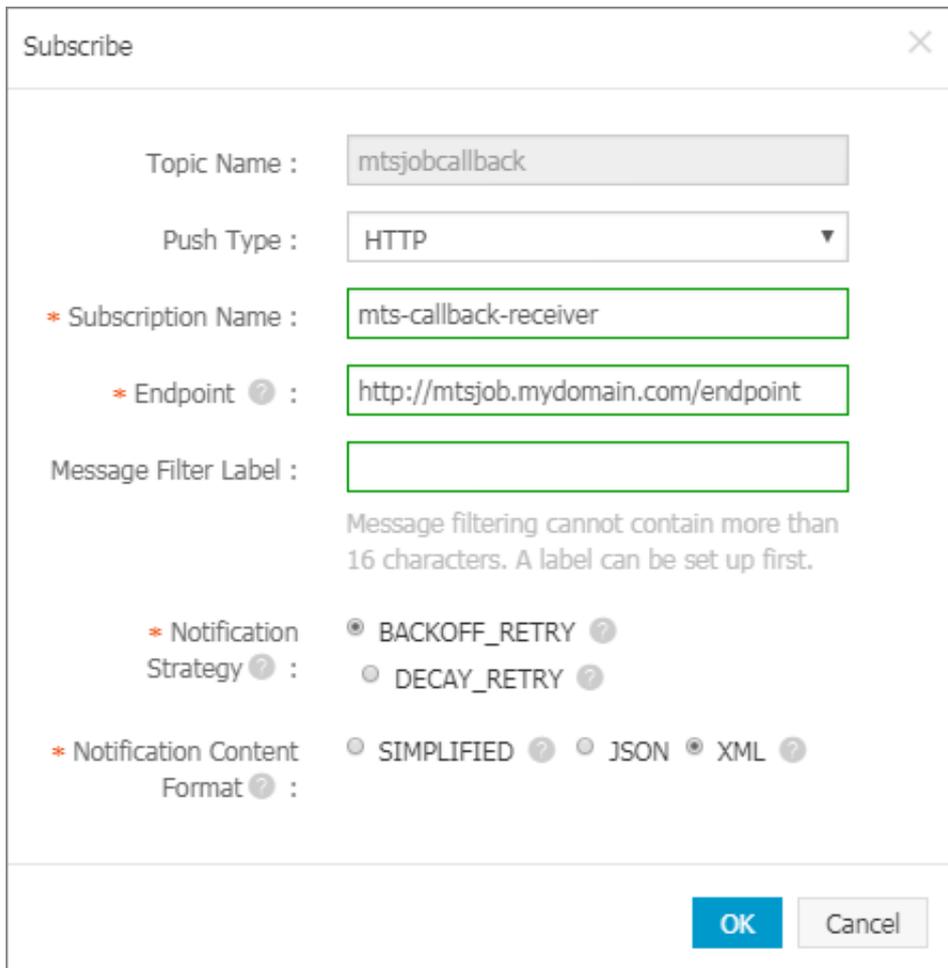
C. Click **Create Topic**.

The screenshot shows the MNS console interface. The 'Topics' tab is selected, and the 'China East 2 (Shanghai)' region is chosen. A 'Create Topic' button is visible in the top right corner. Red circles 1, 2, and 3 highlight the 'Topics' tab, the region dropdown, and the 'Create Topic' button respectively.

D. Enter the **Topic Name** on the **Create Topic** page.

The screenshot shows the 'Create Topic' dialog box. The 'Topic Name' field is filled with 'mtsjobcallback', and the 'Region' is set to 'China East 2 (Shanghai)'. The 'Maximum Message Size (Byte)' field is empty, and the 'Enable Logging' toggle is turned off. The 'OK' button is highlighted.

b. Create a subscription.

A. Click `Subscribe`.**B. On the `Subscribe` page, enter the `Subscription Name` and the `Endpoint`.****2. Set the binding relationship between the MPS queue and notification.**

- a. Log on to the [Media Processing console](#).
- b. Click **Settings**.
- c. Select the region.
- d. Click **MPS Queues**.
- e. Click **Message Notification**.

The screenshot shows the Media Transcoding console interface. The left sidebar has a 'Settings' menu item highlighted with a red circle '1'. The main content area has a 'Transcoding Tasks' section with a sub-tab 'MTS Queues' highlighted with a red circle '3'. Below this is a table with the following data:

MTS Queue ID	MTS Queue Name	Status	Associated Message / Queue	Actions
17a2461a13ef45c880480bb791e65b5c	mts-service-pipeline	In Use	mtsjobcallback	Pause Message Notification

The 'Message Notification' action in the table is highlighted with a red circle '4'. At the bottom right of the table, there is a pagination control showing 'Total: 1 Item(s) . Per Page: 10 Item(s)' and a page number '1' highlighted with a red circle '2'.

f. Select the Message Type and Message Name.

The dialog box titled 'Message Notification' contains two input fields. The first is labeled 'Message Type' and has a dropdown menu with 'Notificator' selected. The second is labeled 'Message Name' and has the text 'mtsjobcallback' entered. At the bottom right, there are two buttons: 'OK' (in blue) and 'Cancel' (in grey).

The relationship between the MPS queue and notification is binded successfully.

3. Establish the message notification receiving service.

For more information, see Message Notification function description.

4. Operate messages in the consumer's queue.

After MPS completion messages are received using an MNS queue, the message consumer must actively receive and delete messages.

- For more information about how to receive messages, see Receive a queue message and Receive queue messages in batches.
- For more information about how to delete messages, see Delete a queue message and Delete queue messages in batches.

5 Library

5.1 Overview

Purpose

This article describes how to initialize the library, set the media bucket and bind the CDN domain name to the Output Media Bucket. Besides, it describes how to set media workflows, upload and manage video files.

Target readers

This User Guide > Library is a reference for anyone who wants to:

- Learn about library settings.
- Bind a CDN domain name to the **Output Media Bucket**.
- Upload and manage video files.

Library management process

1. [Library settings](#).

After MPS is activated, initialize the library and set the **Input Media Bucket** and **Output Media Bucket** in **Library**.

2. [Manage a domain name](#).

Set a CDN domain name for the OSS Bucket which the **Output Media Bucket** is bound to.

3. [Set media workflows](#).

Workflows support transcoding, encapsulation, watermarking, encryption, and editing, allowing you to fast and flexibly construct a cloud-based audio/video handling process on demand.

Each workflow is bound to a path of the Input Media Bucket. When an audio or video file is uploaded to the path or its sub-directory, the workflow is automatically triggered to perform preset processing operations and save the processing result to the specified path of the **Output Media Bucket**.

4. [Upload video files and execute workflows](#).

You can use the MPS console or OSS related upload tools to upload a video file and execute workflows.

5. [Manage videos](#).

You can manage your video files through Media Files such as publishing and deleting videos, set the title, tag, category and other information for a media file; or search for a media file using the information. In addition, the Media Files contains the format, duration, bit rate, frame rate, resolution and other metadata of each media file. It also displays the OSS storage URL and CDN domain URL of each resource, and supports online preview and playback for each resource.

5.2 Library settings

After activating MPS, use it according to the following tutorial. For more information about quick start, see [Library quick start guide](#).

A library uses OSS to store your audio and video resources. It provides media indexing, allowing you to quickly search for audio and video resources by titles, tags, categories, and descriptions.

After MPS is activated, initialize the library and set the **Input Media Bucket** and **Output Media Bucket**.

- **Input Media Bucket:** This bucket stores the original videos you have uploaded.
- **Output Media Bucke:** This bucket stores videos output by the media library.

1. Log on to the [Media Processing console](#).

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

2. Select the region.

3. Click **Library > Library Settings > Media Buckets** to set the **Input Media Bucket** and **Output Media Bucket**.



a. Set **Input Media Bucket**.

A. Click **Add** at the right side of **Input Media Bucket**.

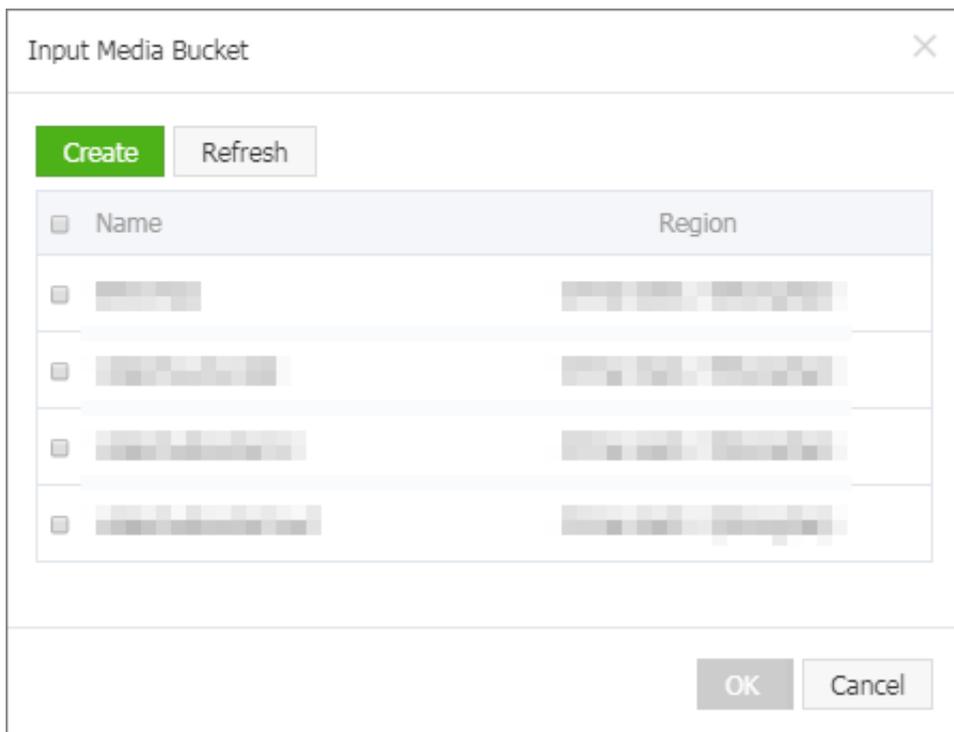




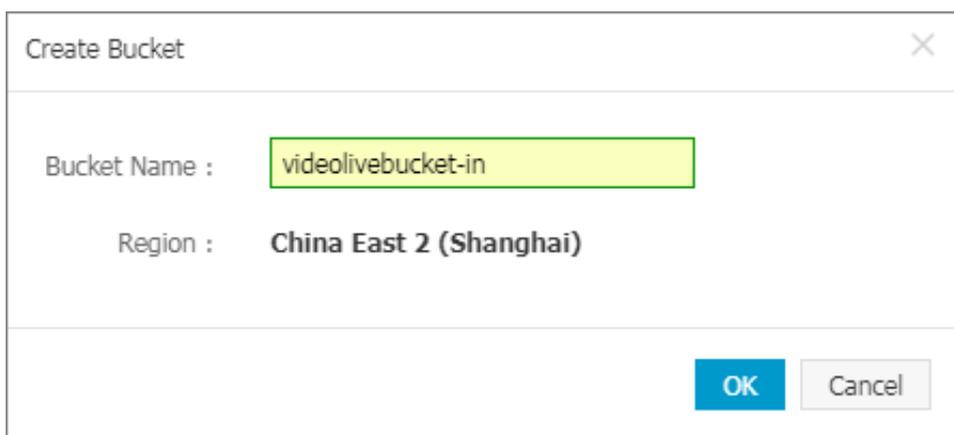
Note:

If you have already created OSS buckets in the current OSS service region, these buckets are listed on the settings interface. In this case, select the appropriate bucket. You can also create a new bucket as the Input Media Bucket.

B. Click Create.



C. Enter the Bucket Name, and click OK.



D. The Input Media Bucket name is shown in the Input Media Bucket list, and click OK.

b. Set Output Media Bucket.

A. Click Add at the right side of Output Media Bucket.

Output Media Bucket		Add
Name		Actions

B. Click **Create.**

Output Media Bucket

Create Refresh

<input type="checkbox"/>	Name	Region
<input type="checkbox"/>	[blurred]	[blurred]
<input type="checkbox"/>	[blurred]	[blurred]
<input type="checkbox"/>	[blurred]	[blurred]

OK Cancel

C. Enter the **Bucket Name, and click **OK**.**

Create Bucket

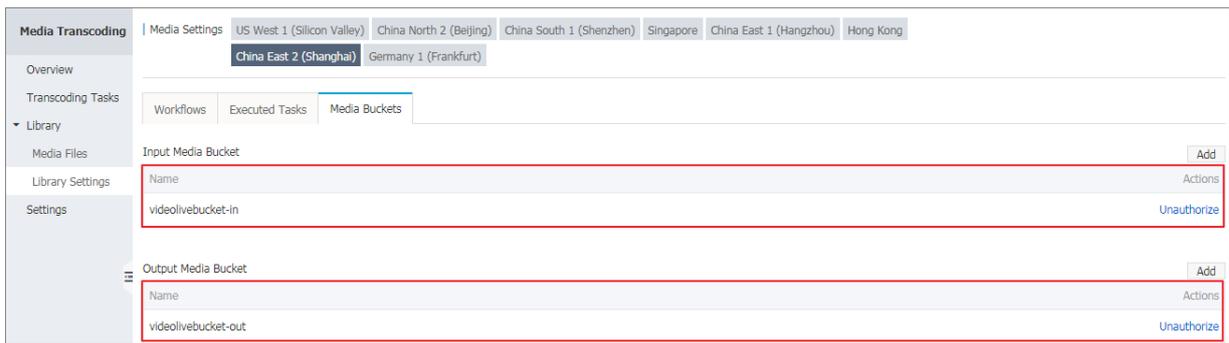
Bucket Name : videolivebucket-out

Region : China East 2 (Shanghai)

OK Cancel

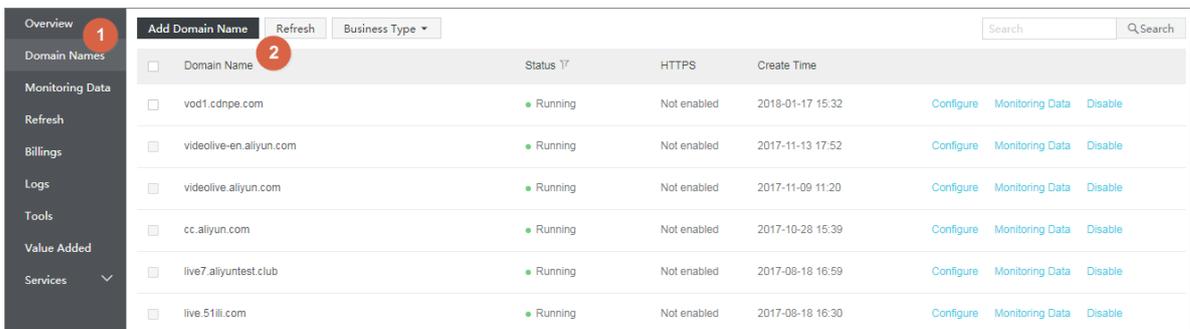
D. The **Output Media Bucket name is shown in the **Output Media Bucket** list. Select the created bucket name and click **OK**.**

As shown in the following figure, the **Input Media Bucket** and **Output Media Bucket** are added.



5.3 Domain name management

1. Log on to the [CDN console](#).
2. Click **Domain Names**.
3. Click **Add Domain Name**.

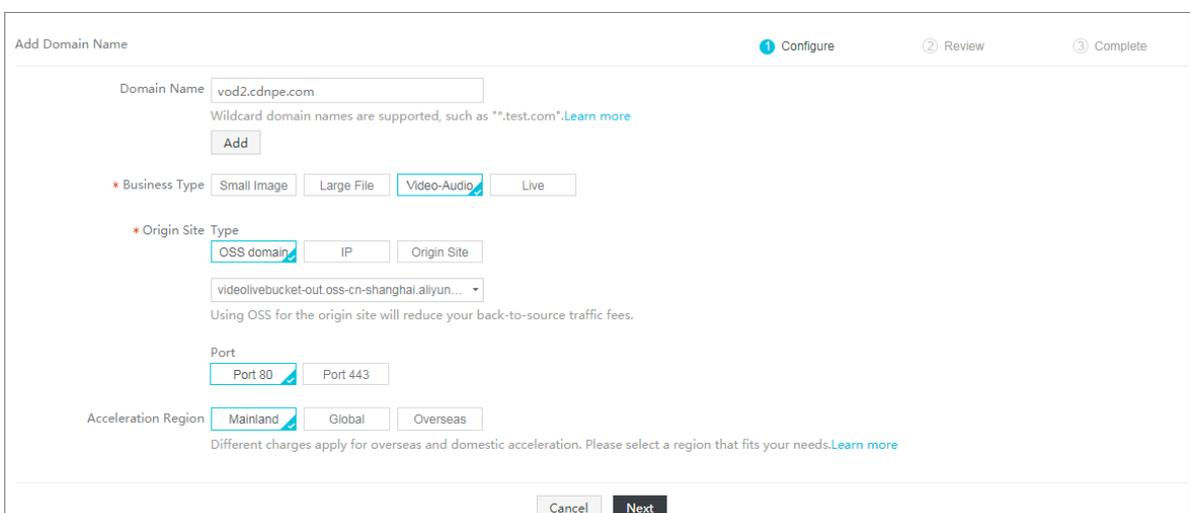


4. Enter domain name information and click **Next**.

Domain Name: Set this parameter to your on-demand CDN domain name.

Business Type: Set this parameter to **Acceleration of On-demand Video/Audio**.

Origin Site Type: Set this parameter to the OSS bucket bound to the **Output Media Bucket**.



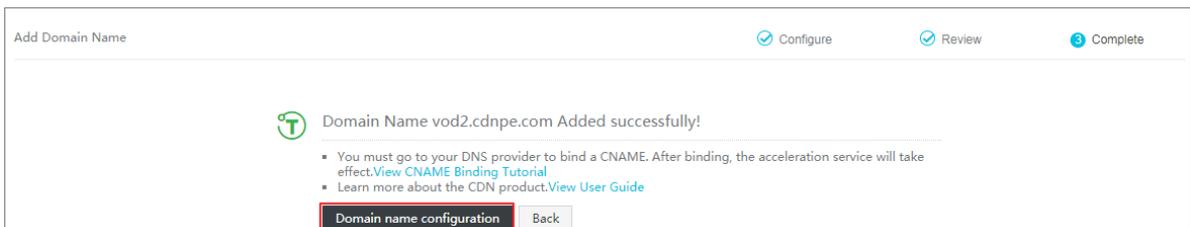


Note:

The CDN origin site does not support the OSS bucket whose read/write permission is **Private**. Log on to the [OSS console](#) and verify that the read/write permission is **Public-read**.

5. Review and configure the domain name.

If your domain name has been filed, the review is quickly completed. Click **Domain name configuration** to go to the configuration page.

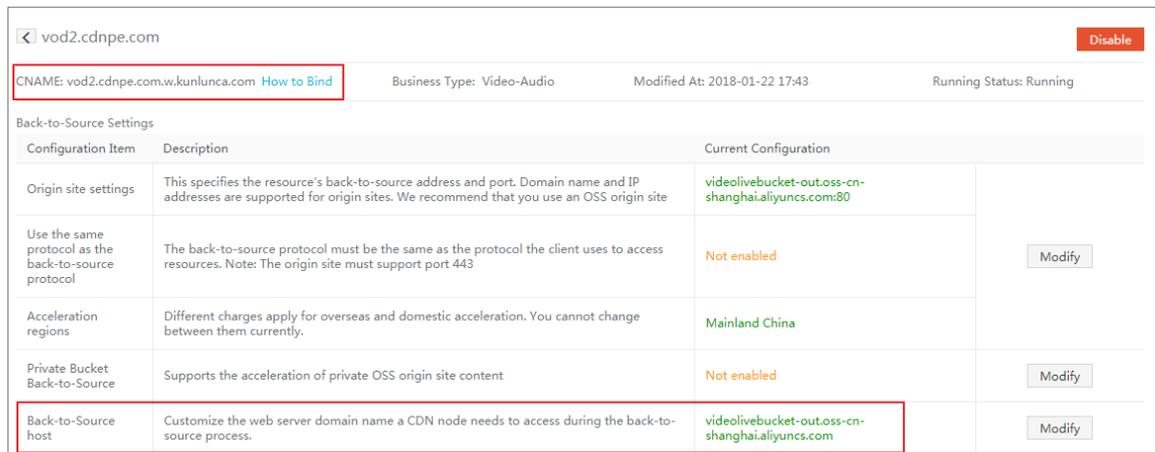


a. Configure DNS resolution for the on-demand CDN domain CNAME.

Configure the CNAME at the location of your DNS service provider. For more information, see [Use HiChina CNAME to access CDN](#), [Use DNSPod CNAME to access CDN](#), and [Use Xinnet CNAME to access CDN](#).

b. Configure Back-to-source Host.

Configure the **Back-to-source Host to Origin Site Domain Name**.



c. Enable Enable Drag/Drop Playback.

After this function is enabled, CDN allows the Alibaba Cloud Web player to play back MP4 and FLV files through drag and drop operations.

Drag/drop playback is supported for M3U8 files even if this function is not enabled.

Video-related		
Configuration Item	Description	Current Configuration
Back-to-source of range	This instructs the client to notify the origin site server to return partial content within a specified range. This function helps accelerate delivery of large files	Not enabled
Drag/Drop Playback	Enables random drag/drop playback in a A/V on demand scenario	Enabled

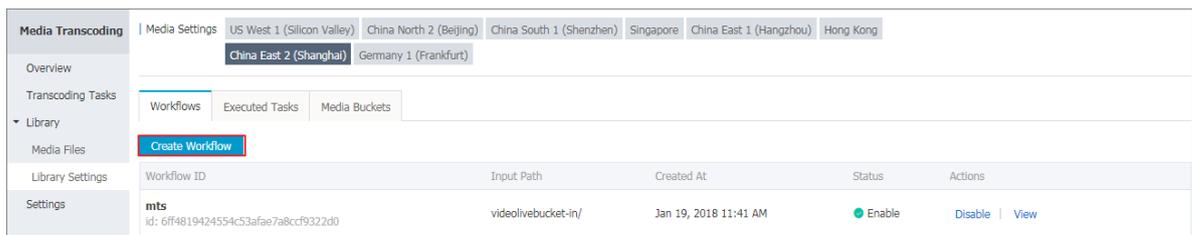
5.4 Workflows

Workflows support screenshot taking, transcoding, encapsulation, watermarking, encryption, and editing, allowing you to fast and flexibly construct a cloud-based audio/video handling process on demand. When a workflow starts or completes execution, a workflow execution message can be sent to the specified message queue or message notification.

Each media workflow is bound to a path of the **Input Media Bucket**. When an audio or video file is uploaded to the path or its sub-directory, the workflow is automatically triggered to perform preset processing operations and save the processing result to the specified path of the **Output Media Bucket**.

Create a workflow

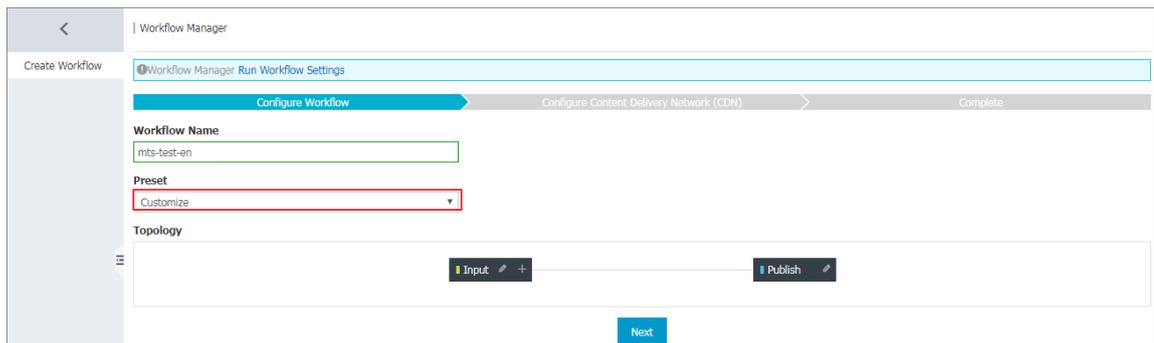
1. Log on to the [Media Processing console](#).
2. Select the region.
3. Click **Library > Library Settings > Workflows**.
4. Click **Create Workflow**.



5. Set the workflow information.

You can select a workflow from **Preset** and edit it as needed to quickly create a workflow. You can also customize a workflow.

- a. Set the workflow name in **Workflow Name**.
- b. Select **Customize in Preset**.

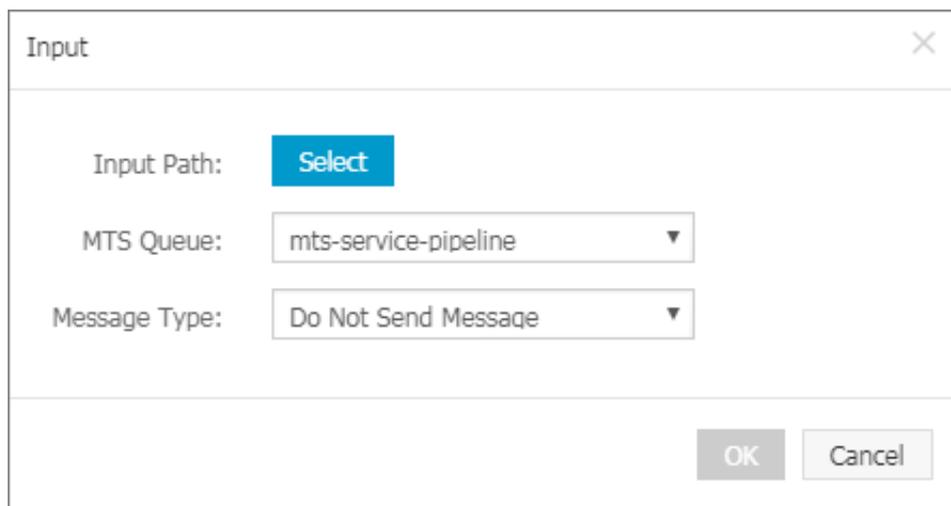


6. Set nodes.

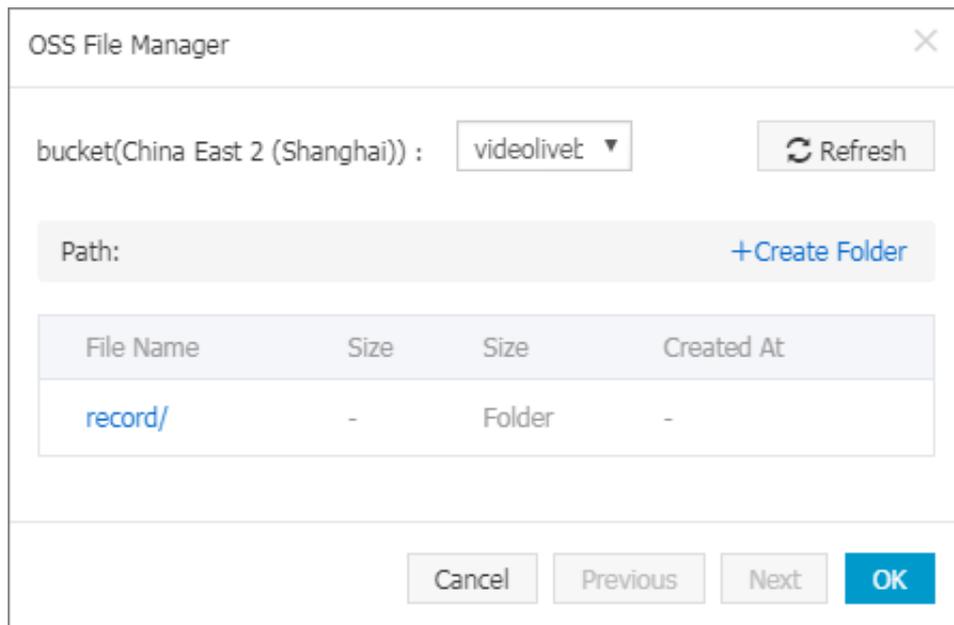
a. Set the **Input** node.

A. At the right side of the **Input** node, click the  icon to set the following information.

B. On the **Input** node, click **Select** at the right side of **Input Path**.



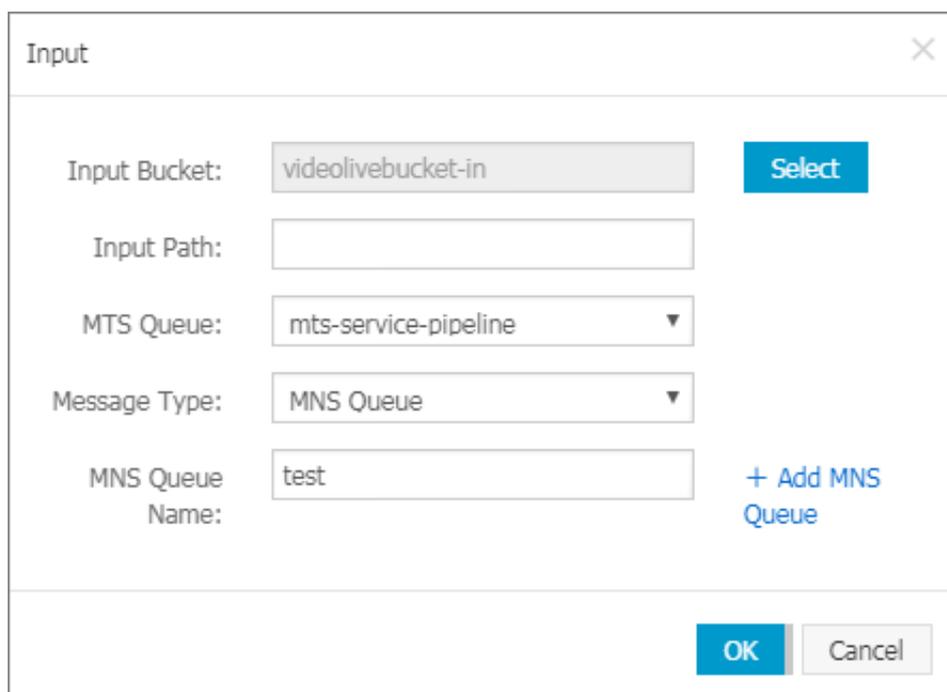
C. In **OSS File Manager** , select the bucket name, and click **OK**.



Note:

To facilitate searching for files, we recommend that the storage location of the original video in the Input Media Bucket and the storage location of the Output Media Bucket are consistent. Examples here are all stored in the root directory.

D. Message Type is optional. You can select MNS Queue or Notification and set the relevant instance.

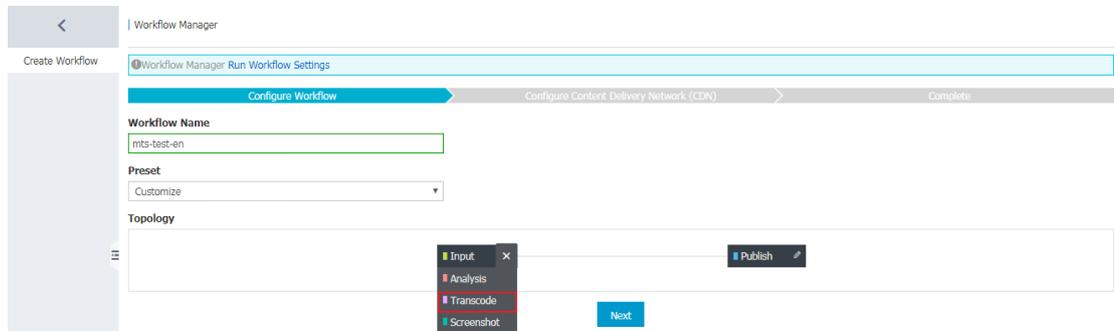


b. Set the Transcode node.

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

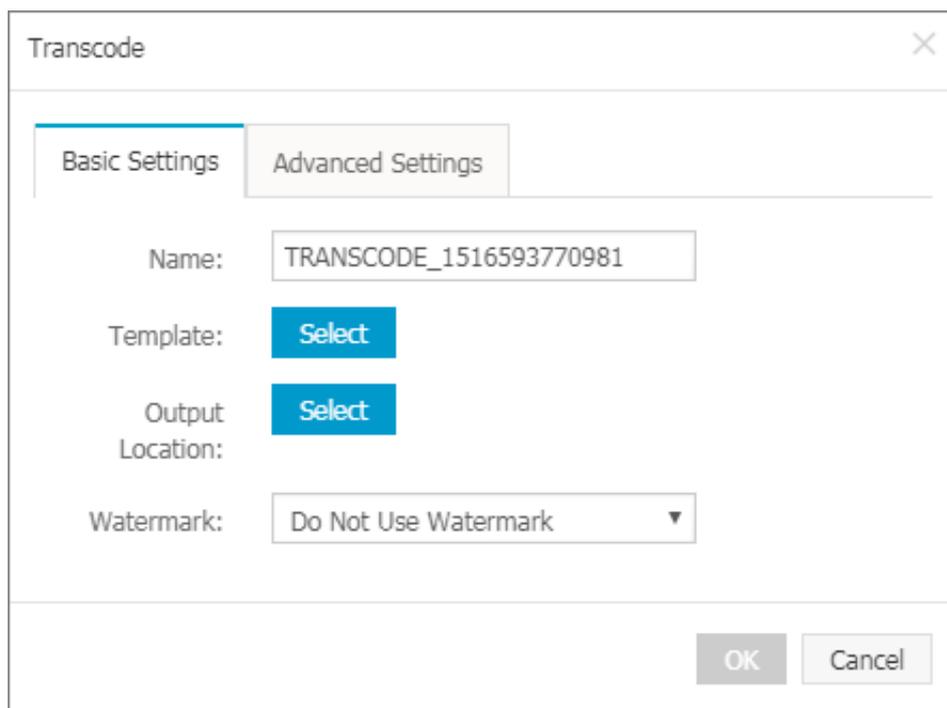


to add the **Transcoding** node.

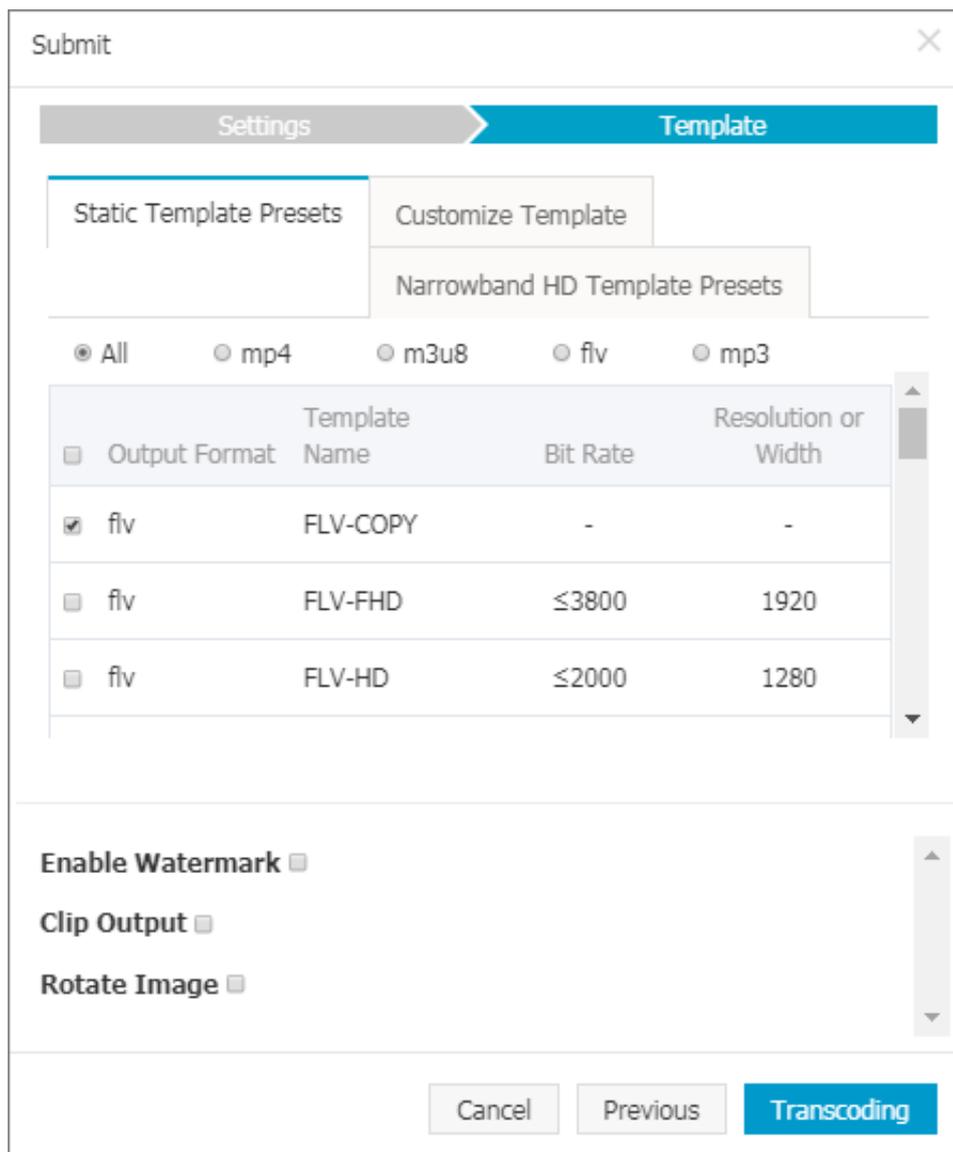


B. At the right side of the **Transcode** node, click the  icon.

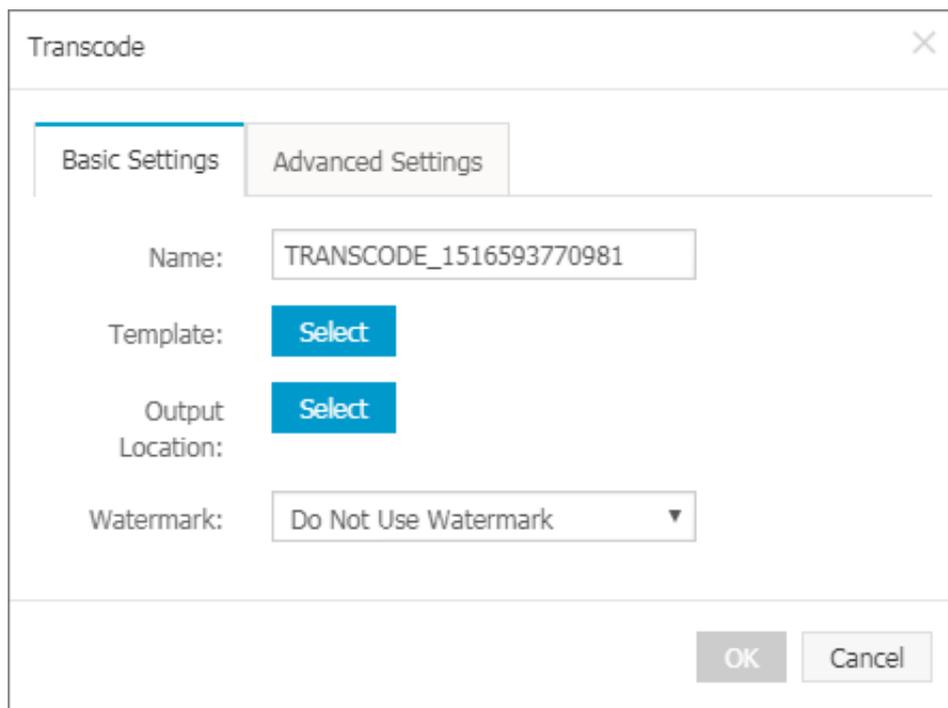
C. In **Transcode** > **Basic Settings**, click **Select** at the right side of **Template**.



D. Select the **template** and click **OK**.



E. In **Transcode** > **Basic Settings**, click **Select** at the right side of **Output Location**.



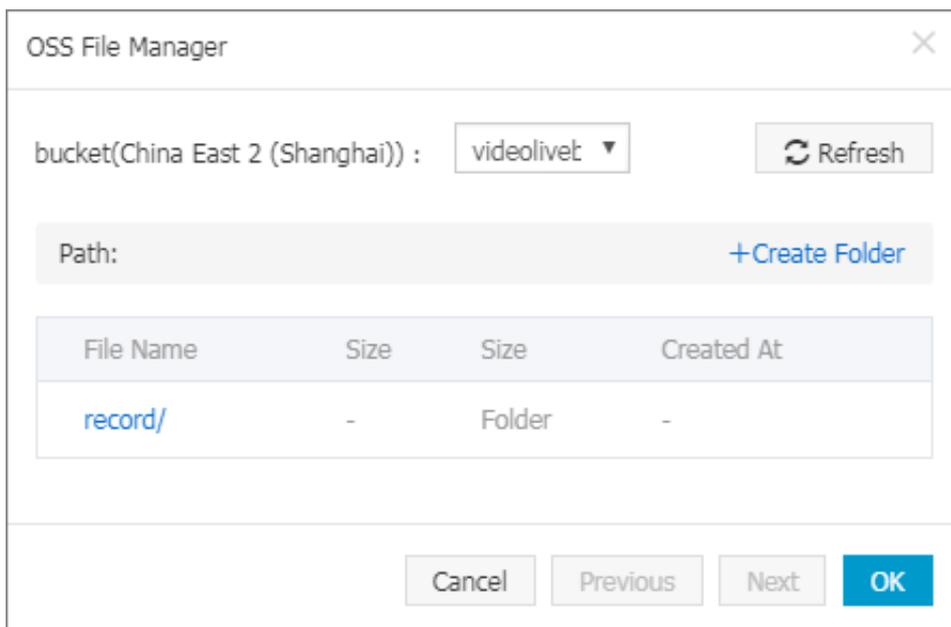
The screenshot shows a dialog box titled "Transcode" with a close button (X) in the top right corner. It has two tabs: "Basic Settings" (selected) and "Advanced Settings". Under "Basic Settings", there are four fields: "Name" with the value "TRANSCODE_1516593770981", "Template" with a blue "Select" button, "Output Location" with a blue "Select" button, and "Watermark" with a dropdown menu showing "Do Not Use Watermark". At the bottom right, there are "OK" and "Cancel" buttons.

**Note:**

Output Location is a storage location in OSS and the output file name. To avoid output files from being overwritten when a workflow is run multiple times, you can combine the system's built-in variable parameters:

- {RunId} the media workflow run ID,
- {ObjectPrefix} the original file path not including Bucket information,
- {FileName} the original file name not including the extension name;
- {ExtName} the original file extension name.

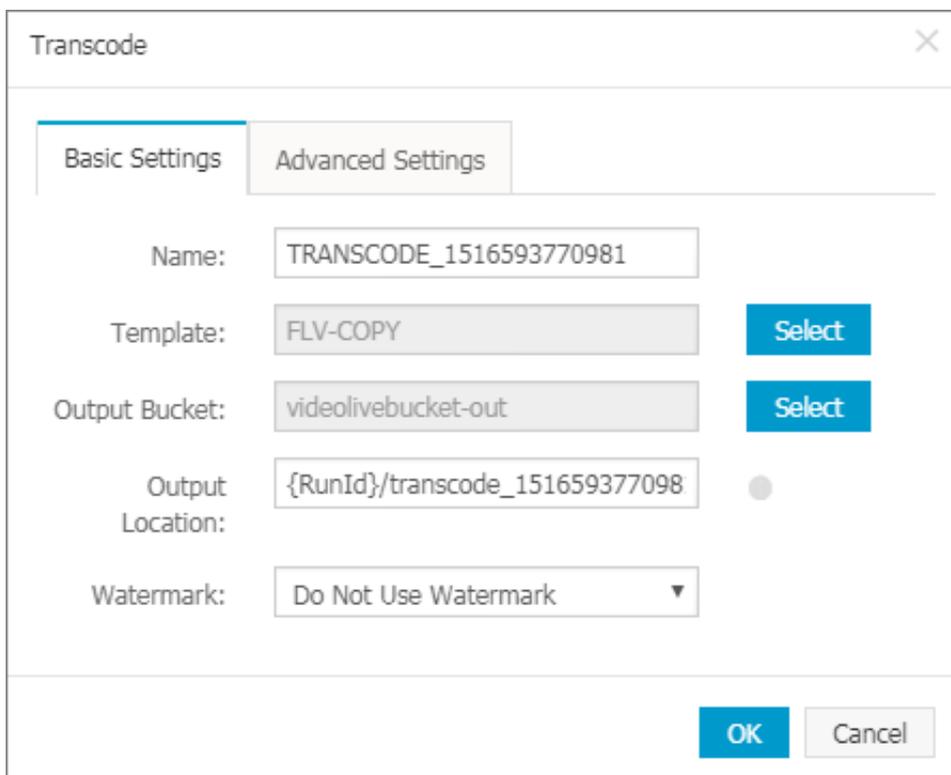
F. In **OSS File Manager**, select the bucket name and click **OK**.



Note:

The Input Bucket and the Output Bucket cannot be the same.

- G.** The **Output Location** is a storage location in OSS and the output file name. For more information, see Output Location description for the **Transcode** node. Click **OK**, and the **Transcode** node configuration is completed.



- c.** Set the **Screenshot** node.

A. At the right side of the **Input** node or **Transcode** node, click the  icon to add the

Screenshot node.

B. At the right side of the **Screenshot** node, click the  icon.

C. Select **Screenshot Type**.

D. Click **Select** at the right side of **Output Location**.

Screenshot ✕

Screenshot Type:

Name:

Output Bucket:

Output Location:
A {Count} placeholder is only required for multiple photos.

Start Time: (hour: minute: second)

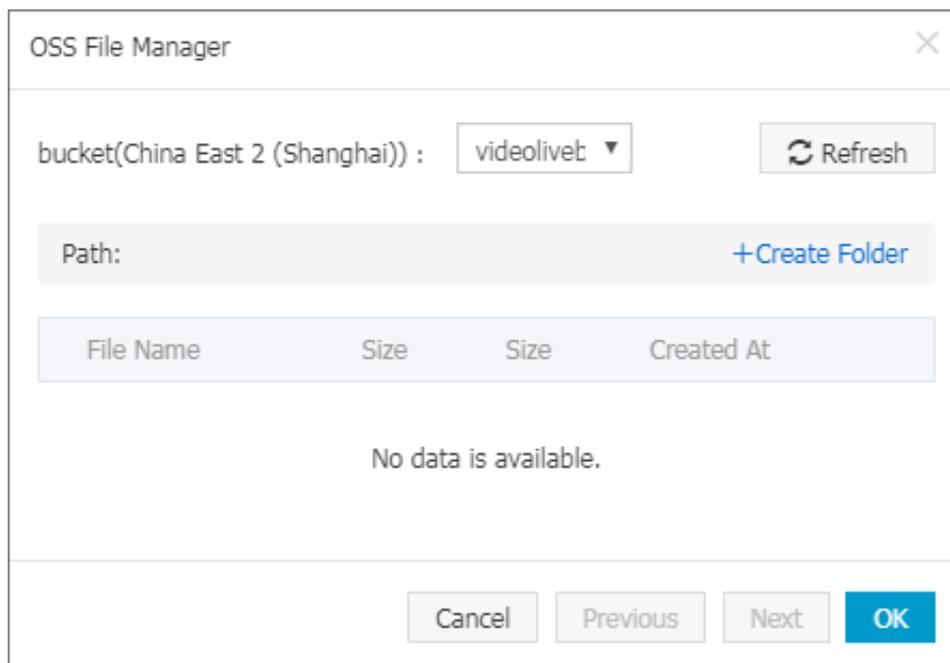
Set As Thumbnail:

Keyframe:

Image Width:

Image Height:

E. In **OSS File Manager**, select the bucket name and click **OK**.



F. Set the Output Location.

Output Location is a storage location in OSS and the output file name. To avoid the output files from being overwritten when a workflow is run for multiple times, you can combine the system's built-in variable parameters, in which {SnapshotTime} indicates the screenshot time, in milliseconds.

G. Enable the **Set As Thumbnail** function.

If this function is enabled, the screenshot taken on this node is automatically set as the thumbnail of the media files set in the library. If multiple screenshots are taken, the first screenshot is set as the thumbnail by default.

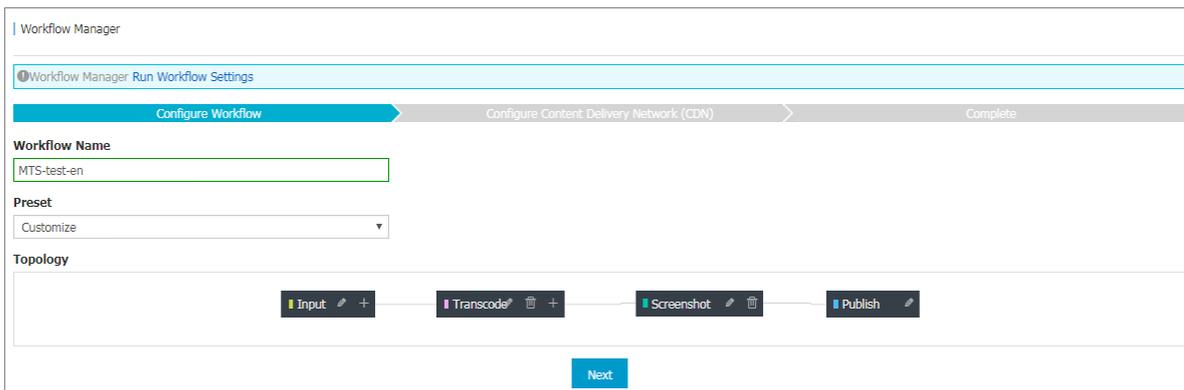
d. Set the **Publish** node.

A. At the right side of **Publish** node, click the  icon to set the **Publish** node.

B. On the **Publish** page, set the Media Publication Type **Automatic**.

- Media Publication Type is set to **Manual** by default. In this case, each file output by transcoding cannot be directed accessed using an OSS URL in public-read mode or CDN URL.
- If Media Publication Type is set to **Automatic**, a file output by transcoding can be directed accessed using an OSS URL in public-read mode or CDN URL.

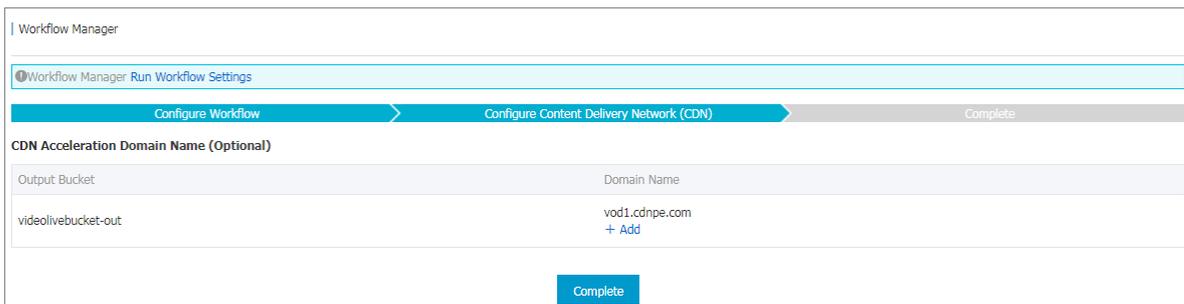
After setting the nodes, click **Next** to go to the **Content Delivery Network (CDN)** configuration page.



7. Configure the Content Delivery Network (CDN).

The on-demand CDN domains that use the output media bucket as the source of this workflow are listed.

In case of need, click **+ Add** to quickly add an on-demand CDN domain for **Output Bucket** (Optional). For more information, see [Acceleration of On-Demand Video/Audio](#).



Note:

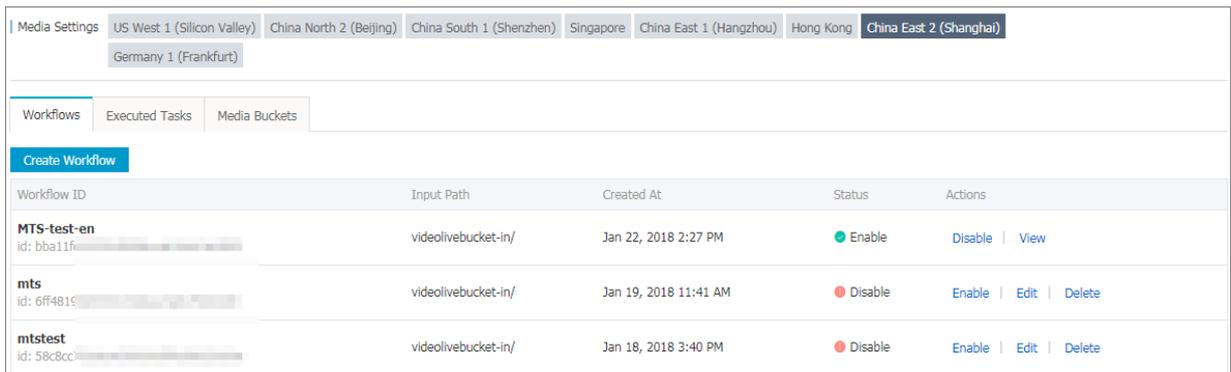
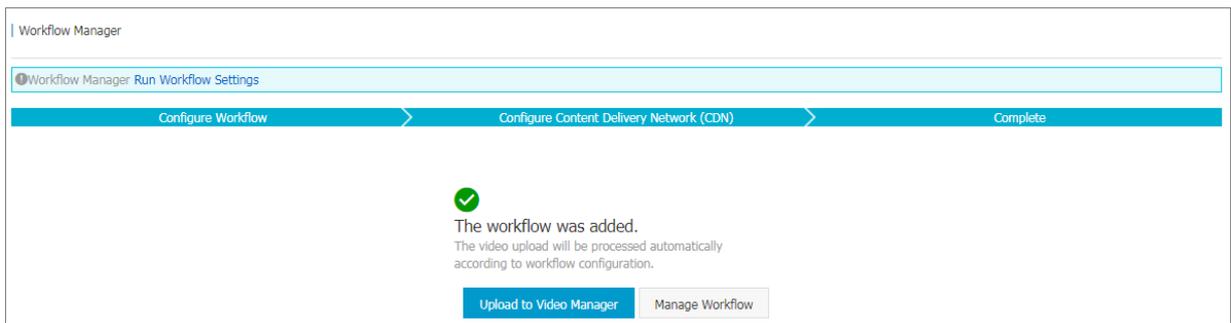
The added domain name must already be filed.

Complete the workflow creation.

After the media workflow is created, it is automatically activated and enters the Enabled status.

The audio and video files uploaded to the **Input Location** bound to the **Input** node automatically trigger the workflow execution.

Click **Manage Workflow** to return to the Workflows page, the workflow ID list is displayed.

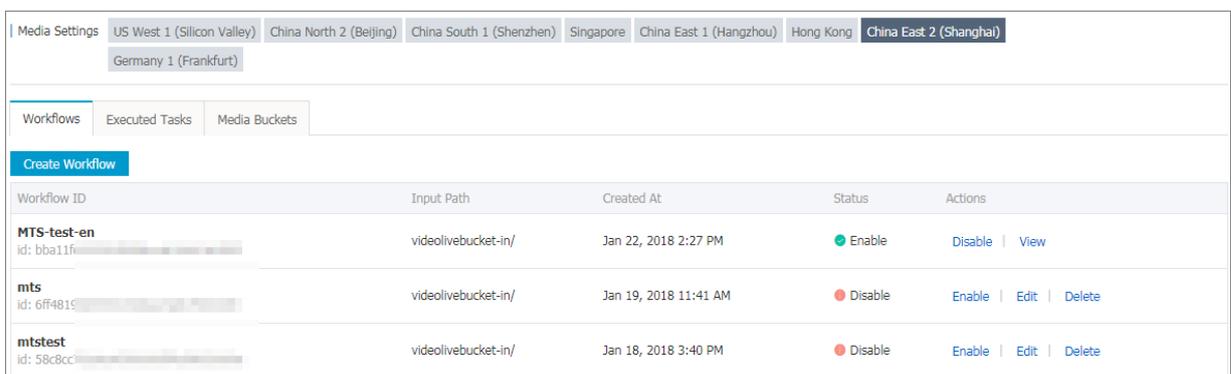


Edit and delete workflows

To edit, modify, or delete a workflow, set the workflow status as **Disabled**.

After the workflow is stopped, it is not automatically executed.

After editing the workflow, click **Enable** to restore automatic execution of the workflow.



5.5 Video file upload and workflow execution

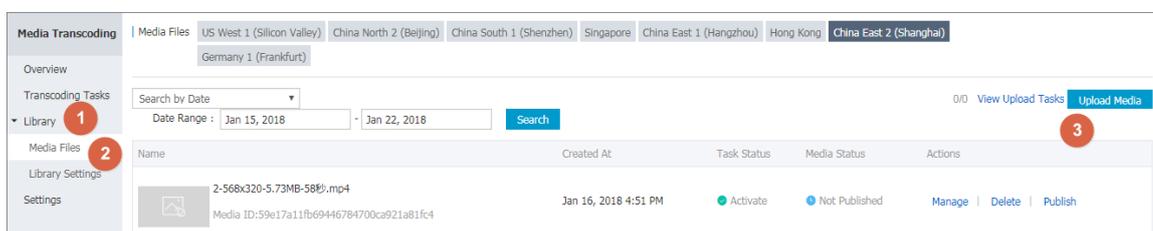
Upload a file

You can use the MPS console or OSS related upload tools to upload a video file. In addition, an upload SDK that covers all platforms is provided. For details, see Upload SDK usage instructions , Upload SDK downloading. For more information, see Upload SDK usage instructions, Upload SDK downloading.

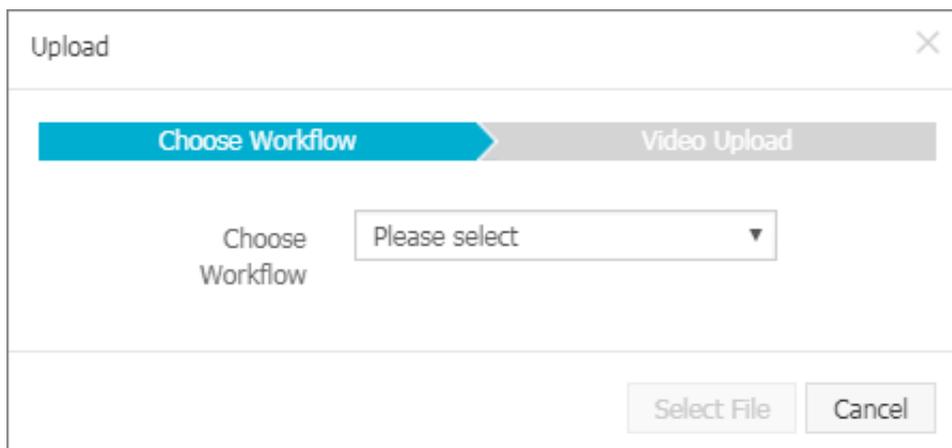
- Upload a video file on the MPS console.

After creating a workflow, upload a video file to the specified workflow in **Media Files**. The video is saved to the Input Path bound to the workflow. After the video is uploaded, the workflow is automatically executed to process the video.

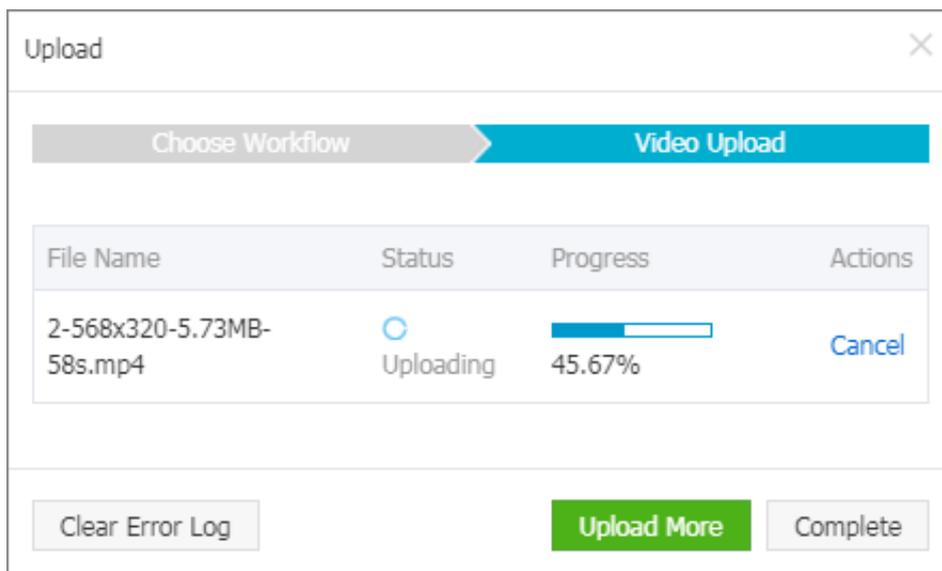
1. Log on to the [Media Processing console](#).
2. Select the region.
3. Click **Library > Media Files**.
4. Click **Upload Media**.



5. On the **Upload** page, select a Workflow, and click **Select File**.



After uploading is completed, you can also click **Upload More** to upload multiple video files.

**Note:**

- Web upload supports multi-part upload, resumable upload, and batch upload.
- In the upload process, you can switch to other pages on the MPS console, but do not close the browser or access the consoles of other cloud products. Otherwise, the upload process is interrupted.

- Upload a media file using OSS tools.

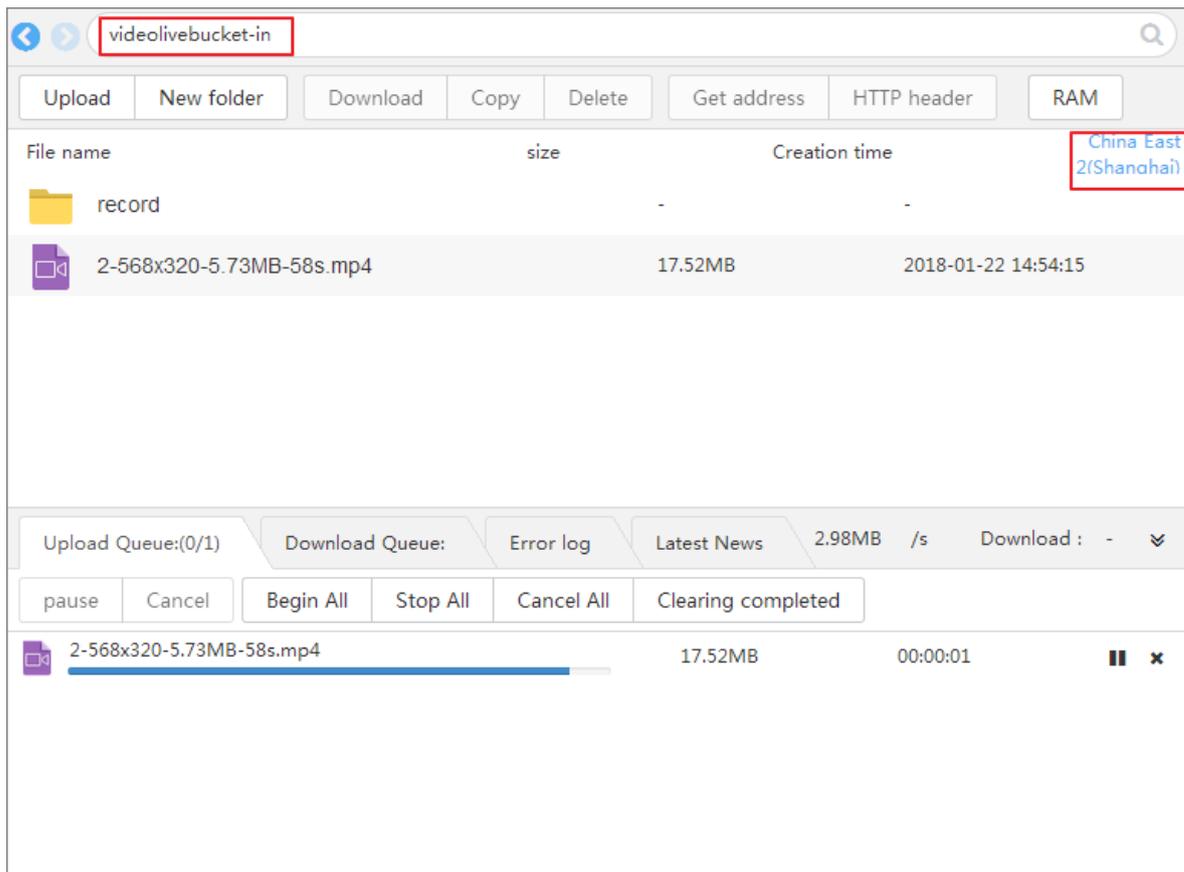
We recommend that you use the OSS console client (officially recommended).

- Tool market for [Windows](#).
- Tool market for [Mac](#).

**Note:**

Tool usage instructions are available on the preceding links.

When using the OSS console client, upload the video file to the Input Path bound to the corresponding workflow to enable automatic workflow execution.



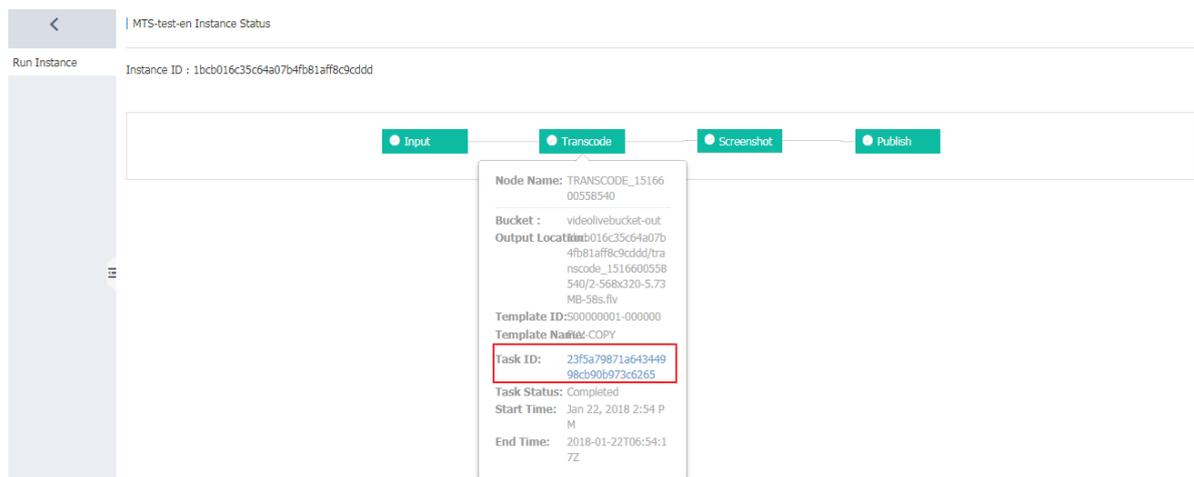
Execute a workflow

After a video is uploaded to the Input Path bound to the workflow, the workflow is automatically executed. Each workflow execution is called an execution instance. You can query the status of the execution instance of the specified workflow on the **Executed Tasks** page.

1. Click **Library > Library Settings > Executed Tasks**.
2. Select the Workflow ID.
3. Select the **Task**, and click **Details** at the right side.



You can view the details of the instance through **Details**.



5.6 Video management

The video management feature is mainly achieved by using the **Media Files**. The features of the **Media Files** are shown as follows.

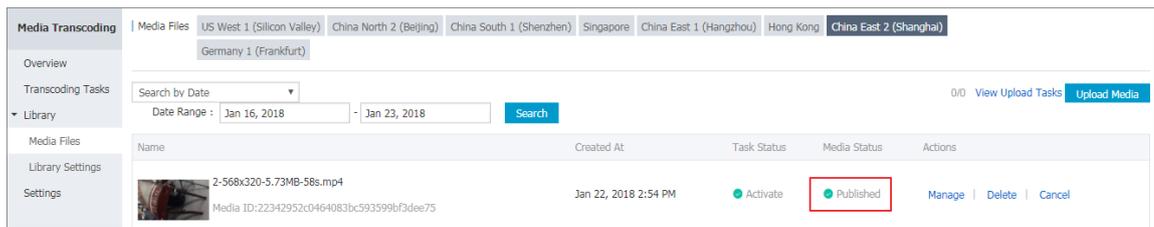
- Manages your audio/video files.

A **media file** is a set of source video files, and videos, screenshots, and other resources processed and output by workflows of the source video files. A unique **Media ID** is allocated to each media file.

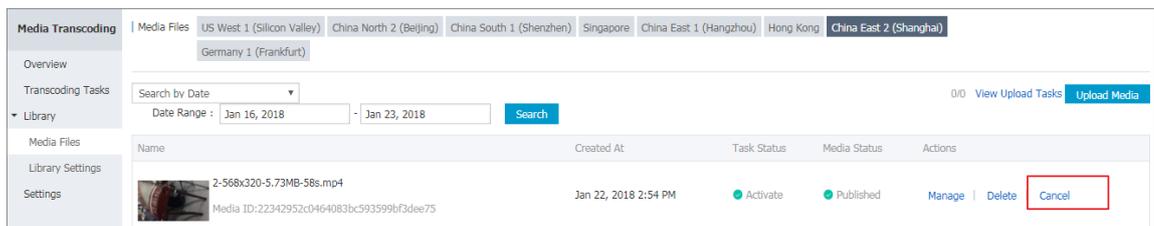
- Supports setting the title, tag, category, description, thumbnail, and other information for a media file; and supports search for a media file using the information. In addition, the Media Files contains the format, duration, bit rate, frame rate, resolution, file size, and other metadata of each media file. It also displays the OSS storage URL and CDN domain URL of each resource, and supports online preview and playback for each resource.
- Supports managing video publishing and also serves as the portal to upload videos on the Web

1. Log on to the [Media Processing console](#).
2. Select the region.
3. Click **Library > Media Files** to go to the **Media Files** page.
4. Publishing management.

- Click **Publish** at the right side of the expected Media ID, you can set the **publishing status** of a video output from the workflow as **Published**.

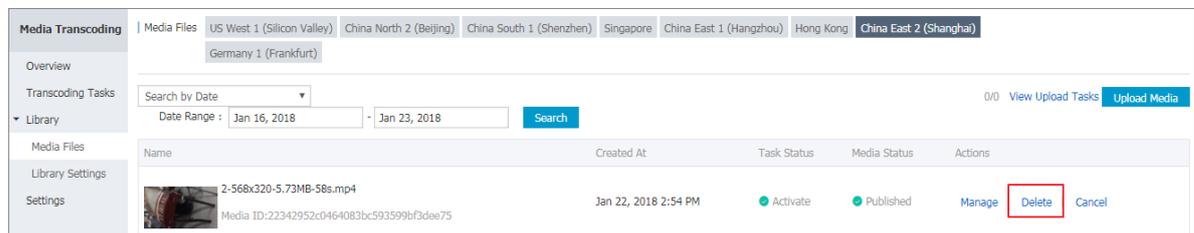


- Click **Cancel** at the right side of the expected Media ID, you can modify the video **publishing status** as **Not Published**. In the **Not Published** status, the video cannot be accessed using the OSS or CDN URL.



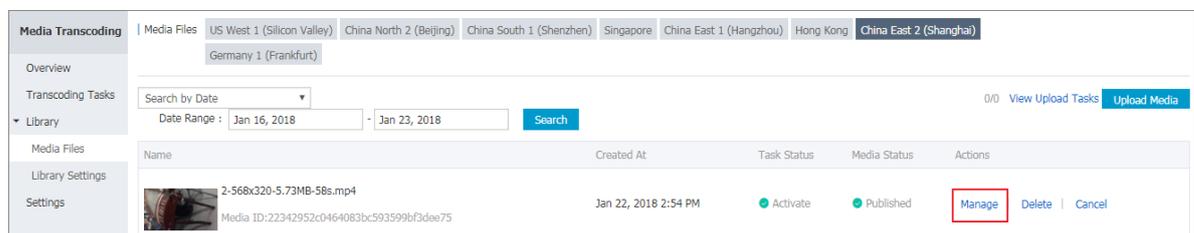
5. Delete a media file.

You can delete a media file if it is no longer needed. Click **Delete** at the right side of the Media ID and you can complete deletion.

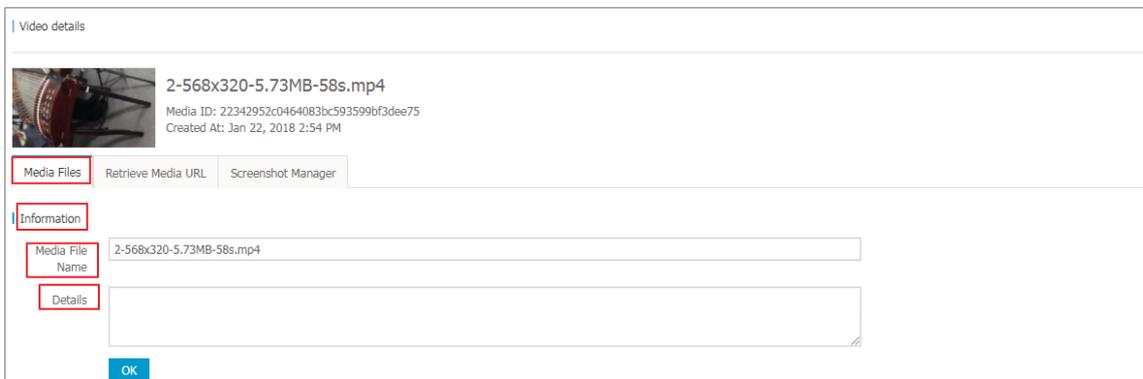


6. Query and edit attributes of a media file.

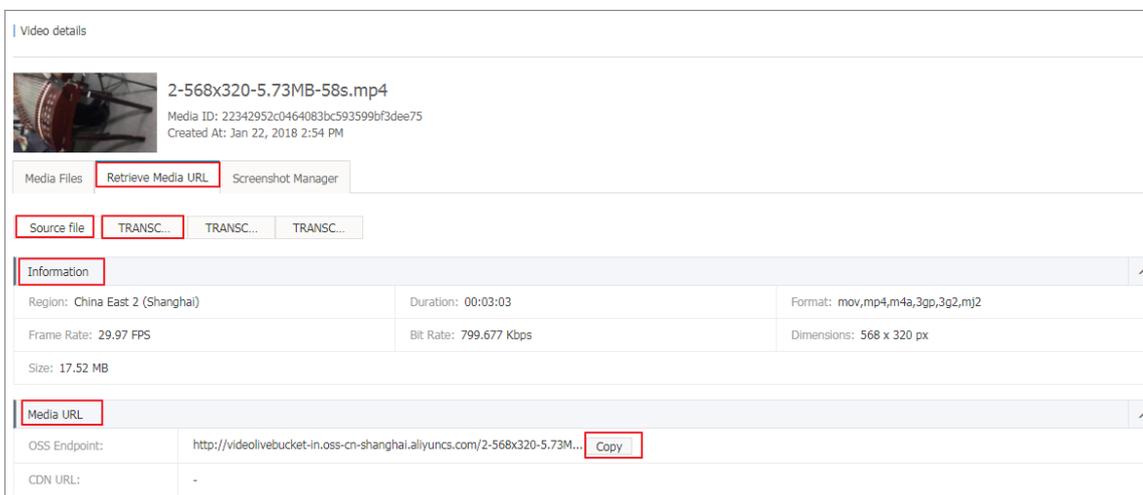
Click **Manage** at the right side of the expected Media ID to go to the **Video Details** page.



- In the **Media Files** tab, you can edit the **Media File Name** and **Details** of a media file in **Information**.



- In the **Retrieve Media URL** tab, you can check the Information, OSS Endpoint, and CDN Endpoint of the source file and the output media file after transcoding. Output media files after transcoding can also be played back and previewed.



In the preceding figure, the names at the right side of the Source File are names of Transcode nodes of workflows.



Note:

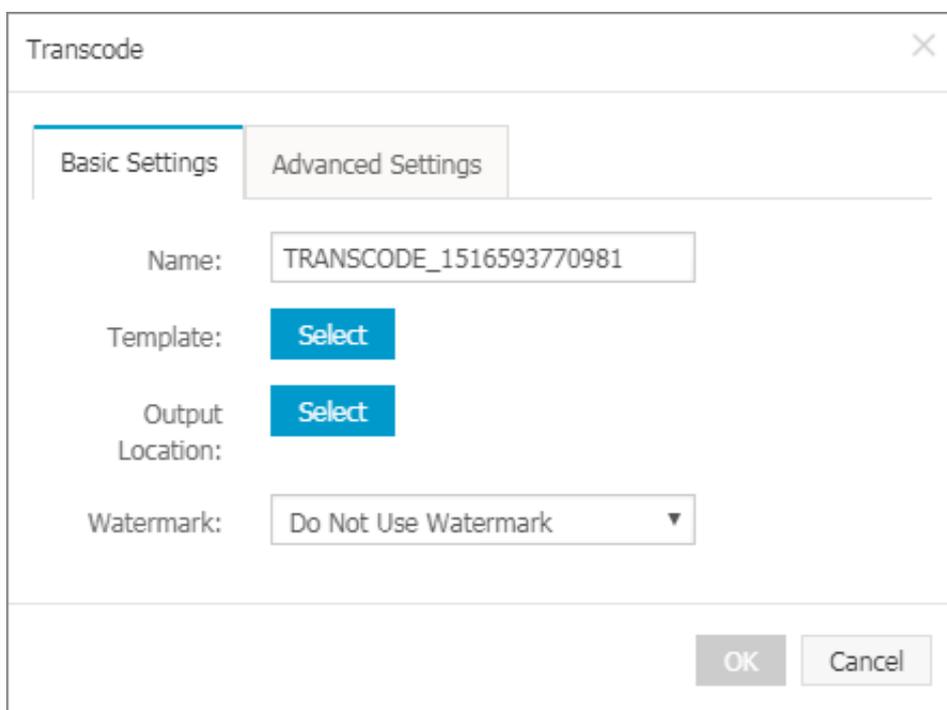
OSS and CDN traffic fees are charged on video playback and preview.

6 Narrowband HD 1.0

Based on Alibaba Cloud's exclusive transcoding technology, Narrowband HD™ 1.0 intelligently analyzes each scenario, action, content, and texture of a video to ensure a lower bit rate and bandwidth cost to a certain extent with the same video quality.

Use a workflow to trigger Narrowband HDTM1.0 based transcoding.

1. [Activate MPS](#).
2. [Set the Input/Output Media Bucket](#).
3. Set a workflow, and select **NarrowbandHD Template Presets** on the **Transcodenode** (The template name ends with **NarrowBandHD**).



The screenshot shows a 'Transcode' dialog box with a close button (X) in the top right corner. It has two tabs: 'Basic Settings' (selected) and 'Advanced Settings'. Under 'Basic Settings', there are four fields: 'Name' with the value 'TRANSCODE_1516593770981', 'Template' with a blue 'Select' button, 'Output Location' with a blue 'Select' button, and 'Watermark' with a dropdown menu showing 'Do Not Use Watermark'. At the bottom right, there are 'OK' and 'Cancel' buttons.

Submit

Settings **Template**

Static Template Presets Customize Template
Narrowband HD Template Presets

All mp4 m3u8 flv mp3

<input type="checkbox"/> Output Format	Template Name	Bit Rate	Resolution or Width
<input checked="" type="checkbox"/> flv	FLV-COPY	-	-
<input type="checkbox"/> flv	FLV-FHD	≤3800	1920
<input type="checkbox"/> flv	FLV-HD	≤2000	1280

Enable Watermark

Clip Output

Rotate Image

Cancel Previous **Transcoding**

For more information about workflow configuration, see [Library quick start guide](#).

4. Upload a media file. For more information, see [Library quick start guide](#).

Use an API to trigger Narrowband HDTM 1.0 based transcoding.

When using the transcoding task submission API [SubmitJobs](#), set TemplateId in Output to [ID of the preset Narrowband HD template](#).

Use the console to create a transcoding task to trigger Narrowband HDTM 1.0 based transcoding

When [Submitting a transcoding task](#), select the Narrowband HD™ 1.0 transcoding template.

7 Sub-account console operating instructions

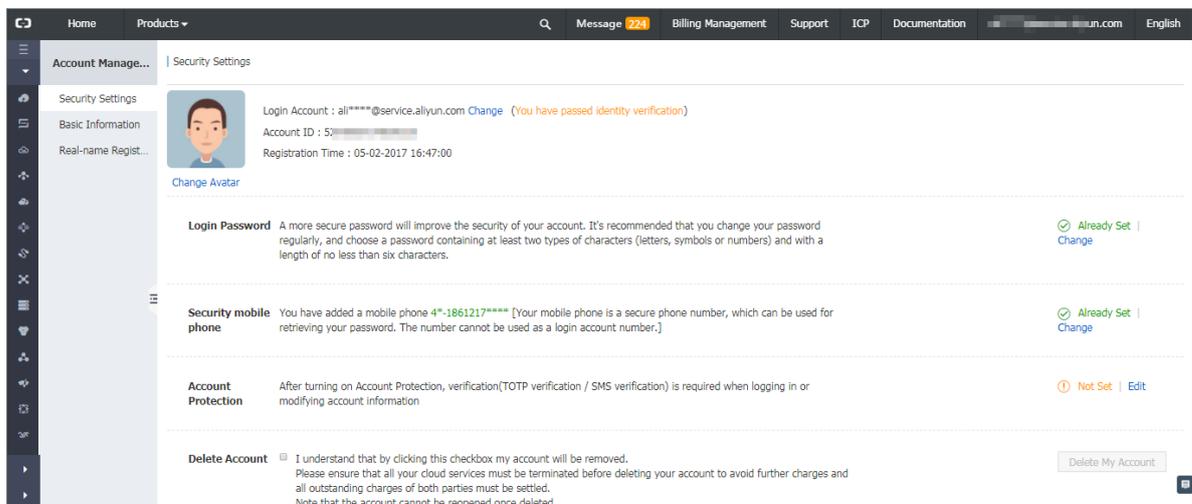
You can grant related permissions for sub-accounts through accessing Alibaba Cloud Resource Access Management (RAM) to enable the sub-accounts to use the MPS console within the authorized scope.

Permissions of the sub-account mainly include authorization to use MPS and the permissions to OSS, CDN, and MNS resource objects. After planning the resource instances of the sub-account with these services, you can create authorization policies based on corresponding authorization templates and grant the permissions to the sub-account.

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

Description of variables

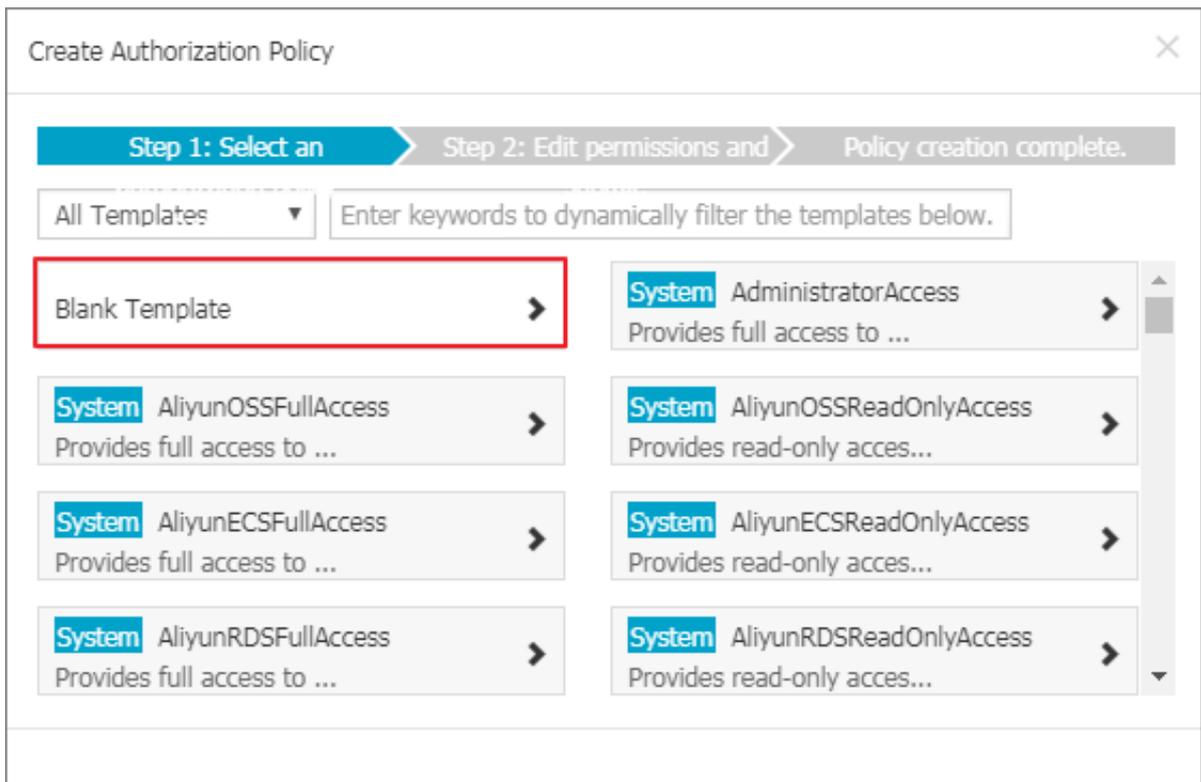
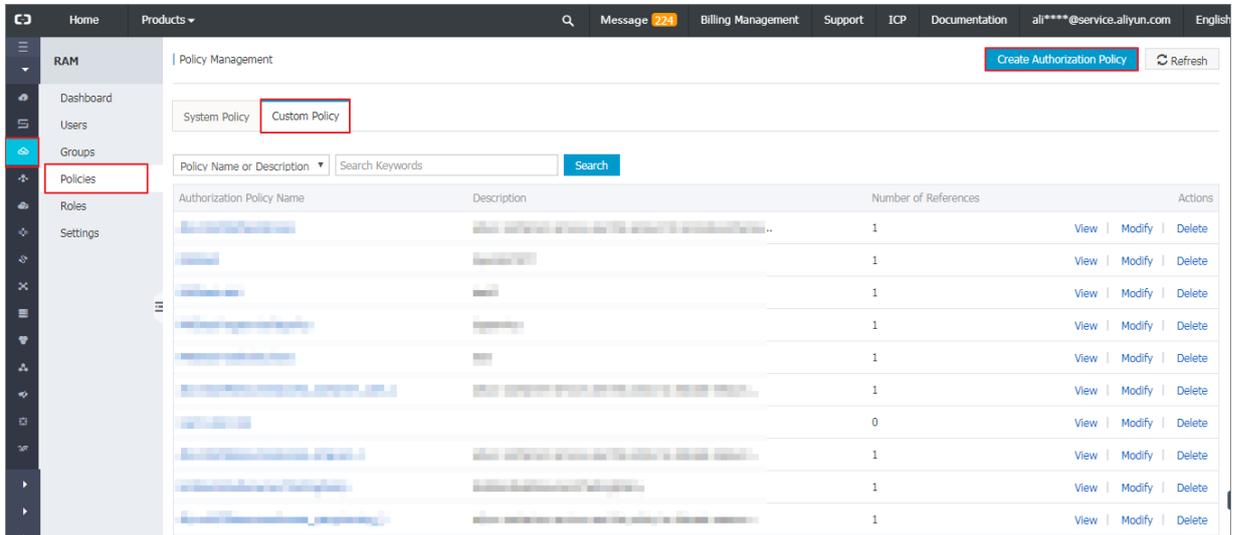
- **\$Uid**: Cloud account ID. You can query it by logging on to the **console > Account Management > Security Settings**.



- **\$Region**: Service region. For more information, see [service region](#).
- **\$InputBucket**: MPS InputBucket.
- **\$OutputBucket**: MPS Output Bucket.
- **\$QueueName**: MNS queue name.
- **\$TopicName**: MNS notification topic.
- **\$DomainName**: CDN domain name.

Authorization policy creation descriptions

Log on to the **RAM console** > **Policies**, and create the following example custom authorization policies for the specified resource instance and grant them to the specified sub-account.



Create Authorization Policy ✕

Step 1: Select an ▶ Step 2: Edit permissions and ▶ Policy creation complete.

* Authorization Policy Name :
Names must be 1-128 characters long. They may only contain the letters A-Z, numbers 0-9, and hyphens.

Description :

Policy Content :

```
1 {
2   "Version": "1",
3   "Statement": [
4     {
5       "Action": [
6         "oss:*"
7       ],
8       "Resource": [
9         "acs:oss:*:*:$InputBucket",
10        "acs:oss:*:*:$InputBucket/*",
11        "acs:oss:*:*:$OutputBucket",
12        "acs:oss:*:*:$OutputBucket/*"

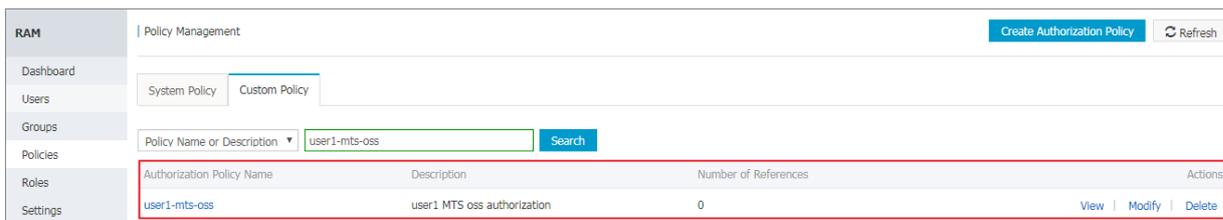
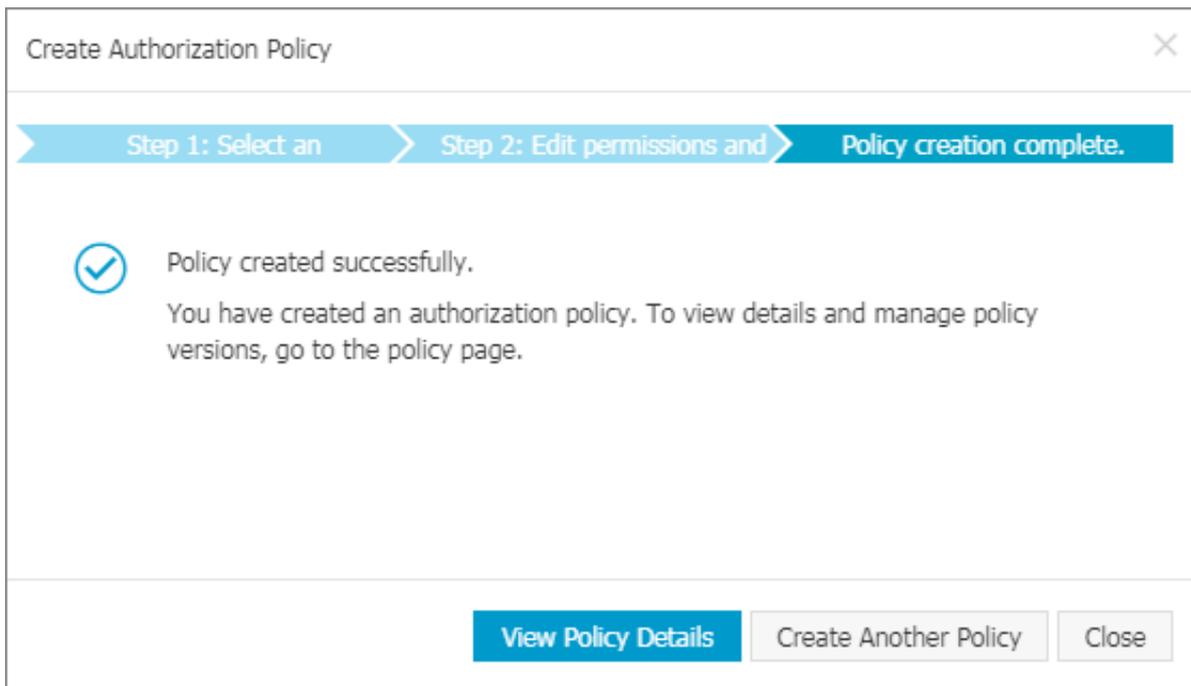
```

[Authorization Policy Format](#)



Note:

Copy the authorization policies of each service of the examples in this document, and replace the variables with the corresponding service instance name.



Note:
After the authorization policies are created for various service resource objects, you can grant the permissions to corresponding sub-accounts. See the permission granting instructions of MPS.

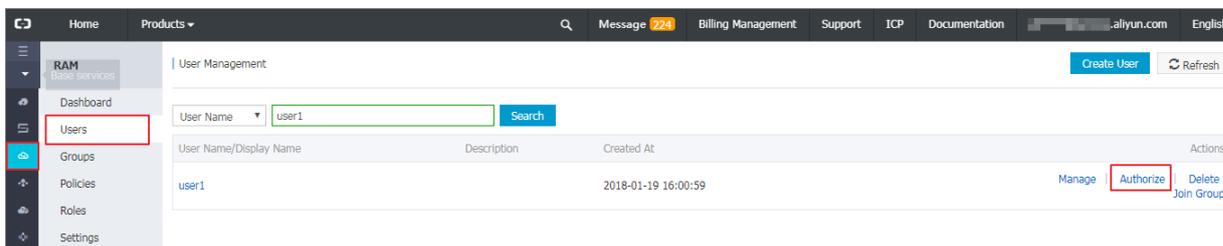
MPS

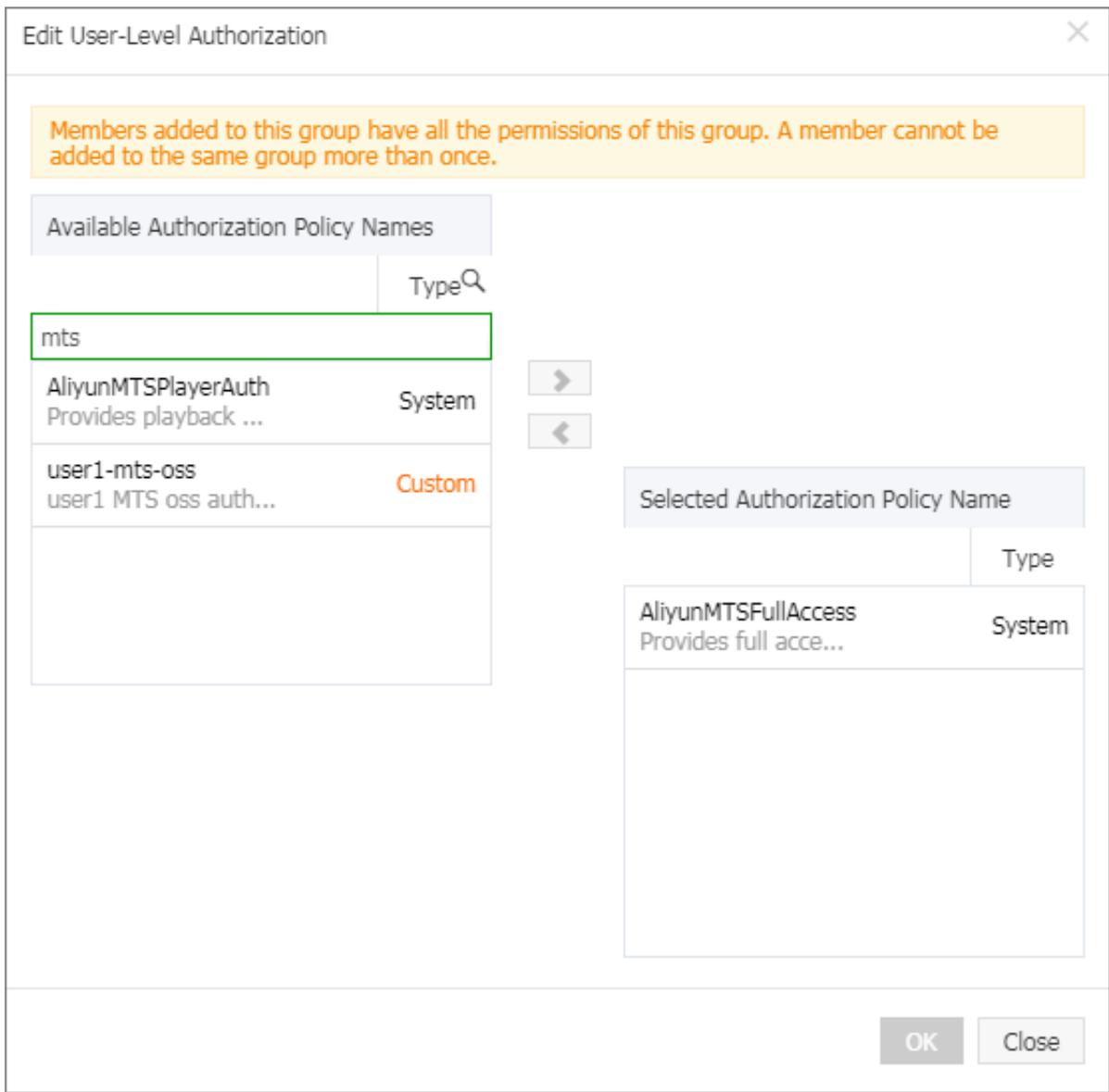
You can directly use the built-in `AliyunMTSFullAccess` authorization policy.

Permission description:

Permission granted to a sub-account to use MTS

Log on to the **RAM console** > **Users**, and grant the `AliyunMTSFullAccess` permission to the specified sub-account.





OSS authorization policy

Permission description:

Permission for all operations on the specified input and output buckets
 Permission to view the bucket list

```
{
  "Version": "1",
  "Statement": [
    {
      "Action": [
        "oss:*"
      ],
      "Resource": [
        "acs:oss:*:*:$InputBucket",
        "acs:oss:*:*:$InputBucket/*",
        "acs:oss:*:*:$OutputBucket",
```

```

        "acs:oss:*:*:$OutputBucket/*"
    ],
    "Effect": "Allow"
  },
  {
    "Action": [
      "oss:ListBuckets"
    ],
    "Resource": "*",
    "Effect": "Allow"
  }
]
}

```

MNS authorization policy

Permission description:

Permission for all operations on the specified query and topic
 Permission to query the query and topic

```

{
  "Version": "1",
  "Statement": [
    {
      "Action": [
        "mns:*"
      ],
      "Resource": [
        "acs:mns:$Region:$Uid:/queues/$QueueName",
        "acs:mns:$Region:$Uid:/topics/$TopicName",
      ],
      "Effect": "Allow"
    },
    {
      "Action": [
        "mns:Get*",
        "mns:List*"
      ],
      "Resource": "*",
      "Effect": "Allow"
    }
  ]
}

```

CDN authorization policy

Permission description:

Permission for all operations on the specified CDN domain name
 Permission to query the CDN domain name.

```

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

```

```
    "acs:cdn:*:$Uid:domain/$DomainName"  
  ],  
  "Effect": "Allow"  
},  
{  
  "Action": "cdn:Describe*",  
  "Resource": "*",  
  "Effect": "Allow"  
}  
]  
}
```

8 Cloud monitoring

8.1 Monitoring indicators

Using MPS monitoring service, you can get monitoring data in system performance and usage. You can also use custom alarming service to monitor service stability, analyze usage condition, and timely find out and diagnose relevant problems.

Indicators	Unit	Description	Dimensions	Granularity
Request success rate	%	Measurable indicator of MPS service usability. Obtained by using the formula: <i>1 - Percentage of error requests at server end# Returned status code is 5xx#of the total requests.</i>	User level	5 minutes
Number of screenshot-submitting tasks	Times	Request number of screenshot-submitting tasks at MPS server end.	MPS queue level	1 minute
Transcoding duration	Minutes	Duration of output video received and processed at MPS server end.	MPS queue level	1 minute
Number of transcoding-submitting tasks	Times	Request number of transcoding-submitting tasks at MPS server end.	MPS queue level	1 minute

8.2 Monitoring alarm access guide

Before using MPS monitoring service, see monitoring service documentation offered in CloudMonitor to learn about the basic concept and configure Alarm Contacts and Alarm Contact Group. For more information, see [Alarm Contacts](#) and [Alarm Contact Group](#).

Create alarm rules

1. Log on to the [MPS console](#), and go to the **MPS alarm configuration** page.
2. Enter configuration parameters.

MPS supports alarm dimensions at user level and MPS queue level.

As shown in the following figure, the alarm rule is to detect every 30 minutes. In the MPS queue **Asia Pacific SE 1 mts-service-pipeline**, if the average transcoding duration per minute exceeds 1000 minutes, the system alarms.

3. Save the configurations.

View alarm rules

1. Log on to the [CloudMonitor console](#).
2. Go to **Alarms > Alarm rules**.

You can view, modify, enable, disable, and delete corresponding alarm rules.

Rule Name	Status (All)	Enable	Metrics (All)	Dimensions (All)	Alarm Rules	Product Name (All)	Notification Contact	Actions
Singapore transcoding duration exception alarm	OK	Enabled	TranscodingDuration	pipelineId:1b07e6668d0047ff91bededb89be0cf1	30minute TranscodingDuration Value>=1000 it alarms 1 times To alarm	mps	Default Co... View	Modify Disable Delete

View alarm logs

1. Log on to the [CloudMonitor console](#).
2. Go to **Alarms > Alarm Logs**.

