Media Processing Service

Console Guide

Product Documentation

Contents

Console Guide
Overview

Last updated：2024-06-11 15:54:10

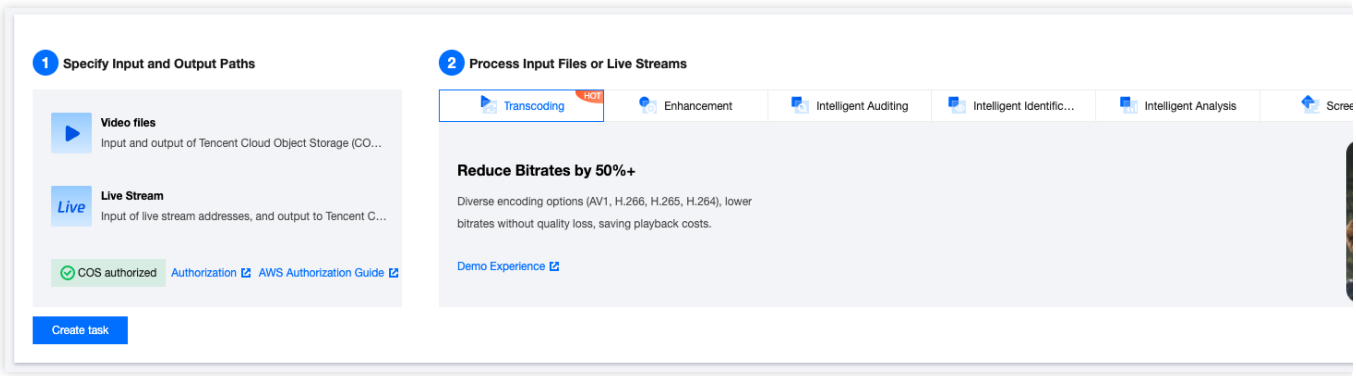
Overview

You can find on the overview page of the MPS console a beginner's guide, product announcements, your usage statistics, your billing mode, as well as a list of frequently read documents.

Details

Getting started

You can click **Hide** in the top right corner to hide this section and click **Getting started** to show it again.



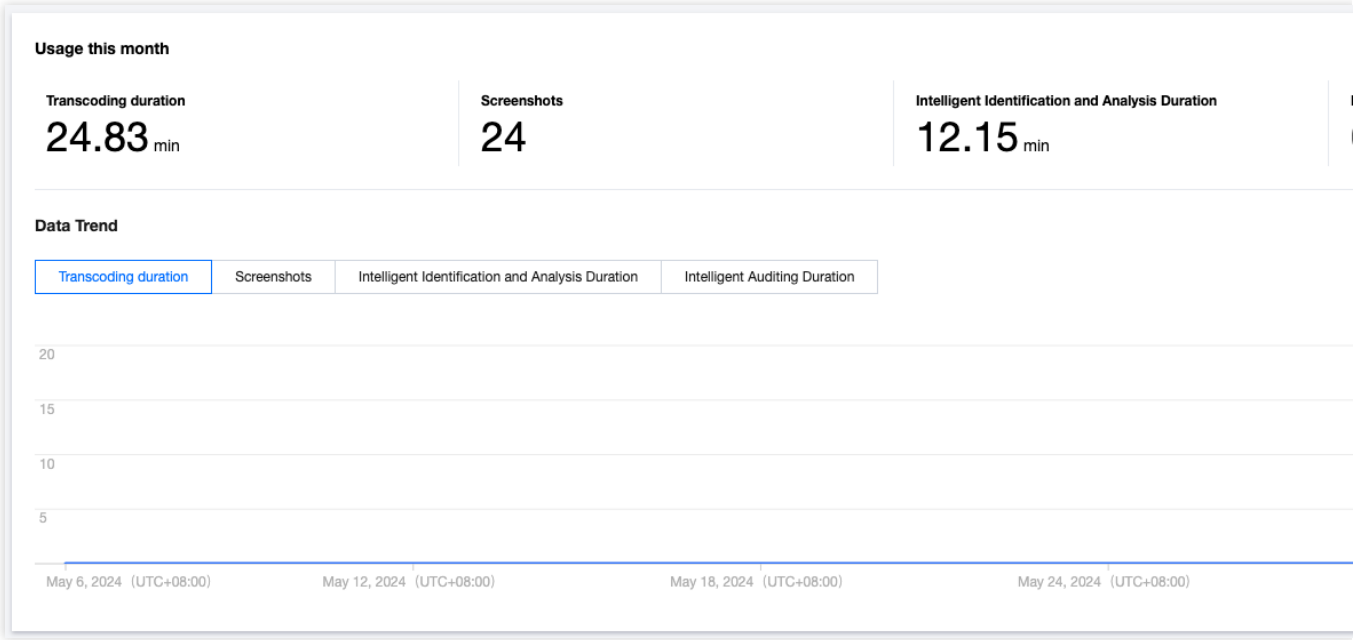
Product announcements

This section notifies you about product updates and new features.

Usage statistics

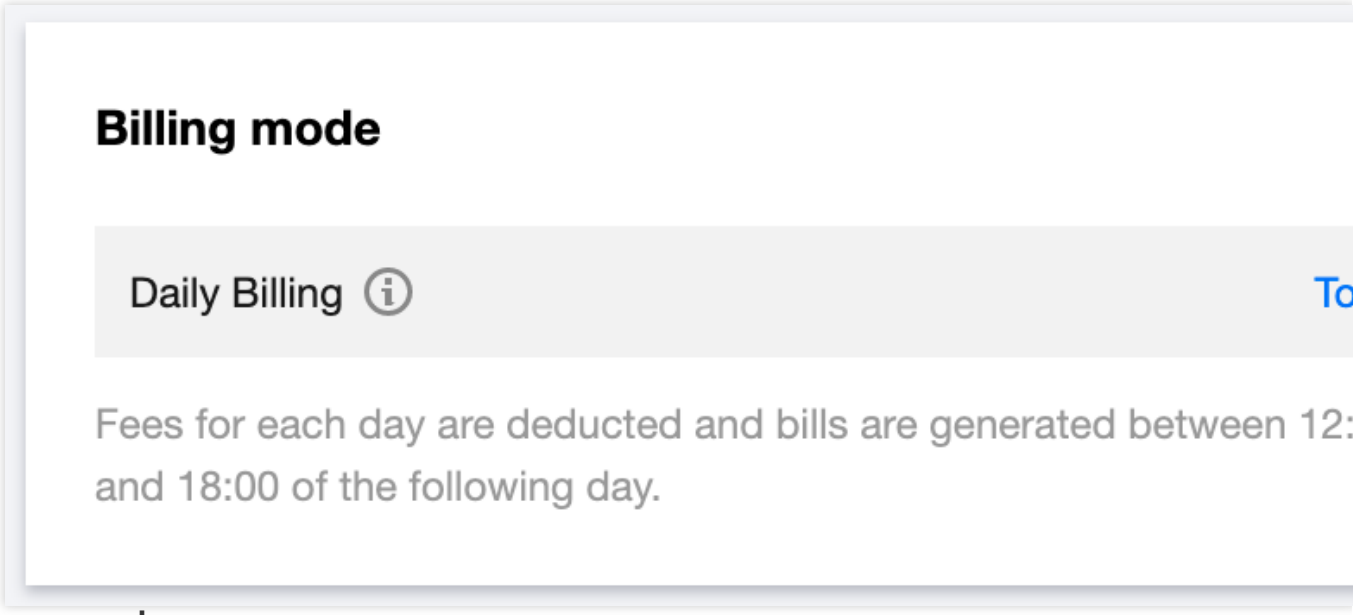
This section shows your usage statistics and usage trends in the current month. You can click **View more** to view details.
Usage statistics: Transcoding duration, number of screenshots, intelligent identification & analysis duration, and intelligent auditing duration for the current calendar month.

Usage trends: Trend charts for your transcoding duration, number of screenshots, intelligent identification & analysis duration, and intelligent auditing duration in the past 30 days.
You can click **View more** to view more details on the Usage Statistics page.



Billing mode

This section shows the current billing mode for your account.
You may be billed daily or monthly. The daily billing mode applies by default. To switch to the monthly billing mode, please contact sales. For more information, see Billing Overview.
You can click **Top up** to top up your account.



Resource packs

This section shows the resource packs you have purchased and their usage.

You can click Buy resource pack to buy transcoding resource packs on the MPS purchase page.

Resources you use will be deducted from your resource packs first.

Documentation

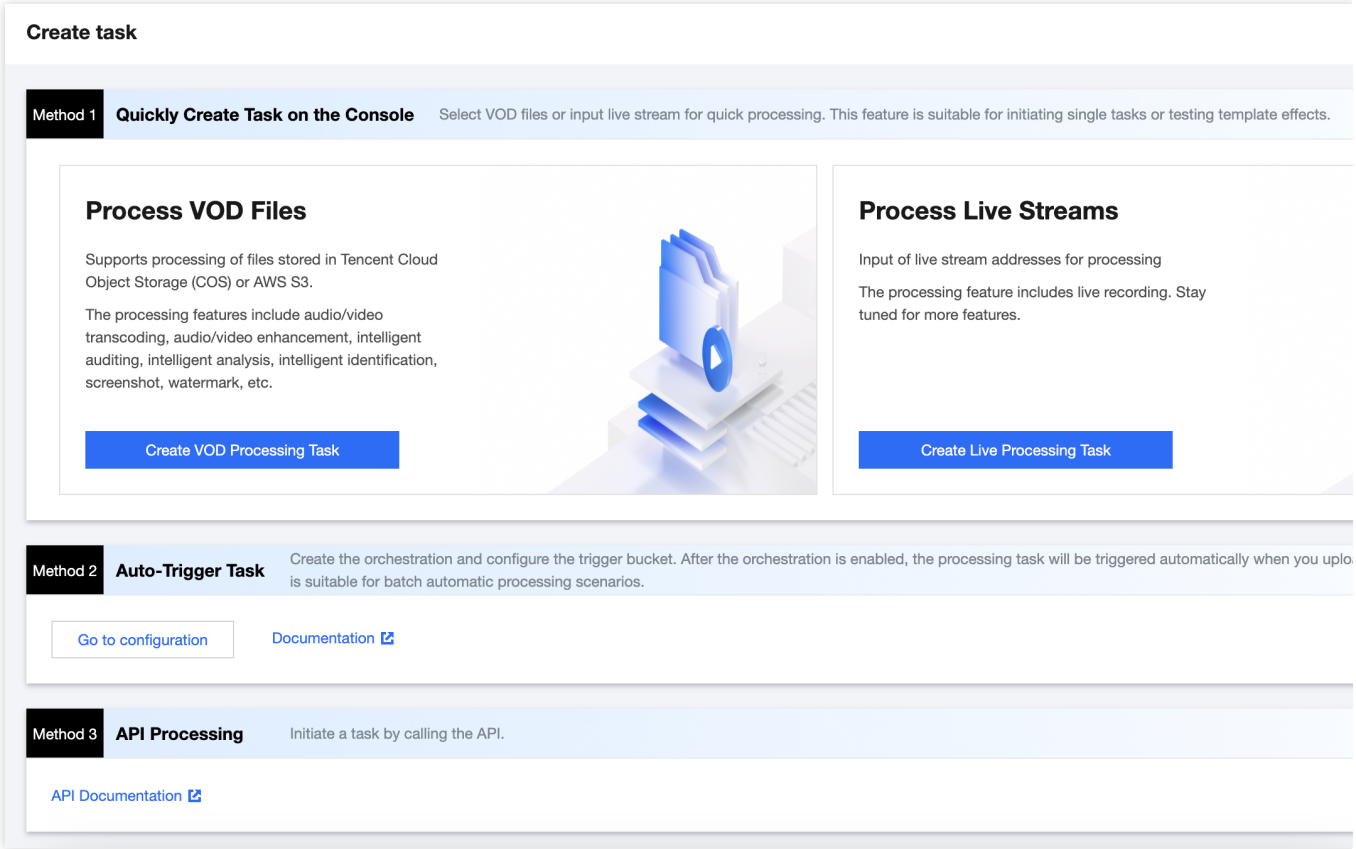
This section offers links to frequently read MPS documents.

Creating Tasks

Last updated：2024-06-11 16:04:44

Overview

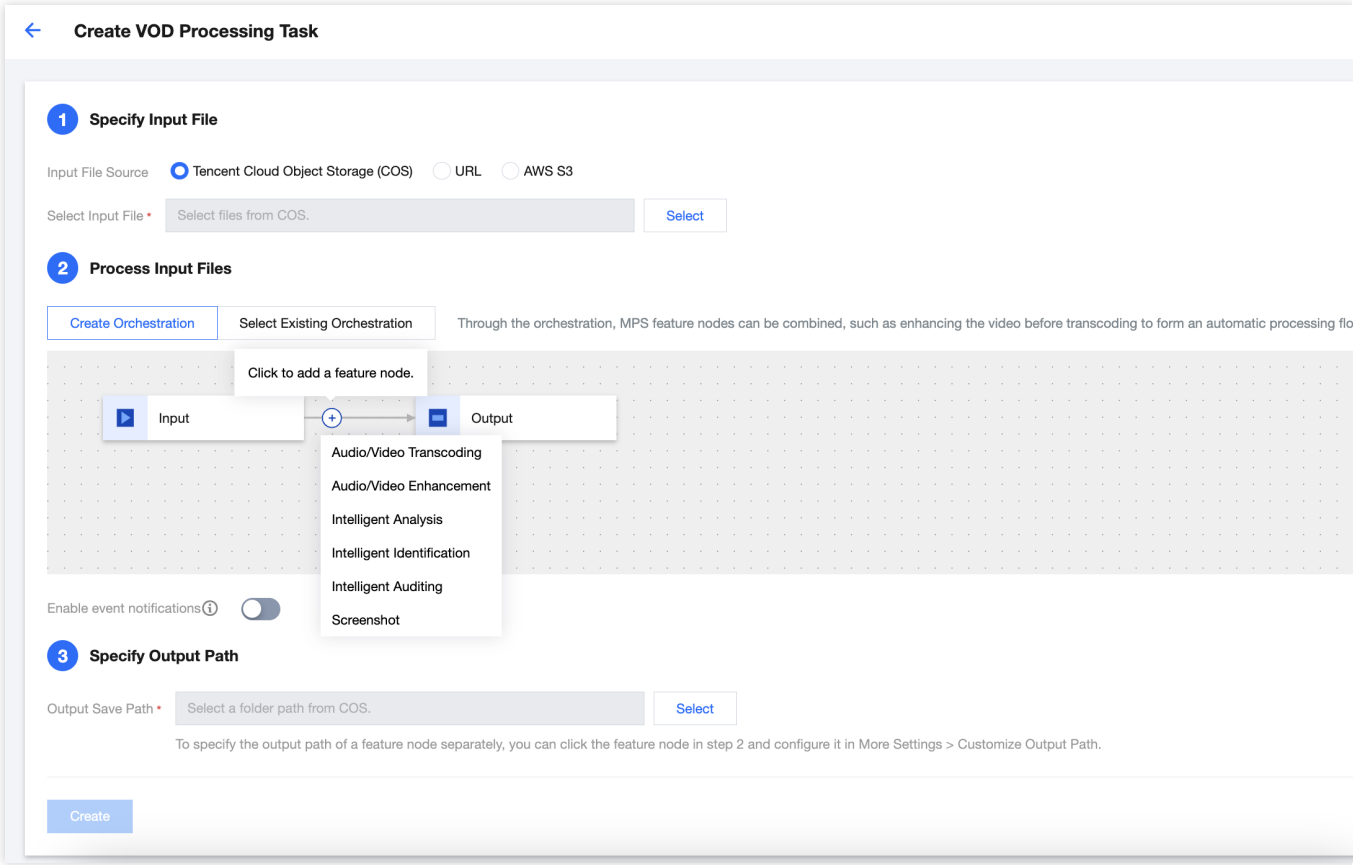
Media Processing Service (MPS) supports three ways to initiate tasks:
Quickly creating tasks in the console: Processing tasks are manually initiated by selecting files or entering live streams in the console.
Automatically triggering tasks: Processing tasks are automatically initiated after files are uploaded to COS/AWS S3 buckets, without the need to manually create tasks in the console. Currently, only Video on Demand (VOD) files are supported.
Initiating tasks via API: Tasks are initiated by calling the API, suitable for batch processing scenarios.



Details

Quickly Creating Tasks in the Console

To process audio and video files stored in COS and AWS S3, you can click **Create VOD Processing Task**. If your video files are stored in other public cloud storage products, you can also provide a file download URL as the input source, but the output needs to use Tencent COS product.
To process live streams, you can click **Create Live Stream Processing Task**.



Specify Input Files

Select the audio and video files/live streams that need to be processed as the input source, and configure the save path for the processed output files.
For VOD media processing, you can choose audio and video files from COS or AWS S3 buckets, or provide a file download URL address.

Note:

If you choose to input from COS or URL, you need to complete the Prerequisites > COS Authorization steps to create a service role, allowing MPS to perform read and write operations such as downloading, transcoding, and uploading files in your COS bucket.
If you choose to input from AWS S3, you do not need to complete COS authorization, but you need to refer to the Using Amazon S3 Buckets with MPS document to create an AWS sub-account, S3 input and output buckets, SQS, etc.
For live stream media processing, you need to enter the live stream URL address (it must be a live address, supporting RTMP, HLS, FLV, etc.).

Note:

You need to ensure that the live stream address is correctly entered. If the live stream fails to be pulled, it will retry 3 times. If it still cannot obtain the live stream, the task will be marked as failed.

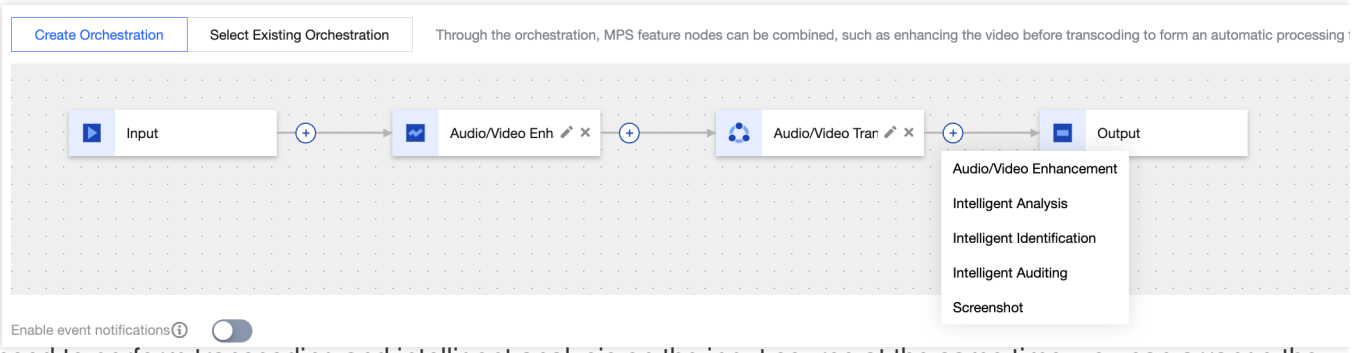
Process Input Files

Create Orchestrations

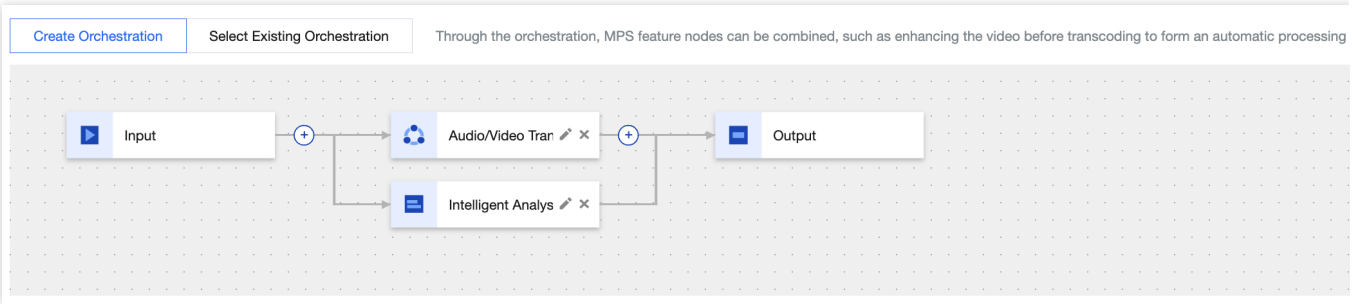
An orchestration is a combination of various MPS features, serving as an automated processing workflow. By clicking the

node, you can add the required features.

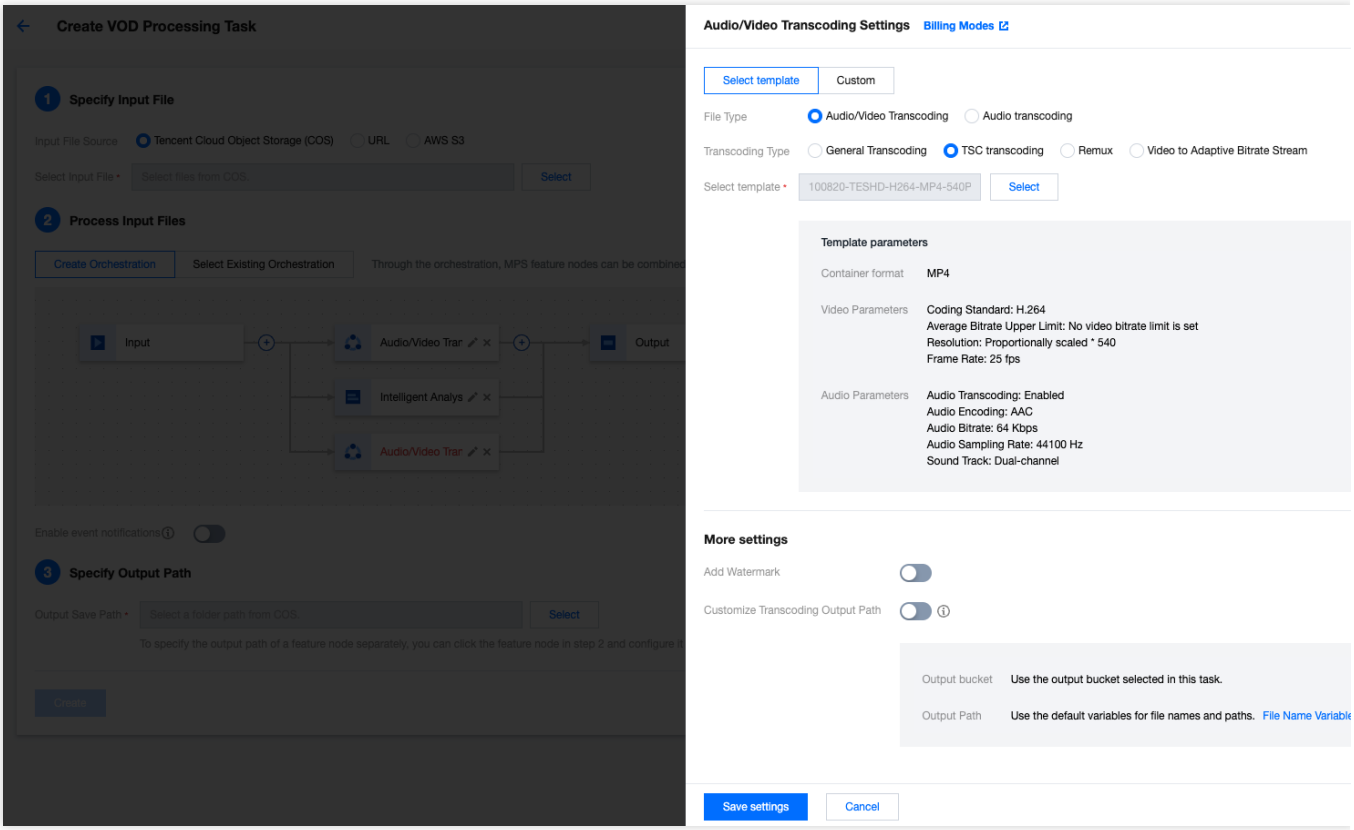
At least one feature node must be added. You may also, according to your needs, arrange the rich features MPS offers in series or parallel. For example, if you need to perform enhancement operations, such as enhancing the image quality and deburring, on the input file and then reduce the bitrate through transcoding and compression, you can first add an audio/video enhancement node, followed by an audio/video transcoding node.



If you need to perform transcoding and intelligent analysis on the input source at the same time, you can arrange the parallel task workflow as shown below.



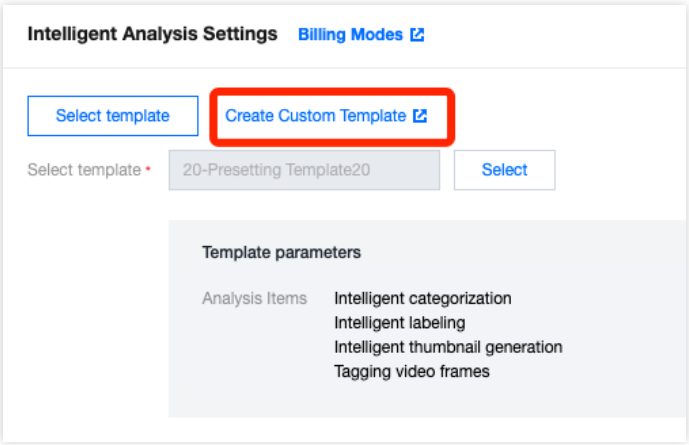
Each time you add a feature node, you need to set the specific parameters of that feature in the drawer floating layer. Taking the audio/video transcoding node as an example, you can choose system preset parameters or previously saved custom parameters by clicking **Select template**. You can also switch to **Custom** to directly edit the parameters. For detailed parameter configuration, refer to Audio/Video Transcoding Template.



Note:

Currently, only audio/video transcoding and audio/video enhancement nodes offer the option to switch to **Custom** to directly edit parameters without the need to save them as templates in advance.

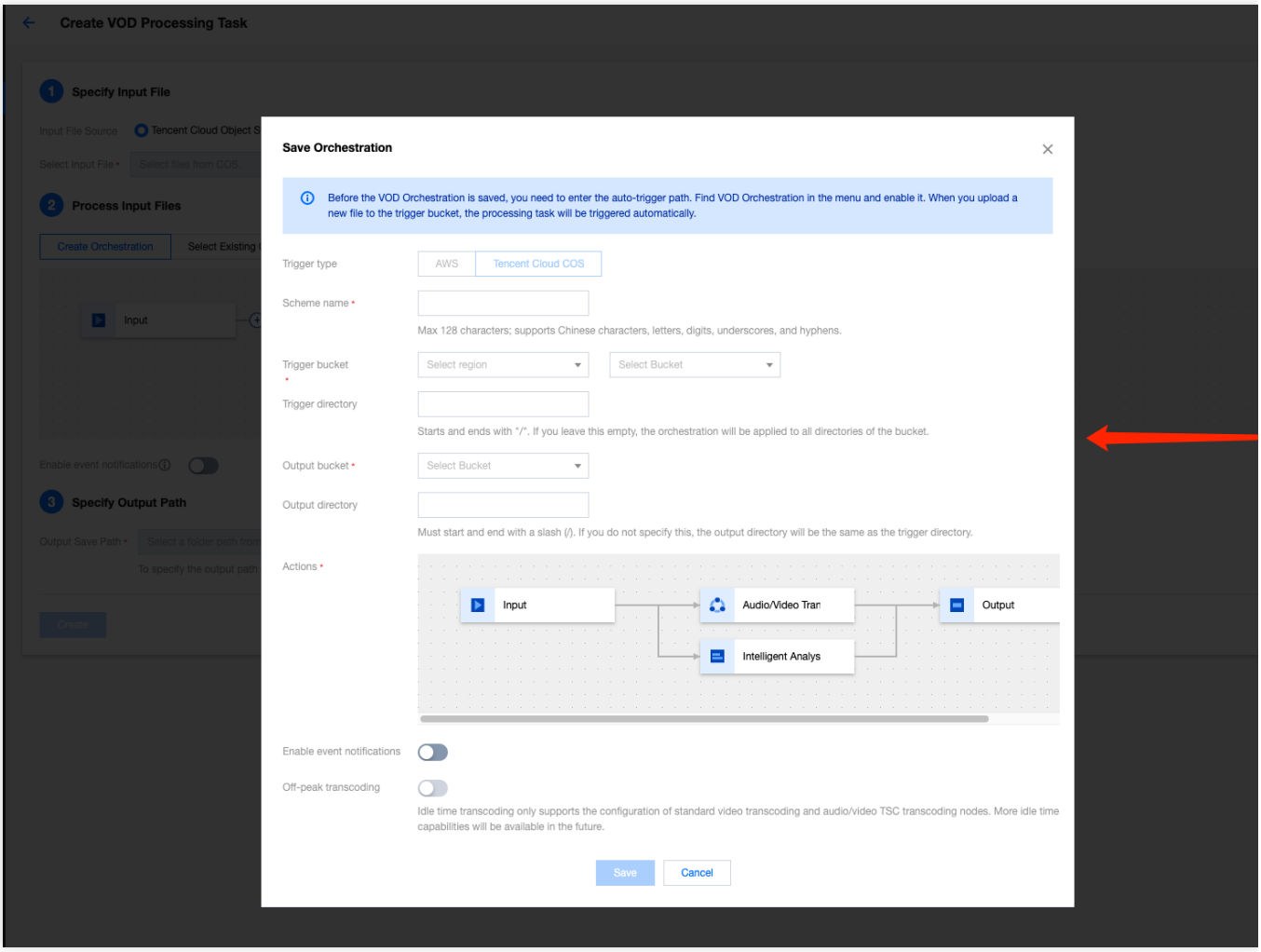
If you need to customize the parameters for other feature nodes such as intelligent analysis, identification, screenshot, etc., you can click **Create Custom Template** to enter the **Templates** page to create a template.



Save the Orchestrations

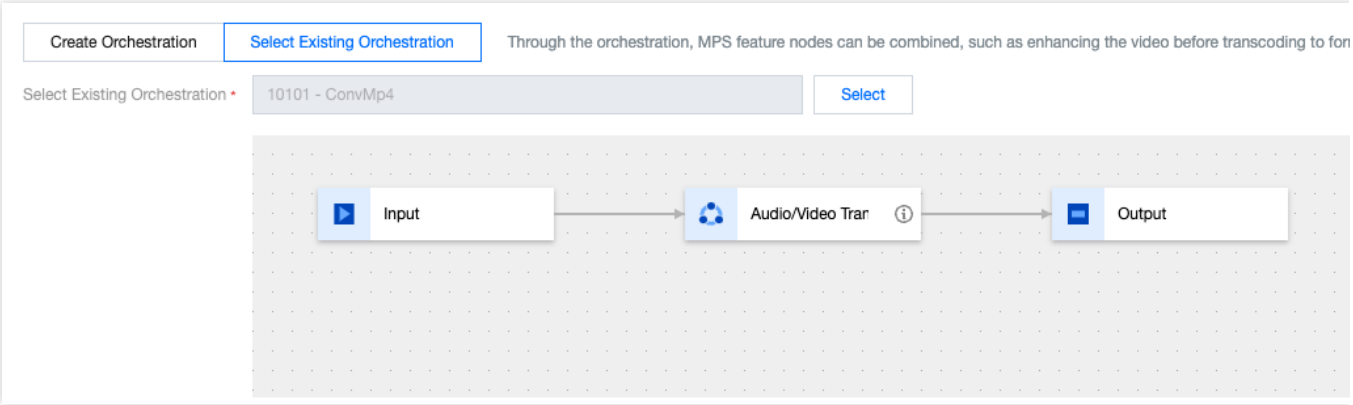
You can save the configured orchestrations for reuse later. The saved orchestrations can be viewed in **Orchestrations**.

When saving, you need to configure the trigger bucket, trigger directory, and other input and output paths to facilitate the subsequent automatic trigger of tasks. For details, see Automatically Triggering Tasks below in this document.



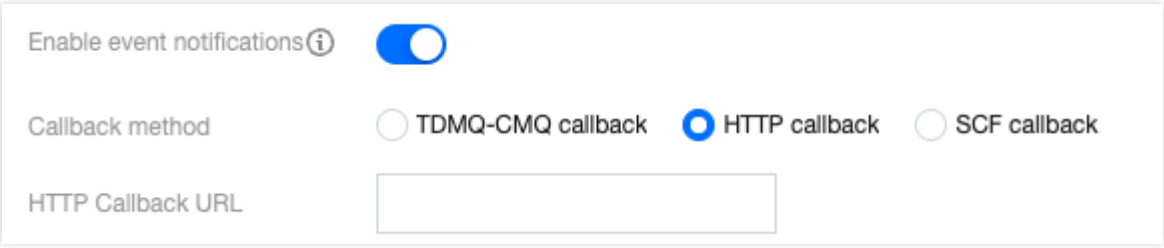
Selecting Existing Orchestrations

That is, use the previously saved orchestration flow and feature node parameters.



Event Notification

Event notification can synchronize the progress and status of your tasks in real time during the task processing flow.
If Tencent Cloud COS/URL is used as the input source, three event notification mechanisms are supported: TDMQ-CMQ callback, HTTP callback, and SCF callback. For detailed description, see Configure Event Notification.
If AWS S3 is used as the input source, two event notification mechanisms are supported: Amazon SQS callback and HTTP callback. For detailed description, see Creating an SQS queue for transcoding callbacks.

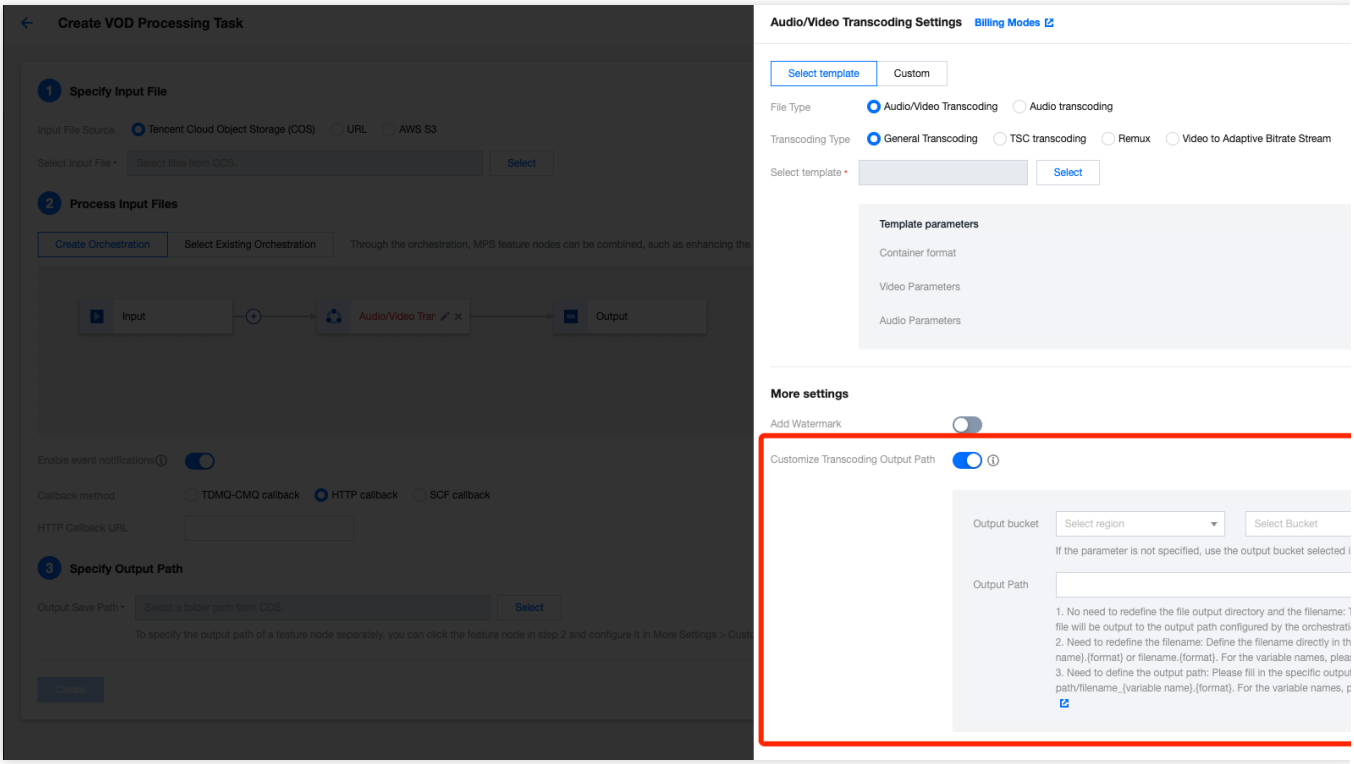


Specify Output Path

Specify the default save path for the output file of this task.

If you need to set the output path of a specific feature node in the orchestration separately, for example, you have added transcoding, enhancement, and screenshot features in the orchestration, and you expect the screenshot output file to be stored in a different path, you can click the screenshot node in the Create Orchestrations step mentioned

earlier, and configure it in **More settings - Customize Screenshot Output Path**. You can also adjust the naming convention of different feature output files through this setting. For details, see Filename Variable.



Note:

The priority order of the output paths is: **custom output path for each feature node in the orchestration** > **output path configured in the task** > **output path configured in the orchestration**.

For example:

During creation of a task, an existing orchestration was selected, with the output path configured as `[ap-guangzhou]test/output1/` in the orchestration.

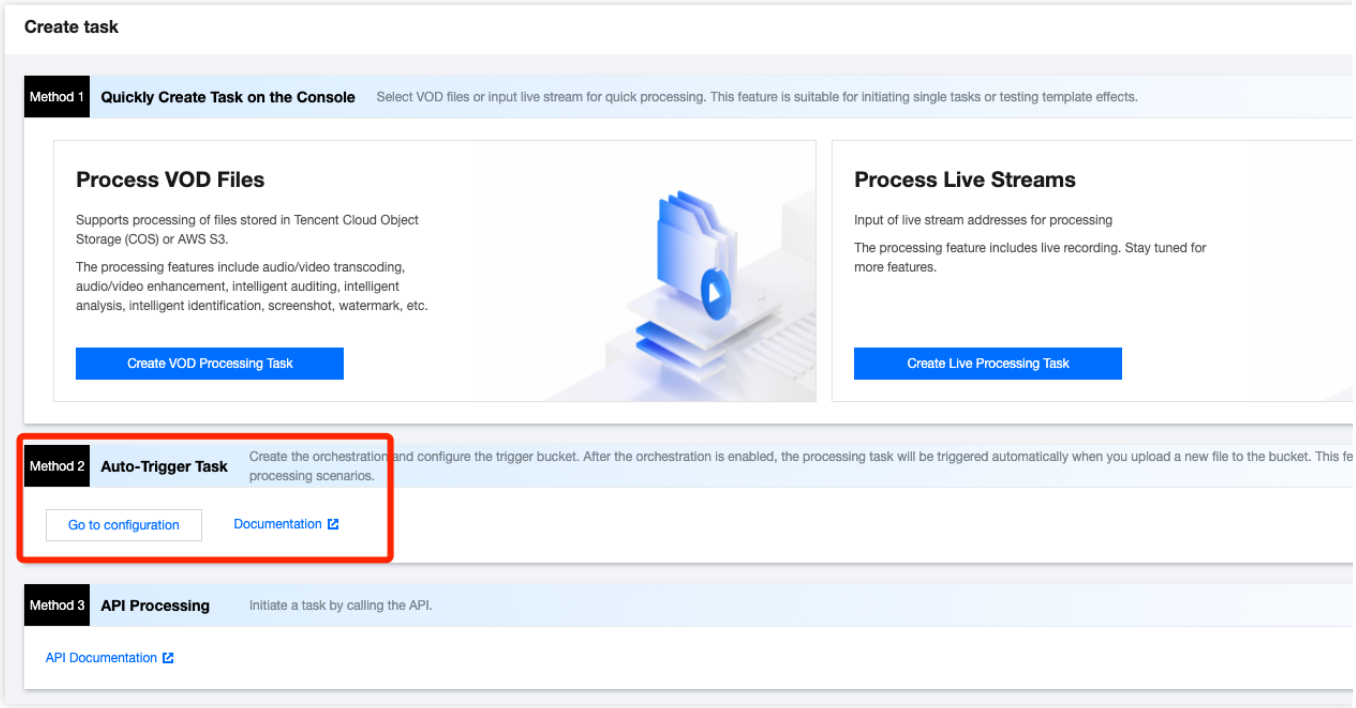
In the orchestration, an audio/video transcoding node and an audio/video enhancement node were configured, where the transcoding node had a custom transcoding output path configured as `[ap-guangzhou]test/output2/` .

The specified output save path for this task is `[ap-guangzhou]test/output3/` .

Therefore, in this task, the enhancement's output result will be saved in `[ap-guangzhou]test/output3/` , and the transcoding output result will be saved in `[ap-guangzhou]test/output2/` .

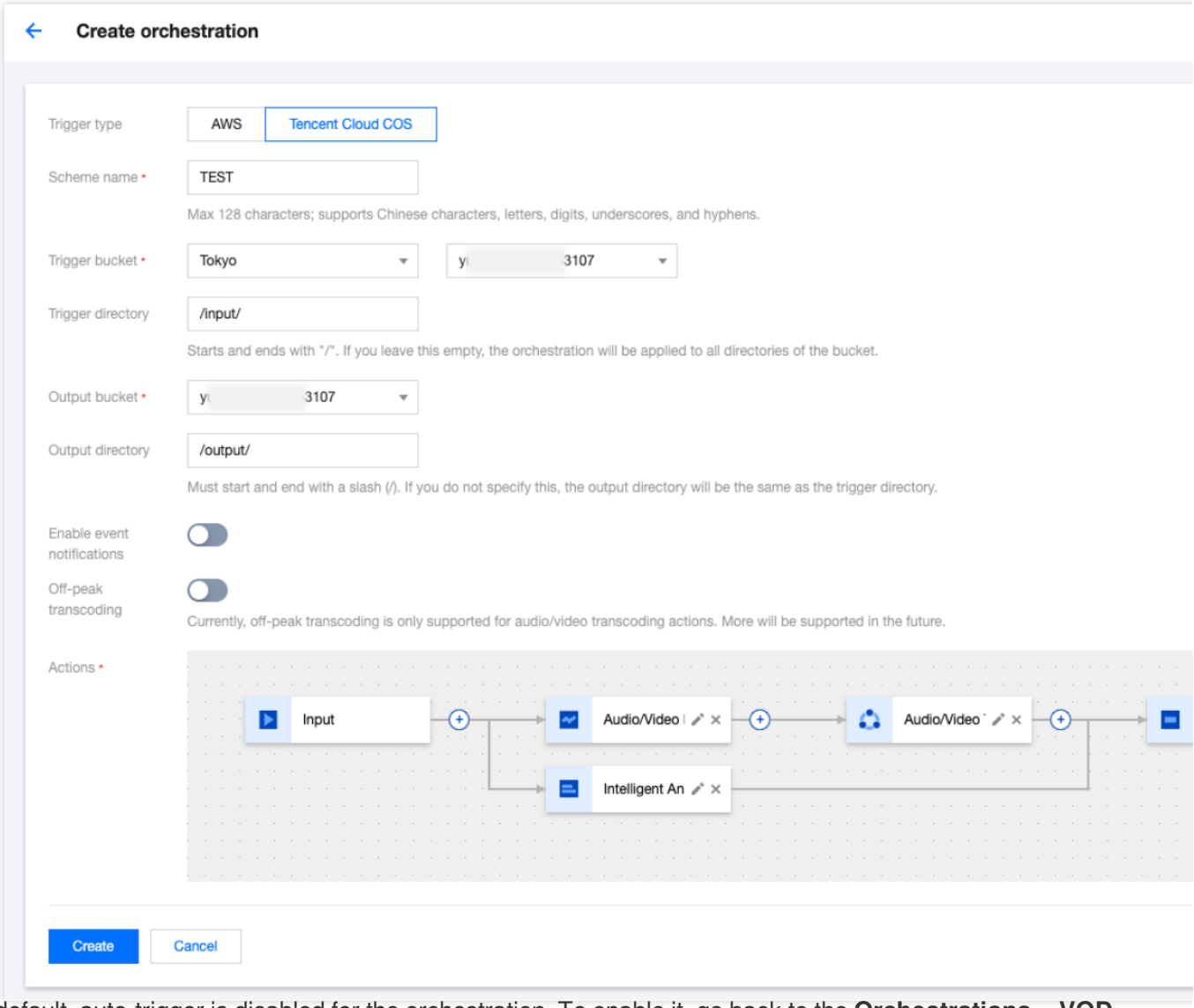
Automatically Triggering Tasks

Processing tasks are automatically initiated after files are uploaded to COS/AWS S3 buckets, without the need to manually create tasks in the console. Currently, only VOD files are supported.



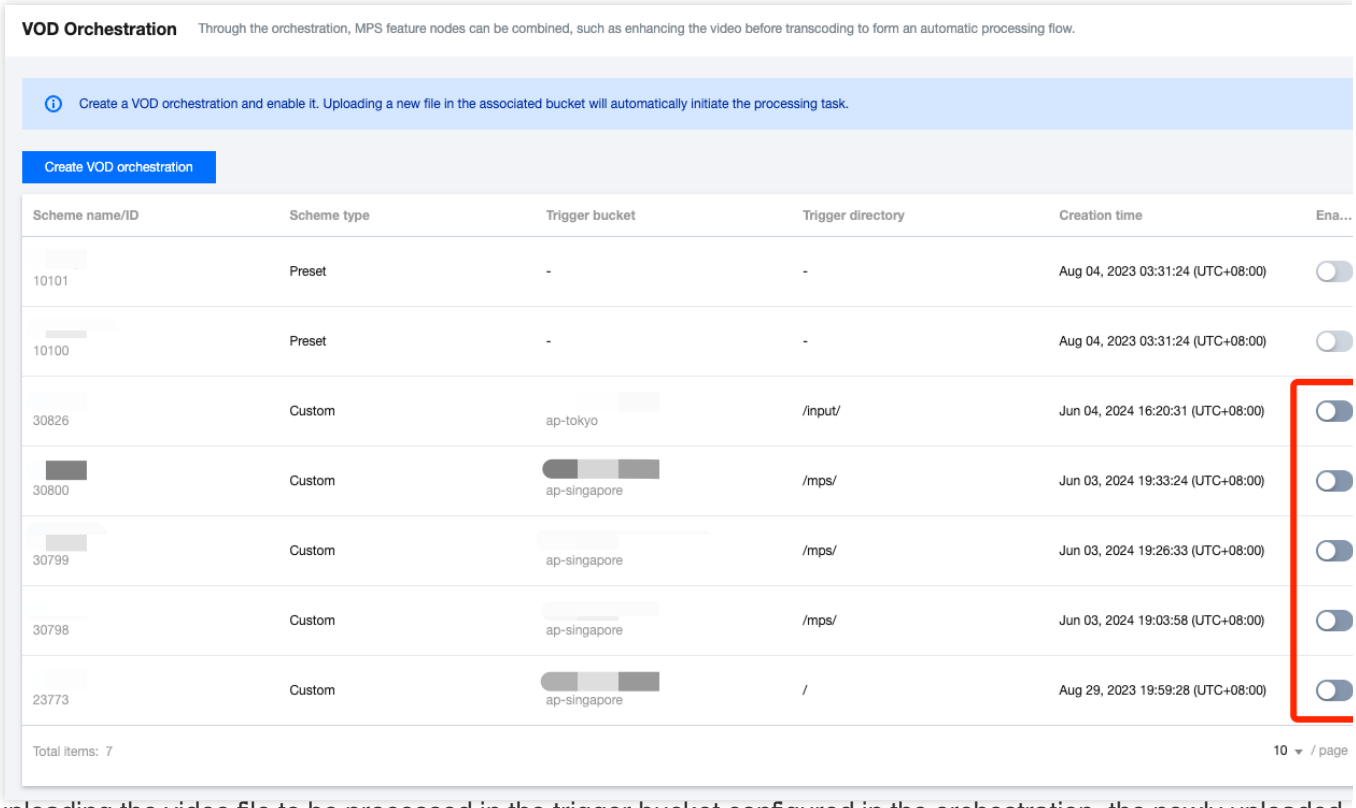
1. Click **Go to Configure** to enter the Orchestrations > VOD Orchestration page, and then click **Create VOD Orchestration**.

2. Configure the trigger bucket and directory, output bucket and directory, the specific task workflow, etc. For detailed configuration instructions, see VOD Orchestration Configuration Instructions.



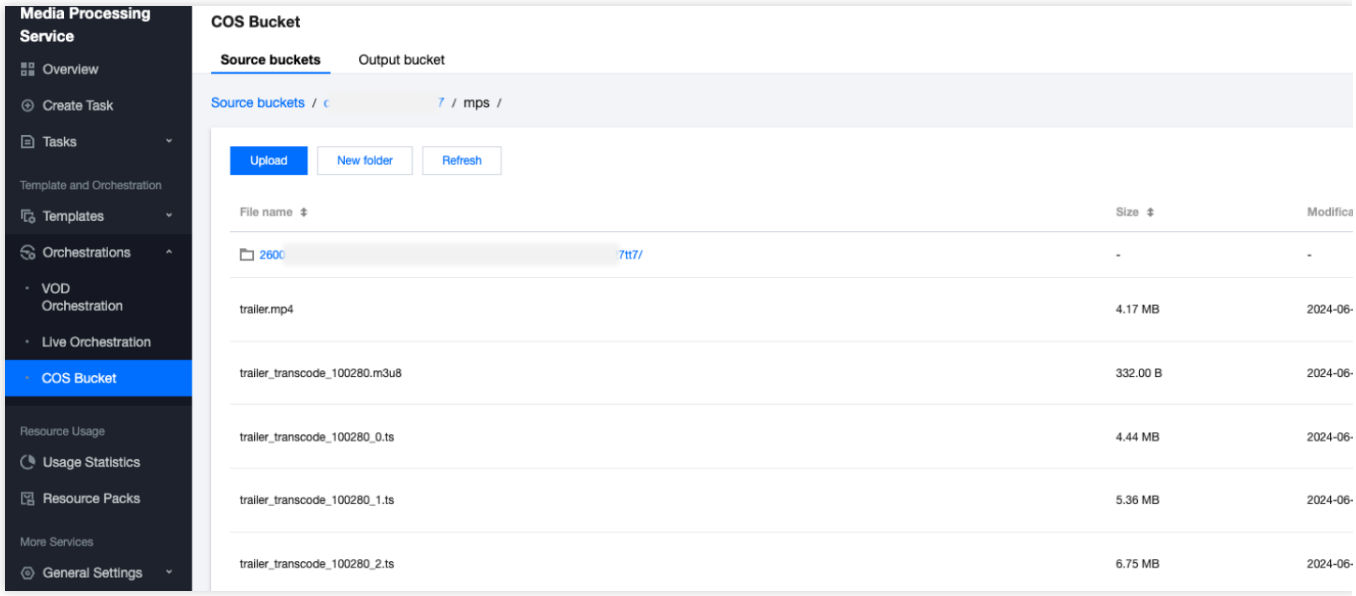
3. By default, auto-trigger is disabled for the orchestration. To enable it, go back to the **Orchestrations** > **VOD Orchestration** page and click

to enable the auto-trigger feature.



4. By uploading the video file to be processed in the trigger bucket configured in the orchestration, the newly uploaded video will be processed automatically according to the task configuration in the orchestration, without the need to manually create tasks in the console.

On the **Orchestrations > COS Bucket** page, you can find the **trigger bucket** and **output bucket** configured in the orchestration, where you can conveniently perform operations on files, such as file upload, preview, and download:



Note:

After auto-trigger is enabled for the orchestration, it will only affect new video files uploaded to the trigger bucket; files previously stored in the trigger bucket will not be processed automatically.

Initiating Tasks via API

VOD Media Processing

Initiate tasks through the API ProcessMedia. The following new features have not yet launched on the console but can be experienced via API:
Media quality inspection: Supports video file format diagnosis, audio and video content detection (jitter, blur, low illumination, overexposure, black and white borders, black and white screens, screen tearing, noise, mosaic, QR code, etc.), and no-reference scoring.

Live Stream Media Processing

Initiate a single live stream processing task via the API ProcessLiveStream. It supports the following features:
Intelligent auditing: Supports image pornography detection, sensitive information detection, and audio pornography detection.
Intelligent identification: Supports identification of faces, objects, text, and speech. Automatic Speech Recognition (ASR) also supports intelligent translation and real-time subtitle conversion. It includes features such as game tagging.
Intelligent analysis: Supports real-time news splitting and more.
Quality inspection: Supports live stream format diagnosis, audio and video content detection (jitter, blur, low illumination, overexposure, black and white borders, black and white screens, screen tearing, noise, mosaic, QR code, etc.), and no-reference scoring among other features.
Live stream recording.

Tasks
VOD Task Management

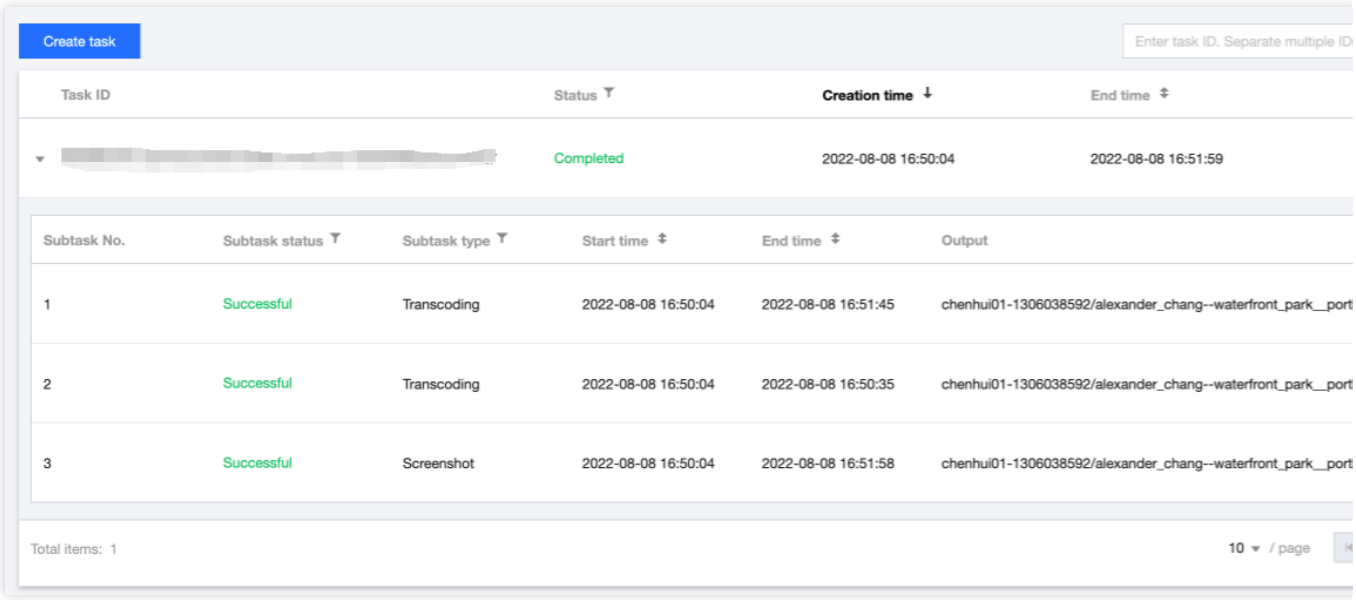
Last updated：2024-06-11 15:54:10

Operation Scenarios

After you initiate a media processing task through file upload to COS bucket, running manual transcoding scripts, or API calls, you can view and manage the task in the VOD module.

Operation Descriptions

Task List



Column Name	Description
Task ID	ID of the initiated primary task.
Status	The current status of the primary task, which can be: Waiting, In progress, and Completed. **Waiting**: The task is in the queue waiting for processing. **In progress**: The primary task status is In progress as long as any of its subtasks is running. **Completed**: The task status is Completed when no subtask is running.

Creation time	The point in time when the task is initiated.
End time	The point in time when the task is completed.
Operation	See the Task Operations section below for more details.

Task Query

1. Click VOD to go to the task management page. The list on this page displays the record of primary tasks initiated by this account.
2. You can filter the required primary task by entering a **task ID** in the search box in the upper right corner of the list or selecting the **task status** in the list.

Task Creation

1. Go to the VOD page and click Create task to enter the task creation page.
2. Select the video file to be processed, specify the output path, transcoding template, and other necessary information, and initiate the task.

Task Operation

The operations supported for task management include: Details, Restart, End, and Play source video.
Details: You can click **Details** to view the information about all subtasks of the primary task.
Restart: Tasks with the status of "Completed" can be restarted. You can click **Restart** to re-execute all the subtasks of the primary task.
Terminate: Tasks with the status of "Waiting" can be ended. You can Click **End ** to cancel waiting tasks and further execution.
Play source video: You can click **Play source video** to obtain and play the input video file of the task.

Subtask List

In the task list, you can click **Details** to display the information about all subtasks of the primary task. Detailed information is as follows:

Column Name	Description
Subtask No.	The incremental serial numbers that distinguish the subtasks of the primary task.
Subtask status	Status of subtasks, including: Waiting, In progress, Successful, and Failed.
Subtask type	Type of subtasks, which can be: Audio/Video Transcoding, Audio/Video Enhancement, Screenshot, etc..
Start time	Initiation time of the subtask.
End time	Completion time of the subtask.

Output	Output location of the subtask. (No output location is required when the subtask type is Intelligent Analysis, Identification, or Auditing, you can use the DescribeTaskDetail API to query the details of execution status and the result of the subtasks)
Operation	Refer to the Subtask Operations section below for details.

Subtask Operations

Supported subtask operations include **Details**, **Play/View**, and **Download**.

Operation Name	Description
Details	You can check the details of a subtask.
Play/View	You can check the result of subtask processing and play the video after the subtask is processed.
Download	You can click **Download** to download the output file of this subtask. This operation is supported only for subtasks of audio/video transcoding, screenshot, and audio/video enhancement. **Note: If multiple screenshots are generated, only the first screenshot can be downloaded currently. In future versions, you can package multiple screenshots for download.**

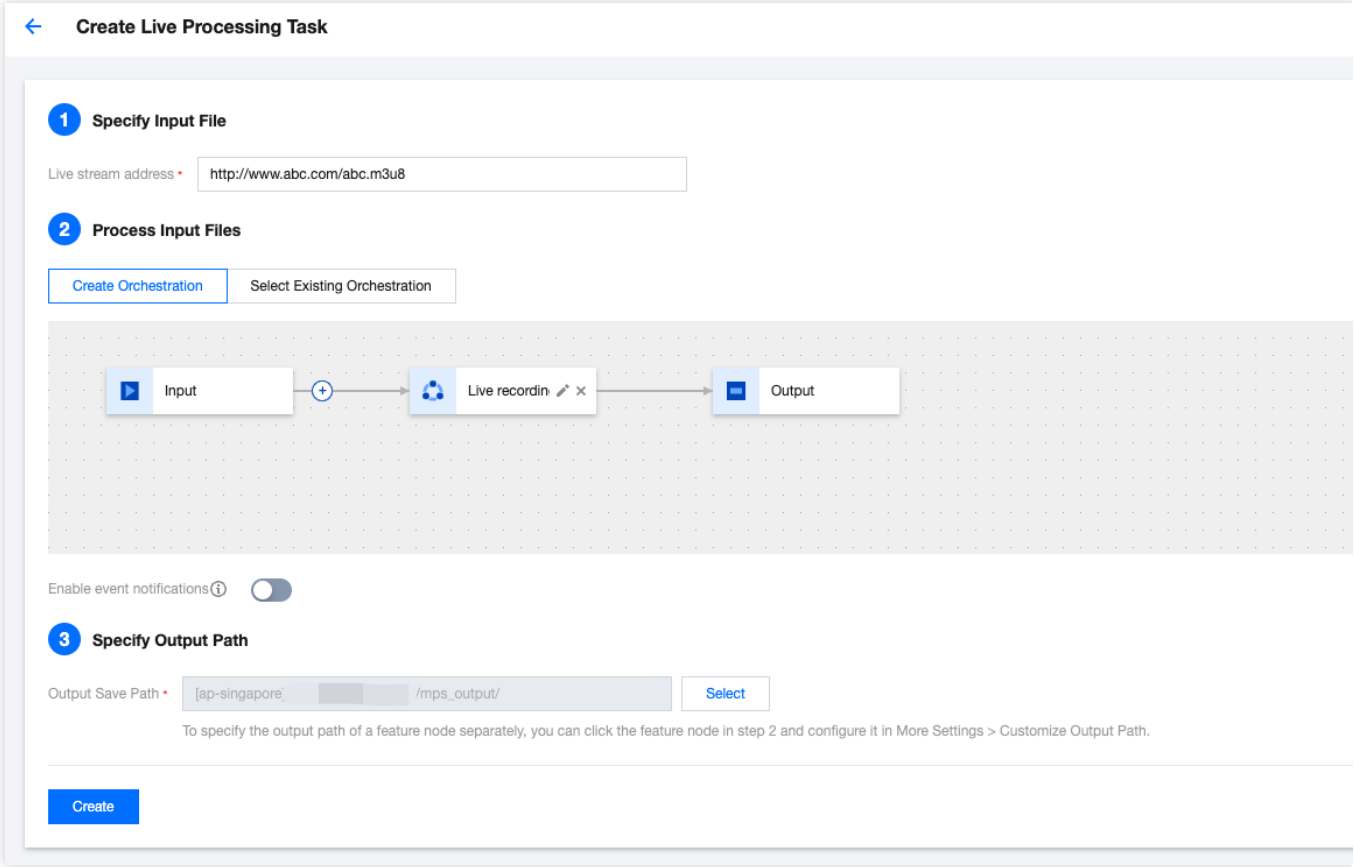
Live Stream Task Management

Last updated：2024-06-11 15:54:10

Operation Descriptions

Live Task Creation

Click Create task, follow the page instructions to configure the live stream address, scheme, and output save path. Currently, the console supports real-time recording of live streams. For detailed template configurations, refer to Live Stream Recording Template.

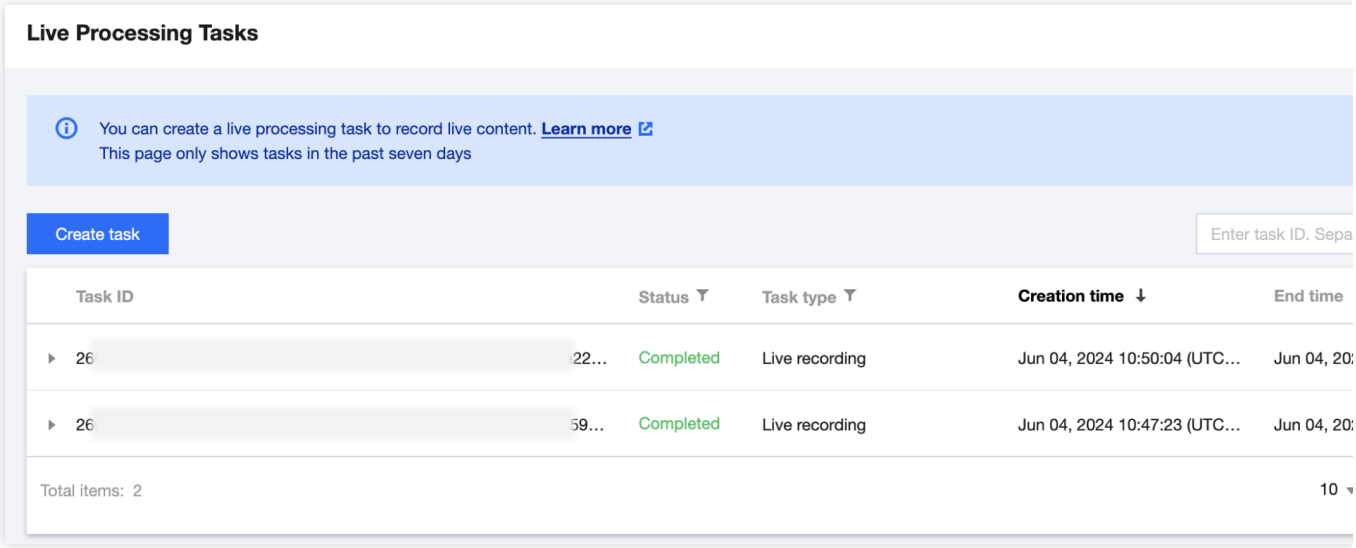


Note:

Make sure that the entered live stream address is correct when creating the recording task. If the live stream fails to be pulled, the pull operation will be retried three times. If the operation still fails, the recording task status changes to Failed.

Live Task Management

Once the live task has been successfully created, it will be executed automatically. You can perform operations like viewing details or ending the task in the task list.



Usage Statistics

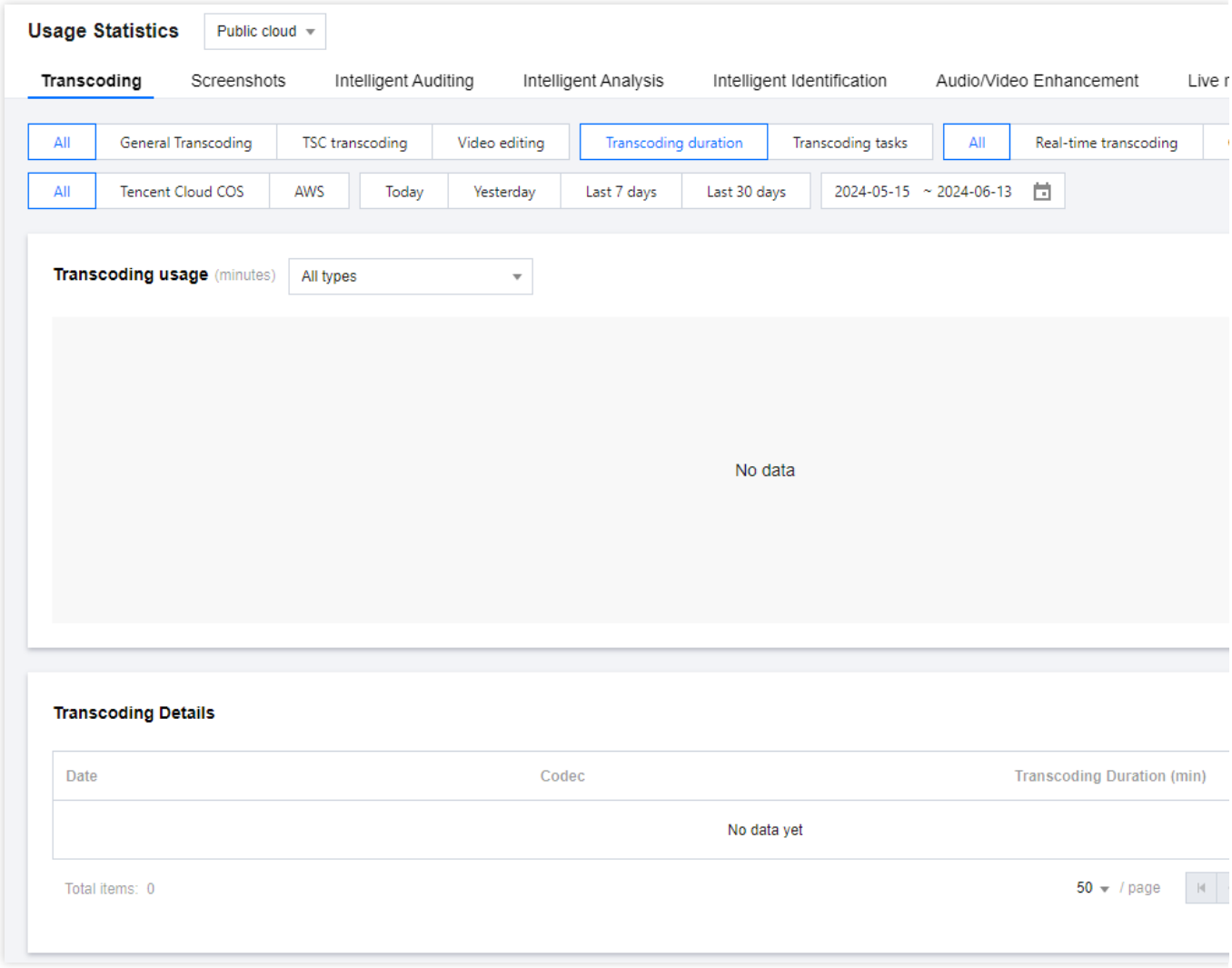
Last updated：2024-06-19 10:49:04

Overview

The Usage Statistics page of the MPS console offers details about your usage of media processing services.

Public Cloud Details

This page provides usage data for Media Processing Service in the public cloud, encompassing tasks such as audio/video transcoding, screenshots, intelligent auditing, and intelligent analysis.
For each task type, you can view the usage statistics for today, yesterday, last seven days, last 30 days, or a custom time period in the past 60 days.
Enables the viewing and downloading of daily usage details.



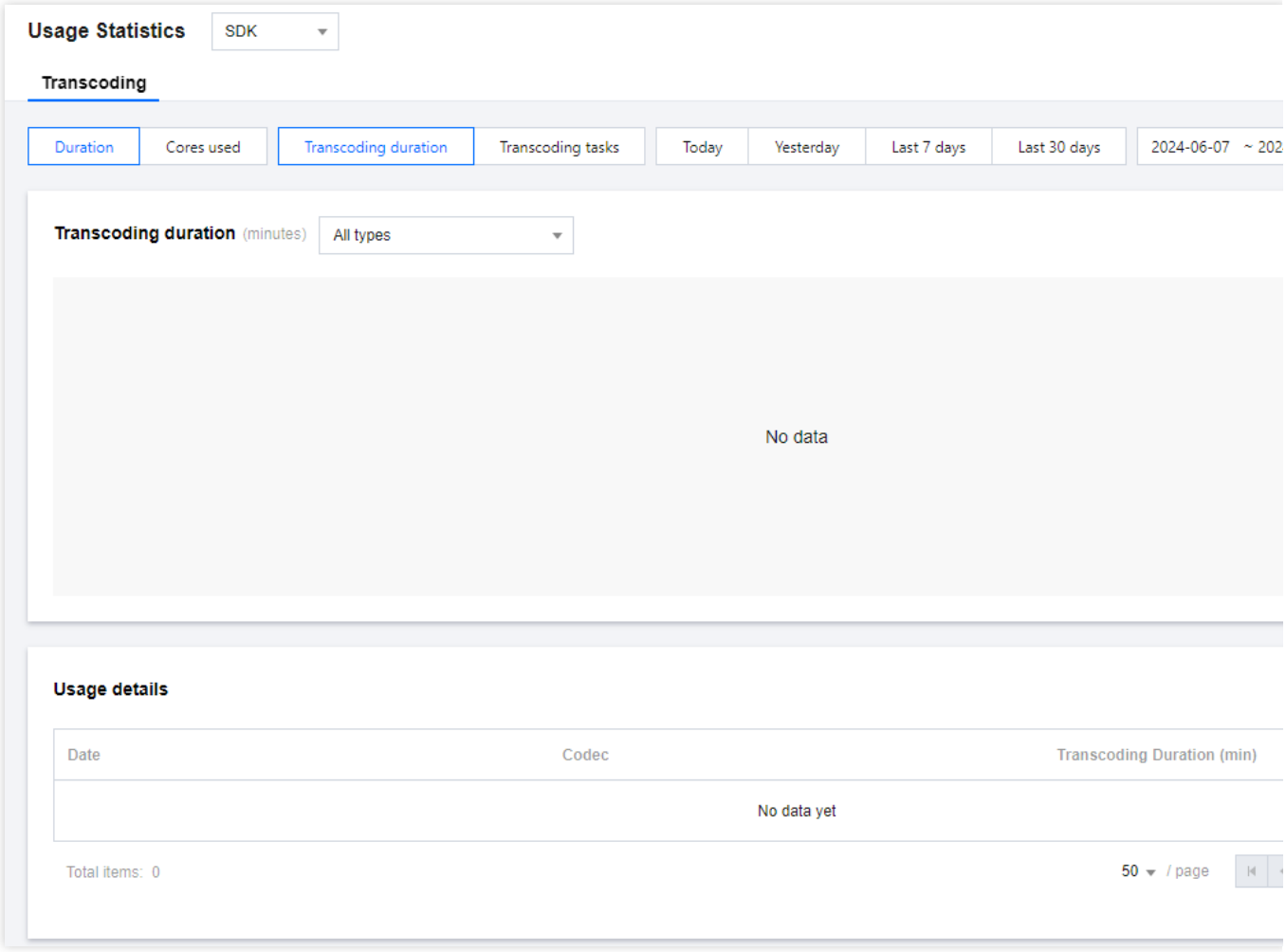
SDK Usage Details

This page provides the usage data for the Media Processing Service Codec SDK.

It allows viewing of transcoding usage data by duration or by cores used.

You can view the usage statistics for today, yesterday, last seven days, last 30 days, or a custom time period in the past 60 days.

Enables the viewing and downloading of daily usage details.



Orchestrations
VOD Orchestration

Last updated：2024-06-19 10:44:44

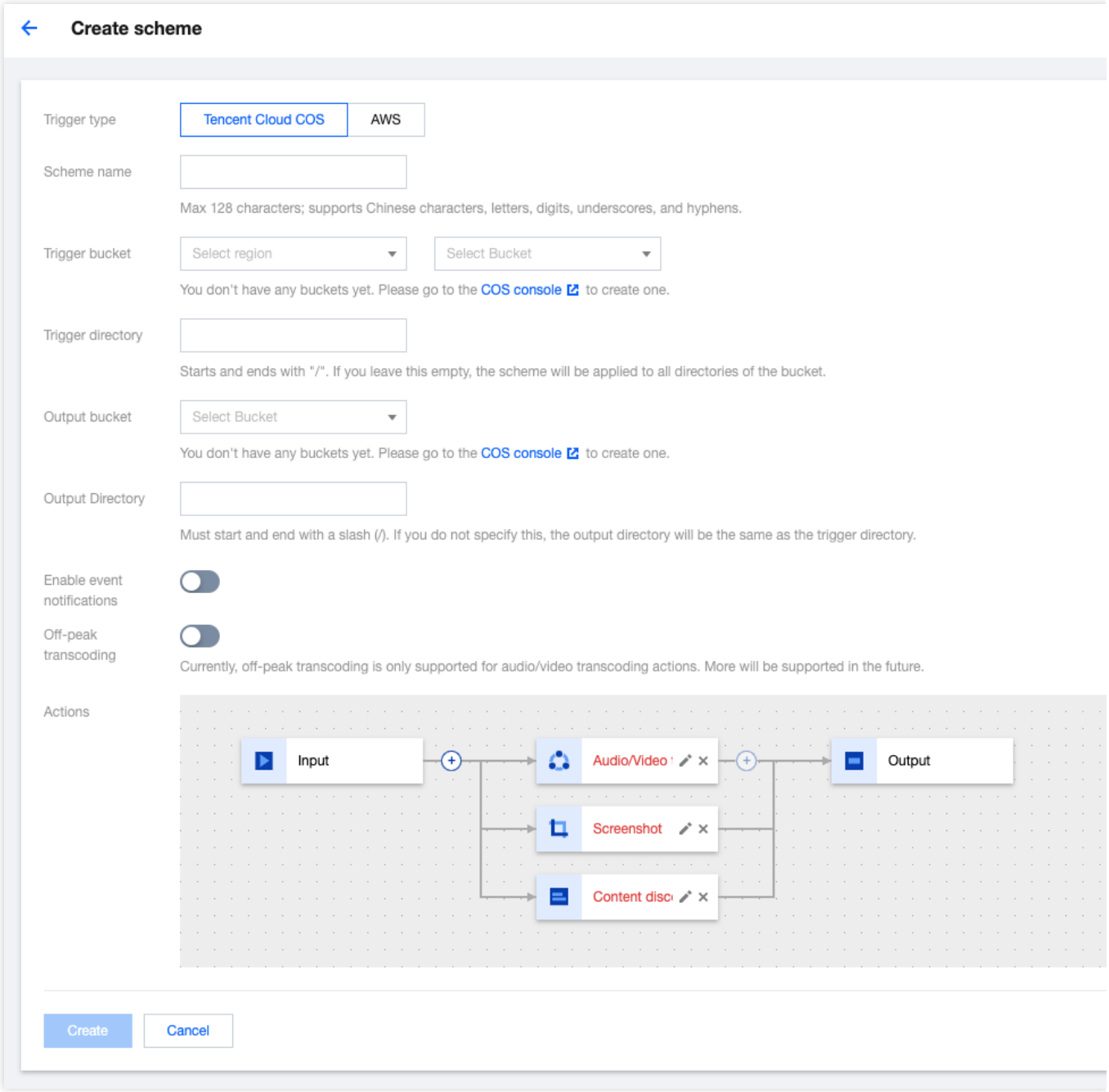
Operation Scenarios

After you correctly configure the **VOD Orchestration**, the orchestration execution will be automatically triggered for videos you upload to the designated bucket directory, and the output files will be written into the designated bucket directory. You can configure the task, including audio/video transcoding, audio/video enhancement, watermarking, screenshot, animated graphic conversion, moderation, content discovery, and content analysis.

Creating VOD **Orchestration**

Go to the Creation Page

1. Log in to the MPS Console, and click Orchestrations > VOD Orchestration > Create VOD Orchestration.
2. On the page that appears, create the orchestration based on the business scenario requirements and configure relevant information.



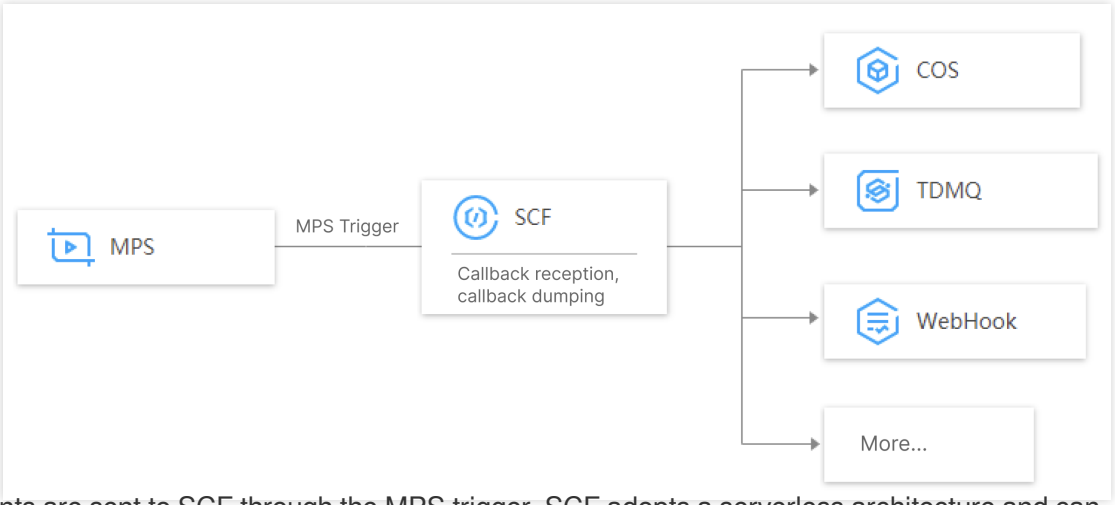
Configure Orchestration

Configuration Item	Required	Configuration Description
Trigger type	-	By default, "Tencent Cloud COS" is selected, indicating that the bucket that triggers the orchestration belongs to Tencent COS. When "AWS" is selected, the trigger bucket belongs to AWS S3. This option can be selected if the bucket is configured on AWS services. Refer to Using Amazon S3 Buckets with MPS for detailed information.
Orchestration	Yes	You can enter a combination of letters, digits, underscores, and hyphens (_).

name		The length cannot exceed 128 characters. Example: "MPS".
Trigger bucket	Yes	You can select a bucket created under this `APPID` as the trigger bucket. Once the orchestration is enabled, video file upload to this bucket will automatically trigger the orchestration execution.
Trigger directory	No	The directory should end with a forward slash (/). If left unspecified, all directories of the trigger bucket can trigger the orchestration execution.
Output bucket	Yes	By default, the output bucket is the same as the trigger bucket. You can also select another bucket in the same region corresponding to the specified `APPID` as the output bucket. Newly generated video files will be stored in the selected bucket once the service orchestration is completed.
Output directory	No	The directory should end with a forward slash (/). If left unspecified, the trigger directory will be taken as the output directory.
Enable event notifications	-	Refer to the Configure Event Notification section below for details. Once enabled, the transcoding process and result data will be sent through the selected notification method.
Off-peak transcoding	-	If this feature is enabled, initiated transcoding tasks will be executed during off-peak hours of resource usage. The timeliness of the transcoding process dynamically changes based on Tencent Cloud's resource utilization. (High timeliness of transcoding cannot be guaranteed.) If this feature is enabled, the transcoding costs will be billed according to the billing logic of "off-peak transcoding packs" or off-peak transcoding, which is different from that of non-off-peak transcoding. For more details, please refer to the General Transcoding Resource Pack, TSC Transcoding Resource Pack, Off-Peak General Transcoding Resource Pack, and Off-Peak TSC Transcoding Resource Pack sections in relevant documents. This feature applies to scenarios involving massive file processing with low requirements for real-time transcoding.
Actions	-	Refer to the Configure Actions section below for details. You can quickly build a process by defining process nodes and templates of the service orchestration.
Associate Resource	No	This configuration option will only appear if cost allocation has been enabled in the **General Management > General Settings**. After resources are associated, cost allocation can be performed for the bill related to this orchestration based on the resource-bound tags. If you need to modify resources, go to Cost Allocation Management.

Configure Event Notification

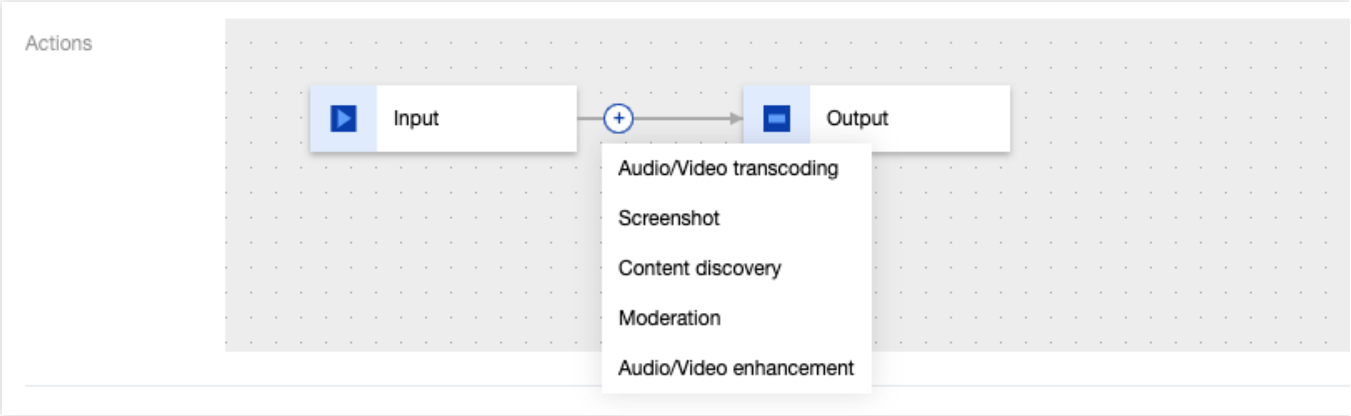
This feature can provide real-time updates on the progress and status during task execution. You can enable and configure this feature to receive notifications. Currently, Tencent Cloud provides three event notification mechanisms: TDMQ-CMQ callbacks, HTTP callbacks, and SCF callbacks. Detailed information is as follows:

Callback Type	Configuration Description
TDMQ-CMQ callbacks	To enable TDMQ-CMQ callback, go to the TDMQ console to activate the CMQ service and create a model. Once enabled, the specified CMQ service will receive event notifications from MPS. You need t fill in the following information: TDMQ-CMQ model: Queue model is selected by default. TDMQ-CMQ region: You can select Guangzhou, Shanghai, Beijing, Shanghai Finance, Shenzhen Finance, Hong Kong (China), Chengdu, North America, or West US. Queue name: Custom.
HTTP callbacks	When calling the event notification configuration API TaskNotifyConfig, specify the NotifyType parame to URL and fill in the HTTP callback address in the NotifyUrl parameter.
SCF callbacks	1. SCF can rapidly process and operate on callback events triggered by MPS. The overall data processing workflow is shown in the following figure:  2. Events are sent to SCF through the MPS trigger. SCF adopts a serverless architecture and can process and respond to callback events. 3. You can click **Go to SCF console** to configure a function. For specific configuration method, please refer to MPS Task Callback Notification. Note: The SCF callback configuration applies to all orchestrations but is not saved specifically for the current orchestration. Corresponding computing fees will incur after the data is sent to SCF. For more information, refer to Billing Overview.

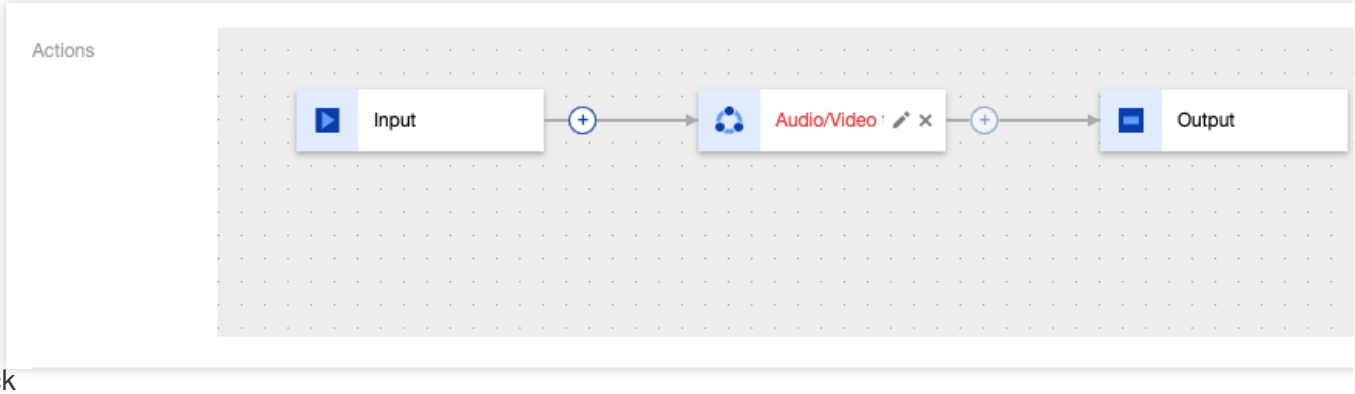
Configure Actions

You can define the entire service process, add various service nodes (such as **audio/video transcoding, audio/video enhancement, intelligent analysis and screenshot**), and apply different templates to each node. The detailed configuration is described as follows:

1. Click the **+** button to select the required action from the drop-down list and add it.



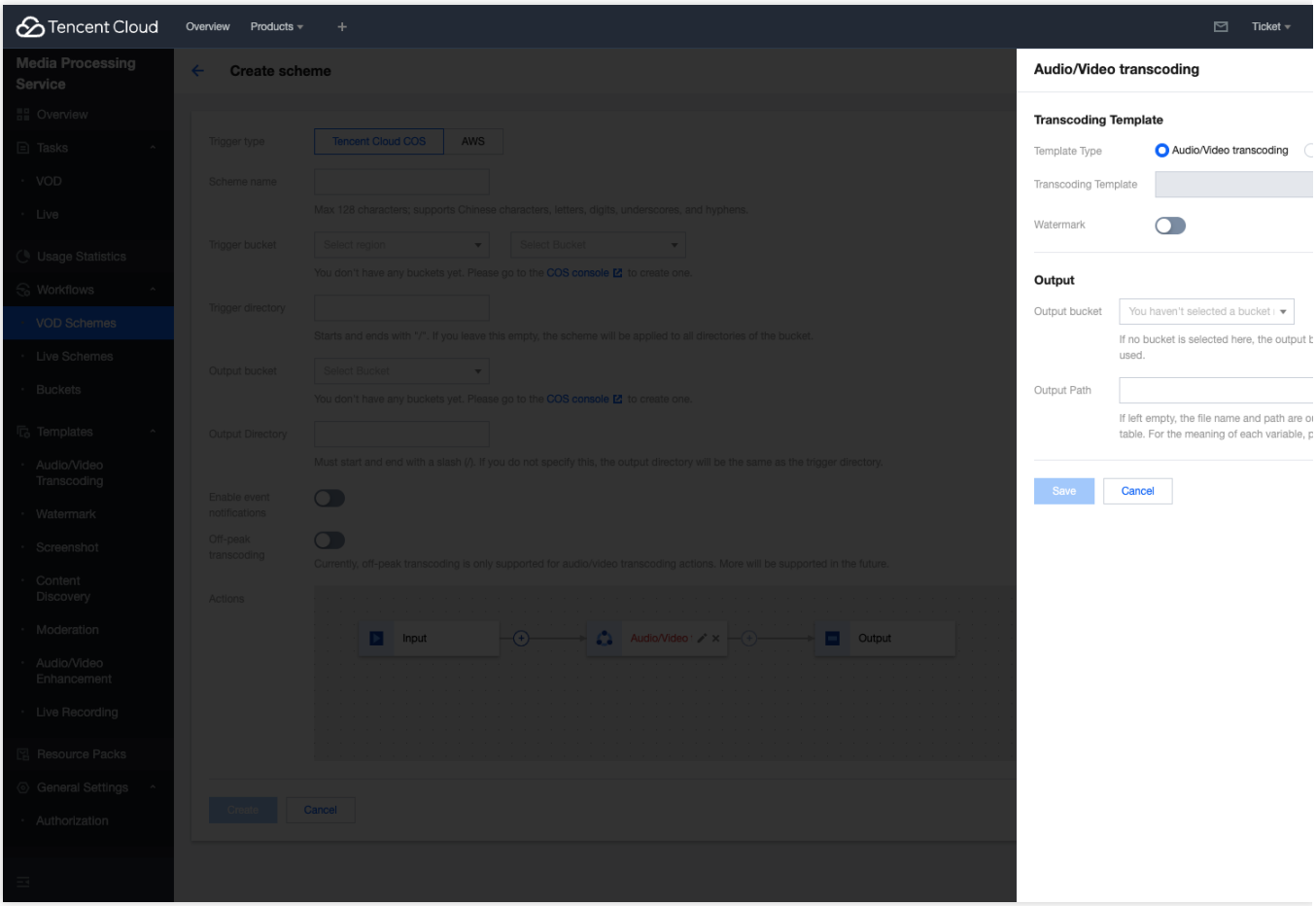
2. After the action is added, the action node is displayed. You can then configure detailed information on the node.



3. Click  on the node to enter a pop-up window for edition. You can select the required action and configure the output for the node. If you do not configure the output, the output information specified in the basic information of orchestration will apply.

Note

The configuration pages vary for different actions. The following figure shows the page of the **audio/video transcoding** action.



Enabling an **Orchestration** to Activate Automatic Task Triggering

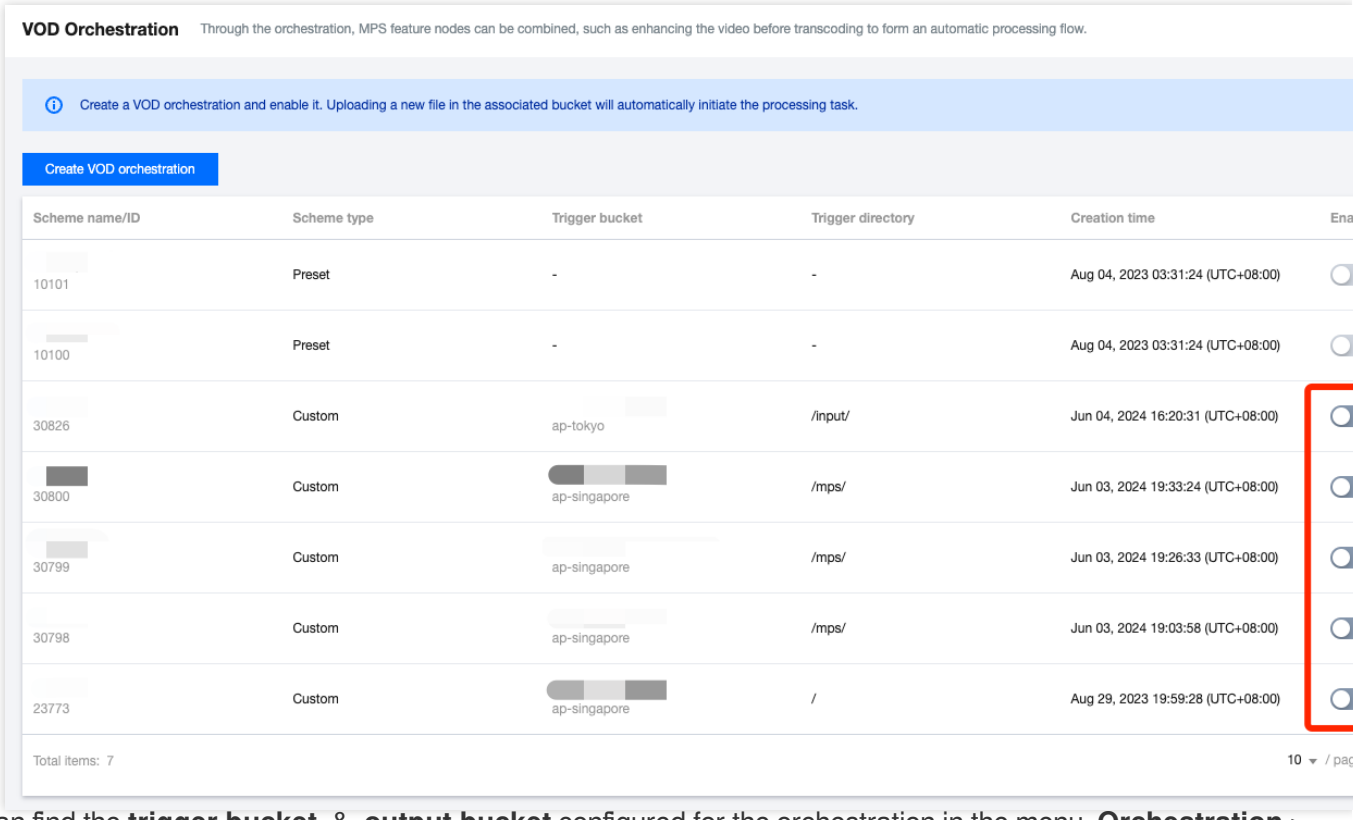
Once an orchestration is created, it is disabled by default.

After the orchestration is enabled, automatic task triggering is activated. When files are uploaded to the trigger bucket configured for the orchestration, the system automatically initiates processing tasks, without the need to manually create tasks in the console.

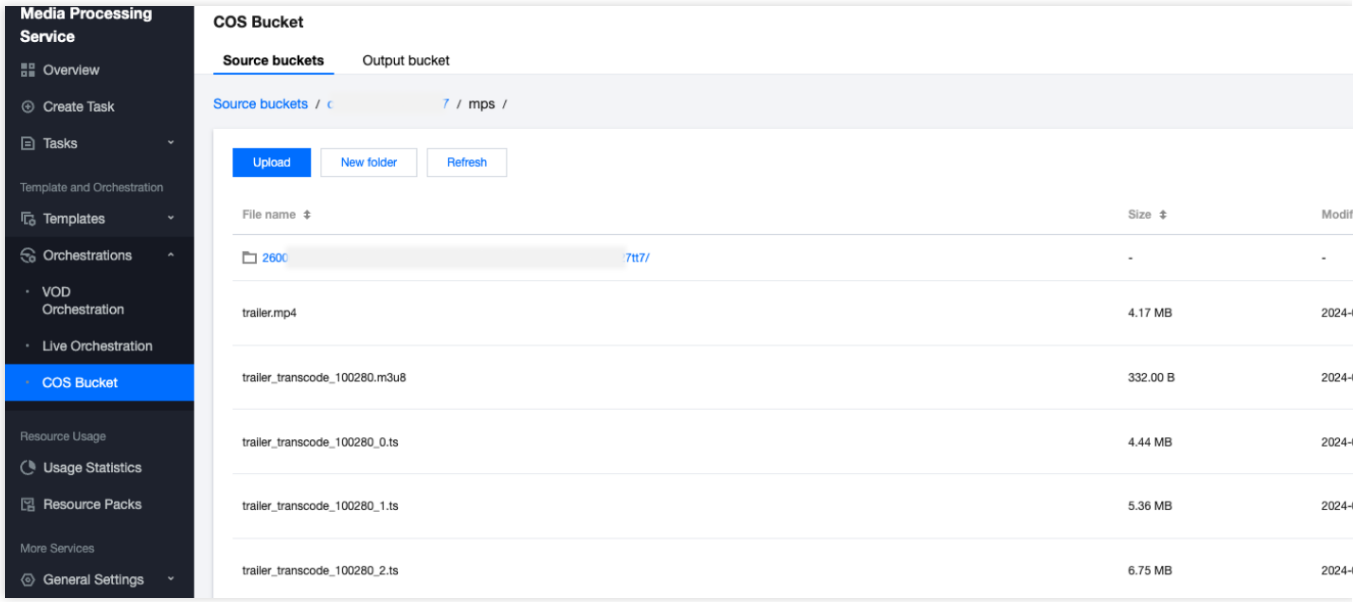
If the orchestration is disabled, MPS tasks will not be executed for video files uploaded to the trigger bucket.

Note:

Once the orchestration is enabled, it only takes effect in video files newly uploaded to the trigger bucket. Files previously stored in the trigger bucket will not be automatically processed.



You can find the **trigger bucket** & **output bucket** configured for the orchestration in the menu **Orchestration > COS Bucket** \\page, to conveniently carry out operations such as file upload, preview, download, etc.



Editing and Deleting an **Orchestration**

Editing a VOD Orchestration

Click **Edit** in the operation column of the target orchestration to enter the **Orchestration Editing** page. Then, you can modify the orchestration name, trigger bucket, trigger directory, output bucket, output directory, event notification, and

configuration items.

Deleting a VOD Orchestration

Click **Delete** in the operation column of the target orchestration to delete it.

After the orchestration is deleted, MPS tasks will not be executed for video files uploaded to the trigger bucket.

Note:

When the orchestration is enabled, it cannot be edited or deleted.

Live Orchestration

Last updated：2024-06-11 15:51:02

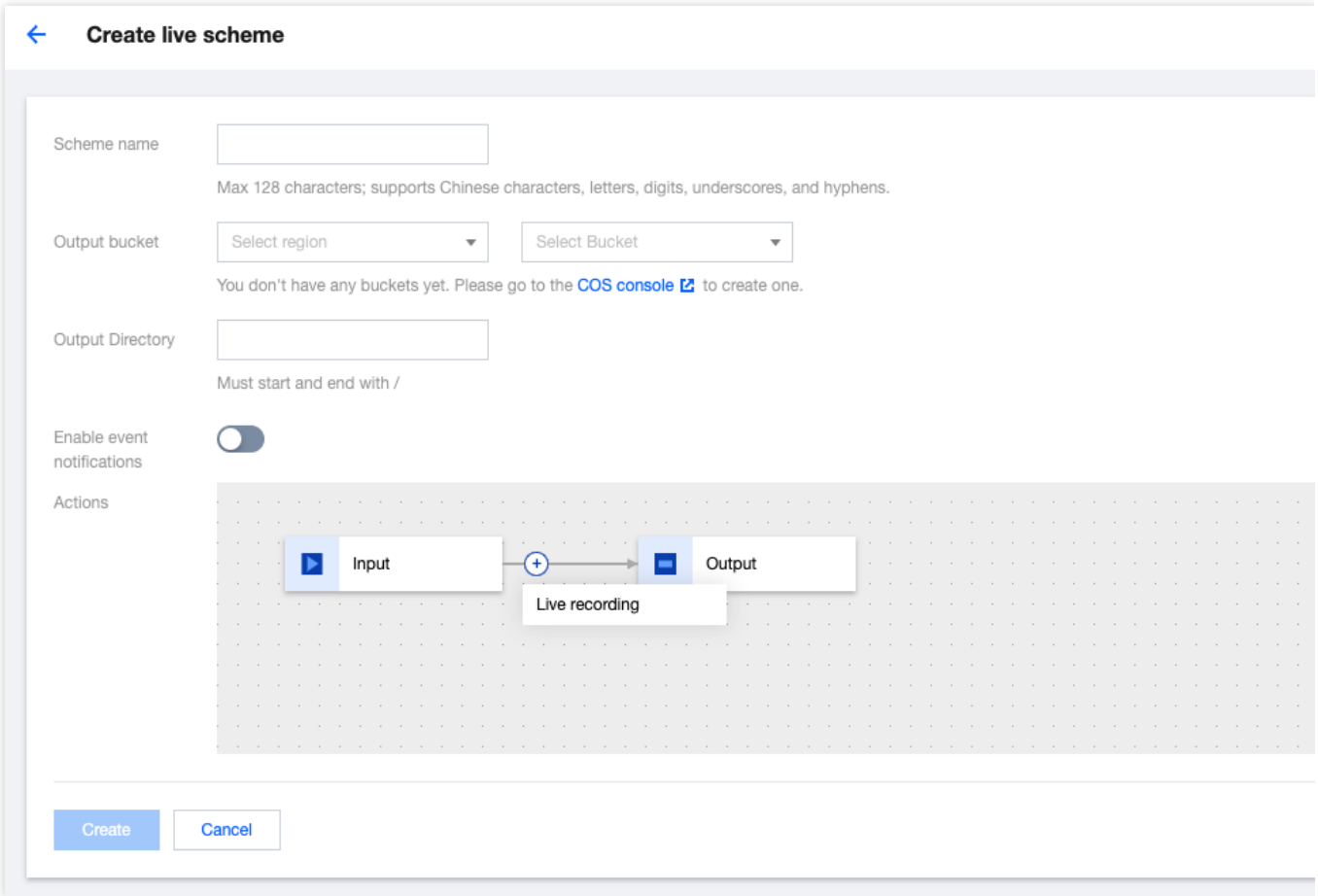
Operation Scenarios

If you want to process live streams using MPS, you need to create a **live orchestration**, configure a task such as live stream recording, and specify the output bucket and directory.

Creating Scheme

Go to Creation Page

1. Log in to the MPS console, and click Orchestrations > Live Orchestration > Create Live Orchestration.
2. On the **Create Live Orchestration** page, you can create a orchestration process and configuration information that meet your specific business scenario needs.



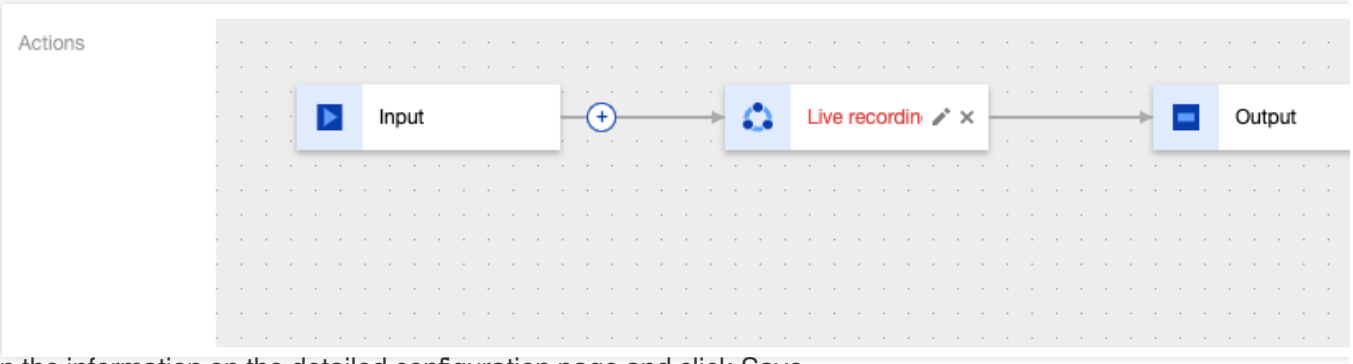
Configure Basic Information

Configuration Item	Required	Configuration Description
Scheme name	Yes	You can enter a combination of letters, digits, underscores (_), and hyphens (-). The length cannot exceed 128 characters. Example: "MPS".
Output bucket	Yes	By default, the output bucket is the same as the trigger bucket. You can also select another bucket in the same region of the trigger bucket corresponding to the specified `APPID` as the output bucket. Newly generated video files will be stored in the bucket you select once the scheme execution is completed.
Output directory	No	The directory should end with a forward slash (/). If left unspecified, the trigger directory will be taken as the output directory.
Enable event notifications	—	For details, refer to Event Notification Configuration. Once enabled, the transcoding process and result data will be reflected through the selected notification method.
Actions	—	Please refer to the Configure Actions section below. You can quickly build a business process by defining process nodes and templates of the orchestration.

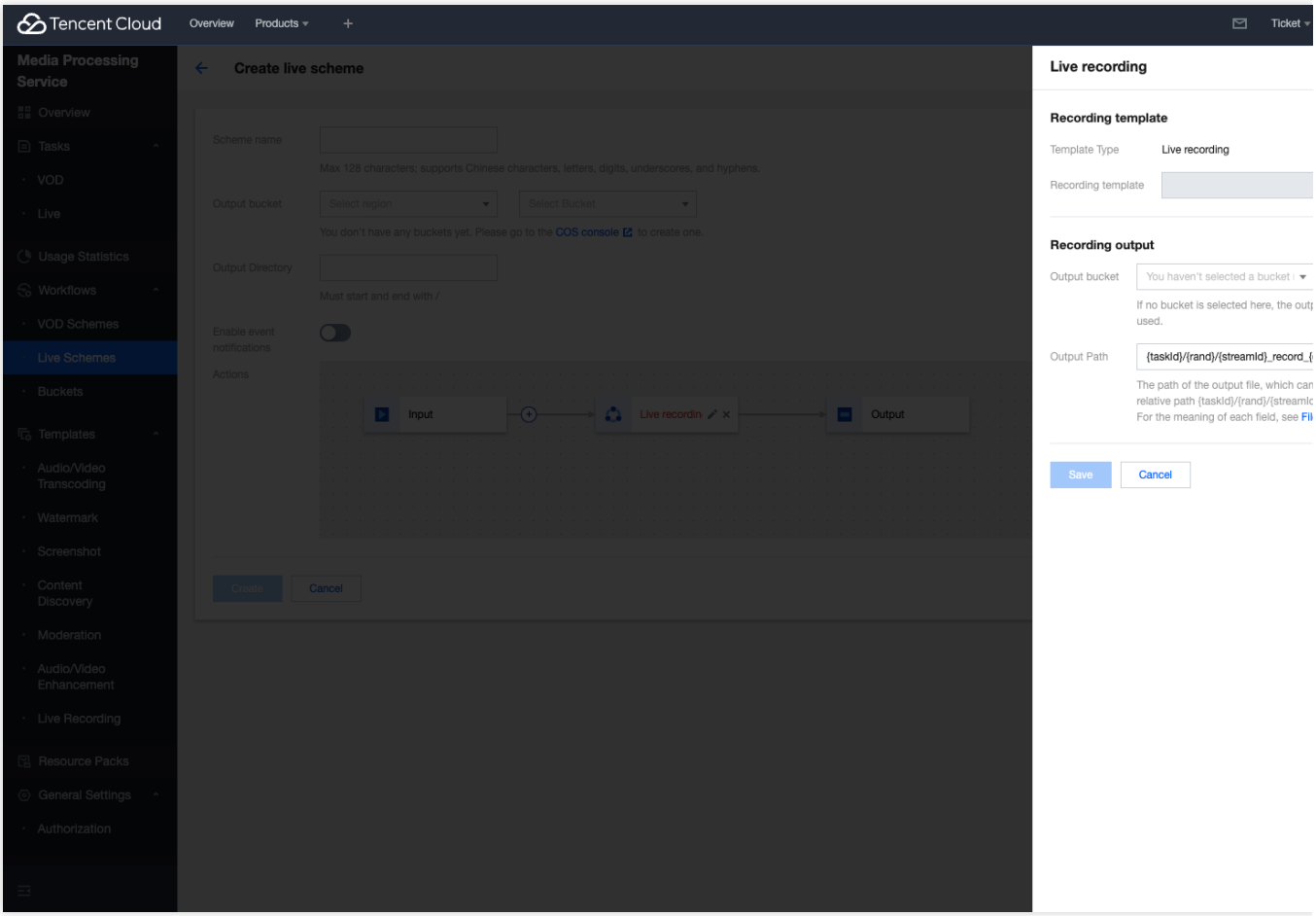
Configure Actions

In this area, you can define the process for the entire service, add different service nodes (such as live recording), and configure different templates for each node. The detailed configuration instructions are as follows:

1. Click the + button to select the required action from the drop-down list and add it.
2. Click the edition button on the right of the added action for detailed configuration.



3. Fill in the information on the detailed configuration page and click Save.



Note:

If the random number variable {rand} is removed from the path, multiple result files may overwrite each other when other variables remain unchanged. Please modify the path with caution.

4. After the aforementioned information is configured, click **Create** to create the **orchestration**.

COS Bucket

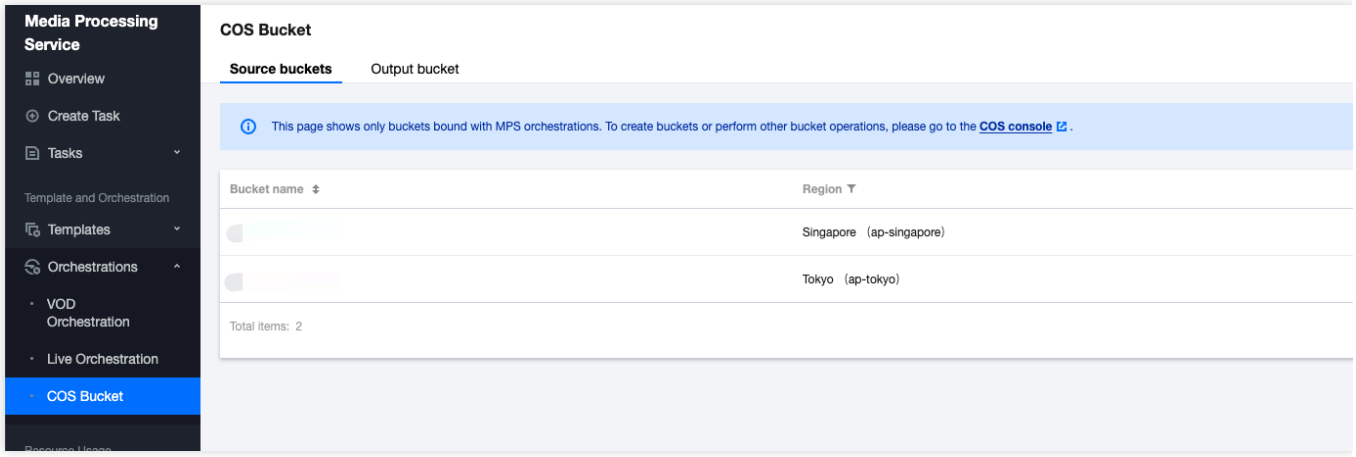
Last updated：2024-06-12 15:06:14

Overview

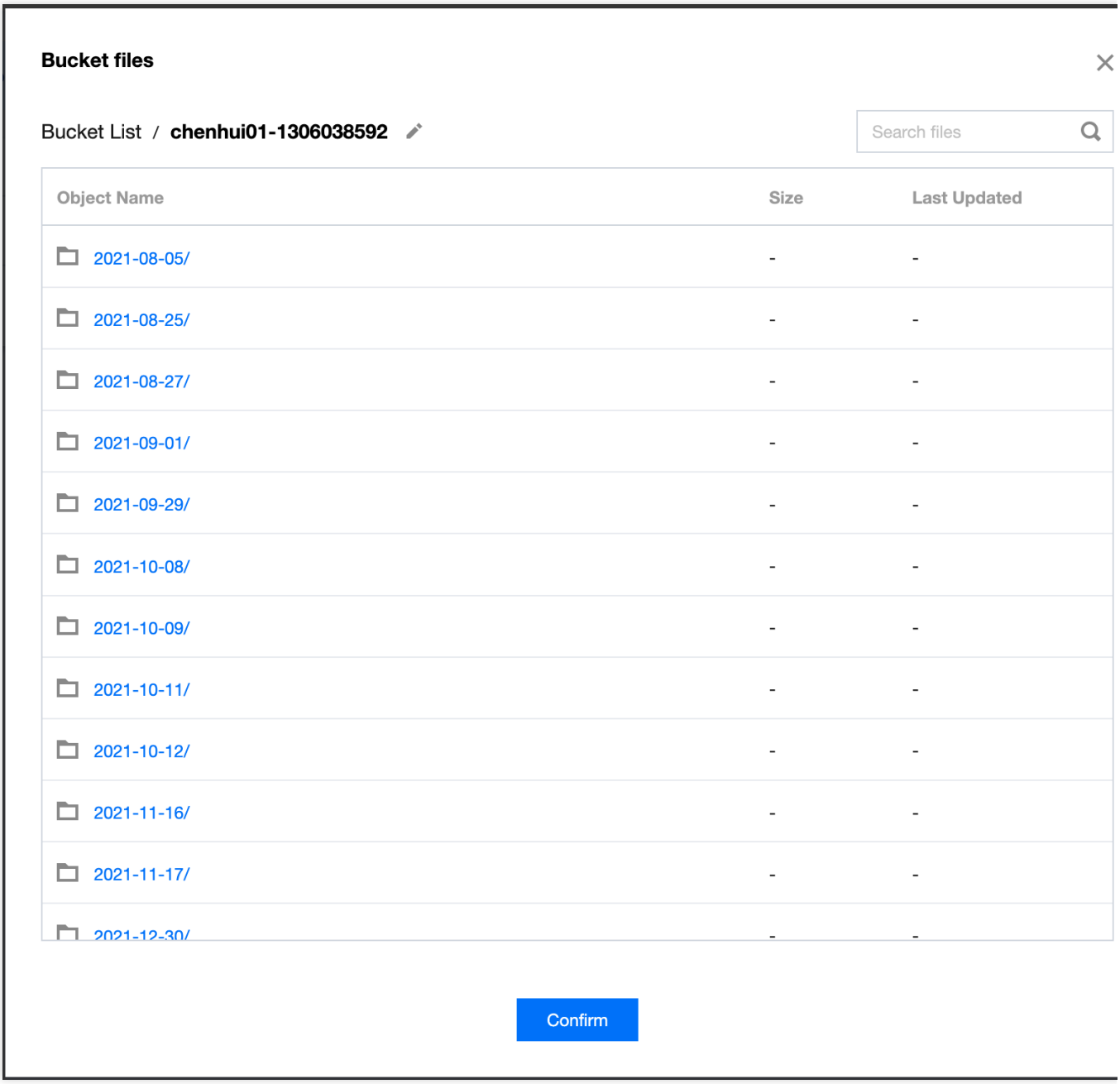
The Cloud Object Storage (COS) Bucket provides a list of input and output buckets bound with Media Processing Service (MPS) schemes, making it easier to query the usage of related buckets.

Details

1. Log in to the **MPS console**, and click Orchestrations > COS Bucket to enter the COS Bucket page. On this page, you can click **Source buckets** and **Output bucket** to view the input and output buckets bound with MPS.



2. Click **View files** in the operation column to view the files in a bucket.



Note:

This page shows only buckets bound with MPS schemes. To create buckets or perform other bucket operations, please go to the COS console.

Workflows

Last updated：2023-03-03 11:23:18

Note：
The **Workflows** section of the MPS console has been replaced with **Schemes**, which offers easier and more flexible settings. To configure a scheme, go to **Schemes**.

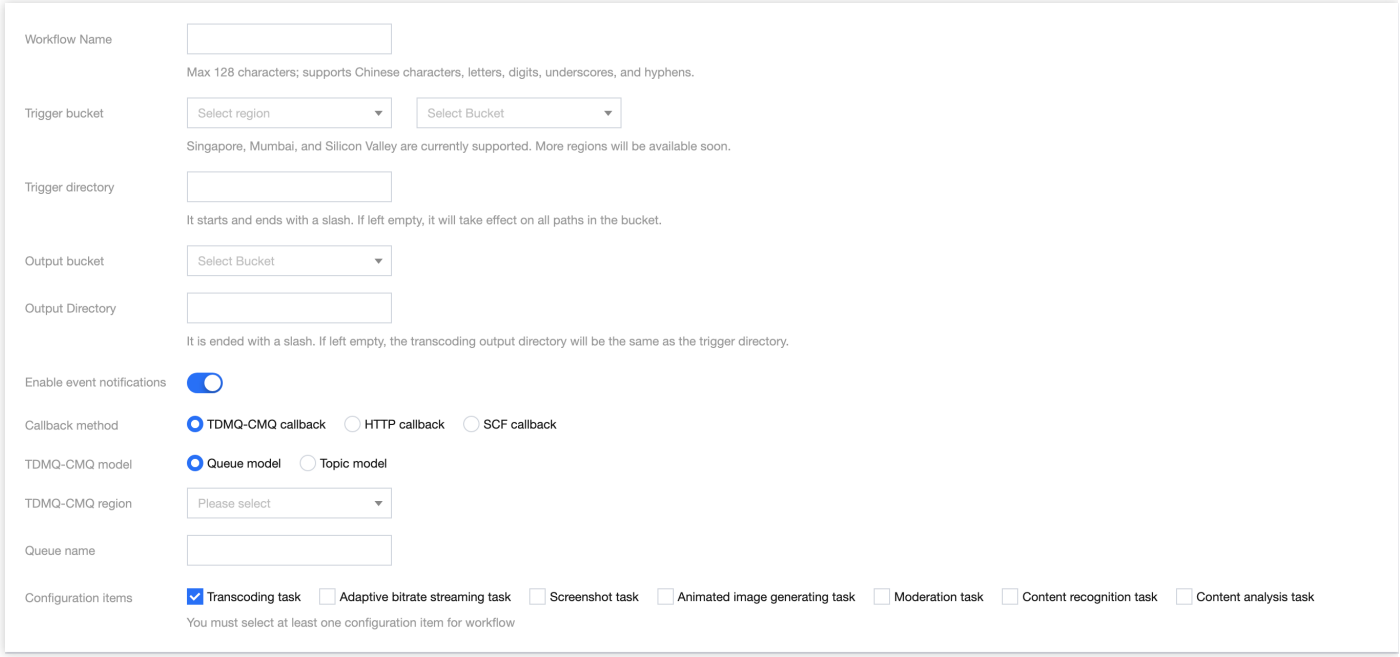
Overview

After you set up a workflow, media files uploaded to the specified bucket and directory will be processed automatically, and the results will be uploaded to the specified bucket and directory. Workflows can include tasks such as transcoding, screenshot taking, animated screenshot generating, moderation, content recognition, content analysis, and watermarking.

Creating a Workflow

1. Log in to the MPS console and select **Workflows** on the left sidebar.
2. Click **Create Workflow** to enter the workflow creation page and set the workflow name, trigger bucket, trigger directory, output bucket, output directory, event notifications and tasks. For detailed instructions, see workflow

configuration.



The table below lists the information needed to configure a workflow.

Item	Required	Description
Workflow name	Yes	Max 128 characters; supports Chinese characters, letters, digits, underscores, and hyphens. Example: "MPS"
Trigger bucket	Yes	Select a bucket created under the current `APPID`. After the workflow is enabled, videos uploaded to this bucket will be processed automatically.
Trigger directory	No	A string that ends with `/`. If it is left empty, the workflow will be applied to all directories under the selected trigger bucket.
Output bucket	Yes	By default, the output bucket is the same as the trigger bucket. You can also select a bucket in the same region under the same `APPID`. After a workflow is executed, the processed videos will be stored in this bucket.
Output directory	No	A string that ends with `/`. If it is left empty, the output directory will be the same as the trigger directory.
Event notifications	No	• Disabled by default. For detailed instructions on how to configure event notifications, see callback configuration below. • To enable TDMQ-CMQ event notifications, you need to activate Tencent Distributed Message Queue and create a model. After TDMQ-CMQ event notifications are enabled, the specified message queue will receive notifications about video processing events.

Configuration items	Yes	From transcoding, screenshot taking, animated image generation, moderation, content recognition, and content analysis, select at least one task for configuration. For details, see task configuration below.

Callback Method	Configuration
TDMQ-CMQ callbacks	• TDMQ-CMQ model: Select “Queue model”. or “Topic model”. • TDMQ-CMQ region: Select Guangzhou, Shanghai, Beijing, Shanghai Finance, Shenzhen Finance, Hong Kong (China), Chengdu, North America, or west US. • Queue name/Topic name: Enter a custom name.
HTTP callbacks	When calling the notification configuration API TaskNotifyConfig, set `NotifyType` to `URL` and `NotifyUrl` to the HTTP callback address.
SCF callbacks	You can click Go to SCF console to configure a function in the SCF console. For detailed directions, see MPS Task Callback Notification. SCF callback configuration applies to all workflows and is not saved specifically for the current workflow.

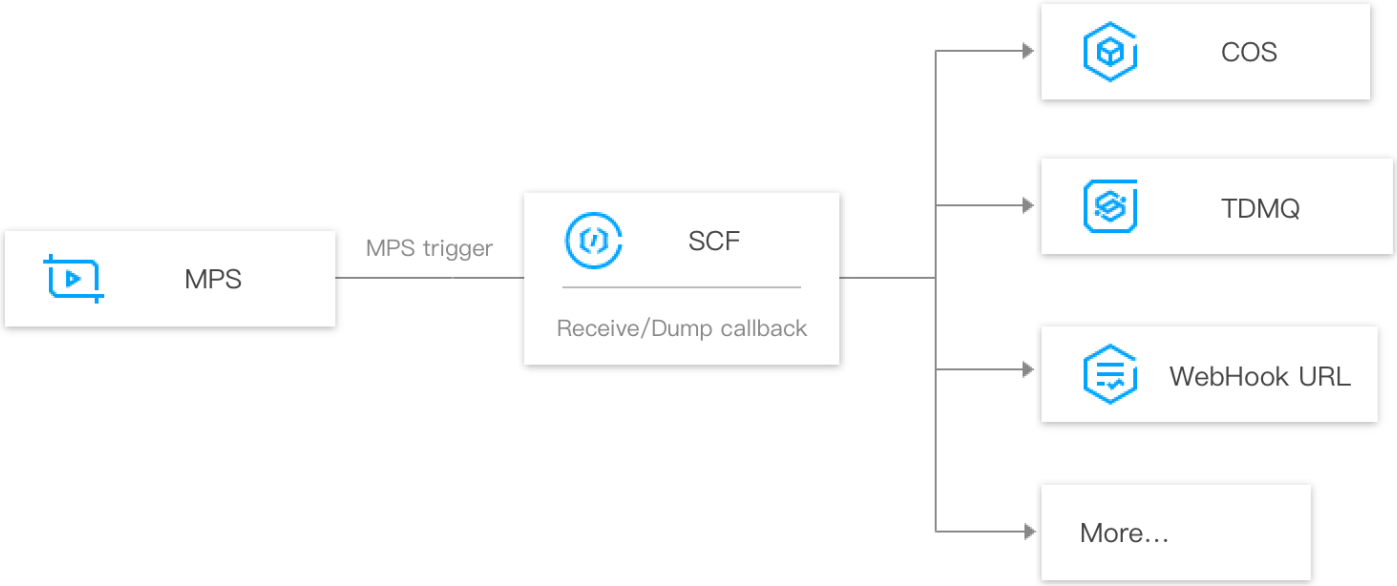
Event Notifications

Receiving event notifications via CMQ

- Event notifications are disabled by default. To receive notifications via CMQ, click the toggle next to **Enable Event Notifications**, select queue or topic model for **CMQ Model**, and set the model name and region. MPS event notifications will be sent to the specified queue or topic.
- You can receive event notifications via CMQ only after you activate the CMQ service and create a queue or topic model. For more information, please see CMQ > Getting Started.

Receiving event notifications via SCF

SCF allows quick handling of the event notifications generated by MPS. The figure below shows the data flow.



Events are pushed to SCF by the MPS trigger and are handled by serverless functions.

Use cases

CLS can deliver the data in log topics to SCF via an MPS log trigger to enable operations such as notification sending, status monitoring, and alarm handling.

Function Processing Scenario	Description
Video task backup to COS	Backing up the called back tasks of MPS to COS via SCF in a timely manner
Video task callback notifications	Receiving MPS data messages in real time and sending the messages to users via WeCom or email.

Note：
Sending data to SCF will incur fees. For details, see Billing Overview.

Managing Workflows

1. Log in to the MPS console and select **Workflows** on the left sidebar.

2. The workflow list displays information including workflow name, trigger bucket, region, trigger directory, creation time, and status. You can sort workflows by creation time, search for a workflow by name, and view, edit, or delete a workflow.
   - **Enable a workflow**
     - Workflows are disabled by default. To enable a workflow, click the toggle in the **Enable** column.
     - After a workflow is enabled, it will be automatically executed for videos uploaded to the trigger bucket.
   - **Disable a workflow**
     - To disable a workflow, click the toggle in the **Enable** column.
     - After a workflow is disabled, it will no longer be automatically executed on videos uploaded to the trigger bucket.
   - **Edit a workflow**
     - Click **Edit** in the **Operation** column of the target workflow to modify its name, trigger bucket, trigger directory, output bucket, output directory, event notification settings, and tasks.
     - You cannot edit or delete an enabled workflow.
   - **Delete a workflow**
     - Click **Delete** in the **Operation** column of the target workflow to delete it.
     - After a workflow is deleted, it will no longer be automatically executed on videos uploaded to the trigger bucket.
     - You cannot edit or delete an enabled workflow.

Templates
Template Overview

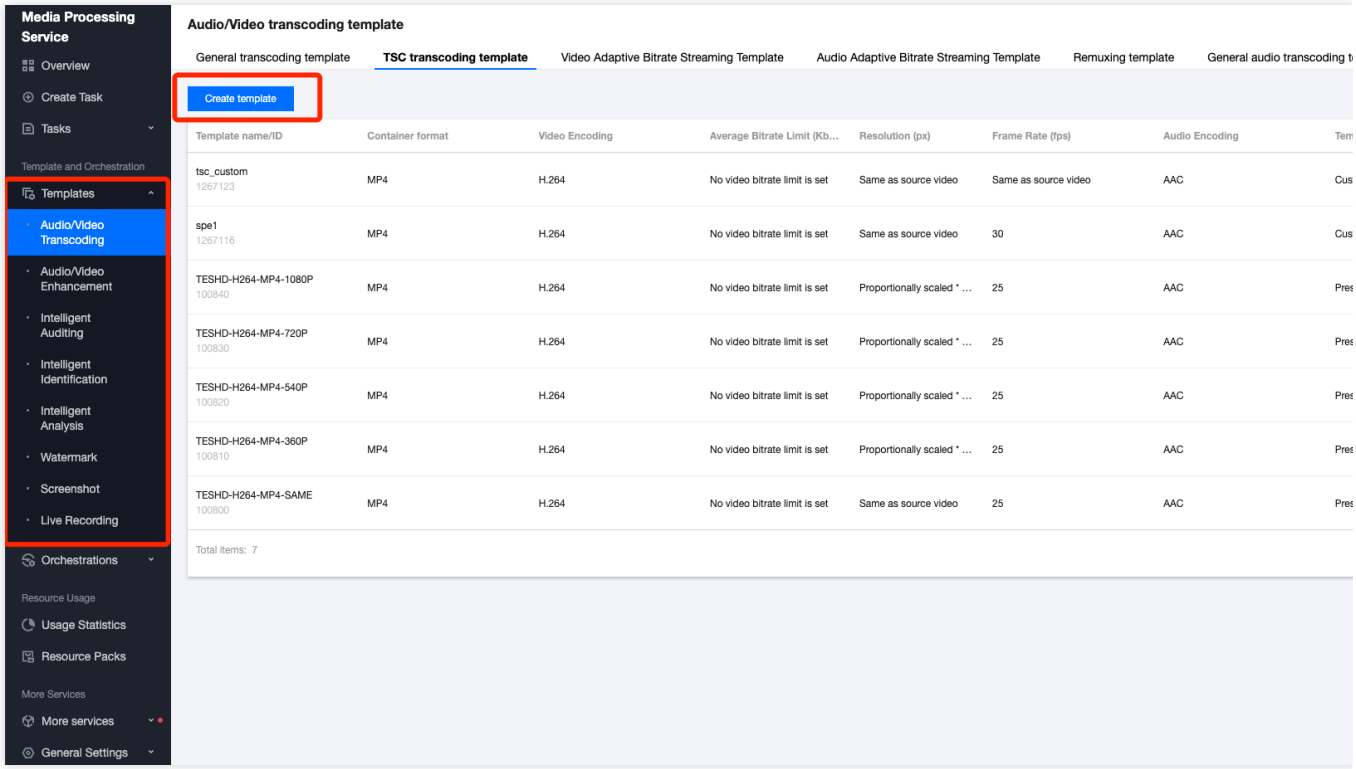
Last updated：2024-07-22 14:19:25

Overview

Media Processing Service (MPS) supports transcoding, enhancement, and intelligent analysis, among other rich features. Each feature has corresponding detailed parameter settings. You can preset different processing parameters through configuring templates, facilitating subsequent reuse.

Directions

Log in to the MPS console and click **Templates** on the left sidebar. Select the type of template you want to configure and click **Create template**.



Template Types

The table below lists the types of media processing templates you can create and add to an orchestration.

Note:

After an orchestration is enabled, if the template used in the orchestration is edited, the orchestration will proceed with the edited template parameters.

After an orchestration is enabled, if the template used in the orchestration is deleted, the subtasks related to that template will fail.

Template Type	Subtype	Description
Audio/Video transcoding	TSC transcoding template	Compared to general transcoding, TSC transcoding template significantly reduces the file size of videos while maintaining their clarity.
	General transcoding template	Basic video transcoding capabilities.
	Video adaptive bitrate streaming template	The input source video files can be transcoded into multiple streams suitable for playback in various scenarios, allowing users to select the appropriate bitrate for video playback based on their network conditions, thereby enhancing the viewing experience.
	General audio transcoding template	Supports basic transcoding processing for pure audio files.
	TSC audio transcoding template	Compared to general audio transcoding, it achieves transcoding results with lower bit rates and superior sound quality.
	Audio adaptive bitrate streaming template	Convert audio into adaptive bitrate streaming formats, allowing users to select the appropriate bitrate for audio playback based on their network conditions, thereby enhancing the listening experience.
	Remuxing template	Transform the encapsulation format of the source video without re-encoding it. Currently, the conversion of source videos into MP4 and HLS formats is supported.
Audio/Video enhancement	Audio/Video enhancement	Our service supports the enhancement and repair of various quality issues in audio and video, comprehensively improving the visual experience. It is widely used in international major events such as the Olympic Games and the FIFA World Cup, as well as

		diverse scenarios such as the restoration of classic films and esports live streaming.
Intelligent auditing	Intelligent auditing	Audit images, voice, and text in videos for pornography, illegality, and regulation violations.
Intelligent identification	Intelligent identification	Identify faces, objects, text, and voice. Automatic Speech Recognition (ASR) also supports intelligent translation and converts it to subtitles.
Intelligent analysis	Intelligent analysis	Support tagging, classification, cover generation, frame-specific tagging, clipping, montage, intro and outro, game marking, and other intelligent analysis capabilities.
Screenshot	Time point screenshot	Take screenshots at specific time points.
	Sampled screenshot	Take screenshots at a specified interval (seconds or percentage).
	Image sprite screenshot	Take screenshots at specified time points and merge them into a sprite.
	Animated screenshot	Cut out a video clip and make it into an animated screenshot.
Watermark	Watermark	Add a text or image watermark to a video.
Live recording	Live recording	Record live streaming content.

Audio/Video Transcoding

Last updated：2024-07-17 11:34:02

Audio/Video Transcoding Templates

General video transcoding

MPS provides preset audio/video transcoding templates, which can be added directly to a scheme. You can also click **Create template** to customize your own audio/video transcoding templates.

Item	Description
Template name	Max 64 characters; supports Chinese characters, letters, digits, spaces, underscores (_), hyphens (-), and periods
Container format	MP4、FLV、HLS、MOV、TS、WEBM、MKV
Configuration items	Video and/or audio parameters
Video codec	H.264, H.265, H.266, VP8, VP9, AV1
Video bitrate	0 or [128, 35000]. `0` means to use the original video bitrate.
Video resolution (px)	0 or [128, 4096] for either dimension. `0` means to use the original resolution.
Frame rate (fps)	[0, 120]. `0` means to use the original frame rate.
Audio codec	AAC, MP3, Opus
Sampling rate (Hz)	32000, 44100, or 48000
Audio bitrate (Kbps)	0 or 26-256. `0` means to use the original audio bitrate.
Sound channels	Mono or dual

Templates created are displayed in the template list. You can view, edit, or delete custom templates, but preset templates can be viewed only, not edited or deleted.

Note:

If the container format is set to MP4, FLV, or HLS, video parameters are required, while audio parameters are optional.

Preset templates

Clarity	Template ID	Format	Video Parameters				Audio Parameters		
			Resolution	Bitrate (Kbps)	Frame Rate (fps)	Codec	Bitrate (Kbps)	Sample Rate (Hz)	Sc Cl
Smooth	100010	MP4	Proportionally scaled × 360	400	25	H.264	64	44100	St
	100210	HLS							
SD	100020	MP4	Proportionally scaled × 540	1000					
	100220	HLS							
HD	100030	MP4	Proportionally scaled × 720	1800			128		
	100230	HLS							
FHD	100040	MP4	Proportionally scaled × 1080	2500					
	100240	HLS							
2K	100070	MP4	Proportionally scaled × 1440	3000			160		
	100270	HLS							
4K	100080	MP4	Proportionally scaled × 2160	6000					
	100280	HLS							

TSC transcoding

MPS provides preset Top Speed Codec (TSC) templates, which can be added directly to a scheme. You can also click **Create template** to customize your own TSC templates.

Item	Description
Template name	Max 64 characters; supports Chinese characters, letters, digits, spaces, underscores (_), hyphens (-), and periods
Container format	MP4、FLV、HLS、MOV、TS、WEBM、MKV
Configuration items	Video parameters (required); audio parameters (optional)
Video codec	H.264, H.265, H.266, VP8, VP9, AV1

Average bitrate limit	The bitrate is limited to 0 or [128, 35000], If this parameter is left empty or set to `0`, it means no upper limit is set for the bitrate.
Video resolution (px)	0 or [128, 4096] for either dimension. `0` means to use the original resolution.
Frame rate (fps)	[0, 120]. `0` means to use the original frame rate.
Audio codec	AAC, MP3, Opus
Audio sample rate (Hz)	32000, 44100, or 48000
Audio bitrate (Kbps)	0 or 26-256. `0` means to use the original bitrate.
Sound channels	Mono or dual

Note:

You can view **preset** TSC transcoding templates in Templates > Audio/Video Transcoding of the MPS console.

If the container format is set to MP4, FLV, or HLS, video parameters are required.

Templates created are displayed in the template list. You can filter, view, edit, or delete custom templates, but preset templates can be viewed only, not edited or deleted.

Audio transcoding

MPS provides preset audio transcoding templates, which can be added directly to a scheme. You can also click **Create template** to customize your own audio transcoding templates.

Item	Description
Template name	Max 64 characters; supports Chinese characters, letters, digits, spaces, underscores (_), hyphens (-), and periods
Container format	MP3, FLAC, OGG, or M4A
Audio codec	The codec must be MP3 if the container format is MP3, FLAC if the container format is FLAC or OGG, and can be MP3, AAC, or AC3 if the container format is M4A.
Sampling rate (Hz)	32000, 44100, or 48000
Audio bitrate (Kbps)	0 or 26-256. `0` means to use the original audio bitrate.
Sound channels	Mono or dual

Templates created are displayed in the template list. You can view, edit, or delete custom templates, but preset templates can be viewed only, not edited or deleted.

Preset templates

Template ID	Container Format	Audio Bitrate (Kbps)	Codec	Sound Channels	Audio Sample Rate (Hz)
1100	M4A	24	AAC	Stereo	44100
1110	M4A	48	AAC	Stereo	44100
1120	M4A	96	AAC	Stereo	44100
1130	M4A	192	AAC	Stereo	44100
1140	M4A	256	AAC	Stereo	44100
1010	MP3	128	MP3	Stereo	44100
1020	MP3	320	MP3	Stereo	44100

Watermark

Last updated：2023-03-03 14:23:56

1. MPS does not provide preset watermark templates. You can click **Create template** to customize watermark templates.

Item	Description
Template Name	Max 64 characters; supports Chinese characters, letters, digits, underscores (_), hyphens (-), and periods
Watermark type	Image watermark
Image	PNG or JPG images. For better visual experience, transparent images in PNG format are recommended. The image cannot exceed 200 KB in size or 200 x 200 px in dimensions.
Reference position	Upper left (default), upper right, lower left, or lower right, based on which you can change the position of the watermark image by adjusting the vertical and horizontal offset
Vertical offset	The percentage represents the ratio of the vertical distance between the watermark and reference position to the height of the video, which is used to specify the vertical position of the watermark.
Horizontal offset	The percentage represents the ratio of the horizontal distance between the watermark and reference position to the width of the video, which is used to specify the horizontal position of the watermark.
Image dimensions	You can choose to resize the watermark by percentage (%) or pixel (px).

2. The templates created can be found in the watermark template list, which displays watermark previews and information including template name, format, type, reference position, dimensions, etc. You can also view the details of, edit, or delete a template on this page.

Screenshot

Last updated：2023-03-03 14:24:48

MPS provides preset screenshot templates, which can be added directly to a scheme. Three types of screenshots are supported: time point screenshot, sampled screenshot, and image sprite screenshot. You can also click **Create template** to customize your own screenshot templates.

Time Point Screenshot

Select the **Time point screenshot template** tab, click **Create template**, and set the template name and screenshot dimensions. You need to specify the time points in scheme settings. For detailed directions, see Schemes.

Item	Description
Template name	Max 64 characters; supports Chinese characters, letters, digits, underscores (_), hyphens, and periods (.)
Image format	JPG
Image dimensions	The width and height of the image must be in the range of 128-4096 px.

Preset Templates:

Template ID	Format	Width	Height	Fill Mode
10	JPG	Same as source	Same as source	Scale to fill

Sampled Screenshot

Select the **Sampled screenshot template** tab and click **Create template**.

Item	Description
Template name	Max 64 characters; supports Chinese characters, letters, digits, underscores (_), hyphens (-), and periods
Image format	JPG

Item	Description
Image dimensions	The width and height of the image must be in the range of 128-4096 px.
Sampling interval	The interval can be a percent value (%) or a time value (s). If `%` is selected, the value entered cannot exceed 100.

Preset Templates:

Template ID	Format	Width	Height	Interval Measurement	Interval	Fill Mode
10	JPG	Same as source	Same as source	By percent	10%	Scale to fill

Image Sprite Screenshot

Select the **Image sprite screenshot template** tab and click **Create template**.

Item	Description
Template name	Max 64 characters; supports Chinese characters, letters, digits, underscores (_), hyphens, and periods (.)
Image format	JPG
Image dimensions	The width and height of the image must be in the range of 128-4096 px.
Sampling interval	The interval can be a percent value (%) or a time value (s). If `%` is selected, the value entered cannot exceed 100.
Rows	A positive integer. The number of subimage rows multiplied by subimage columns must not exceed 100.
Columns	A positive integer. The number of subimage rows multiplied by subimage columns must not exceed 100.

The templates created can be found in the screenshot template list, which displays information including template name, screenshot type, image dimensions, and template type. You can also view the details of, edit, or delete a template on this page.

Preset templates

Template ID	Format	Subimage Width	Subimage Height	Subimage Rows	Subimage Columns	Interval Measurement	Interval (s)
10	JPG	142	80	10	10	By time	10

Animated Screenshot

MPS provides preset animated screenshot templates, which can be added directly to a scheme. You can also select the **Animated screenshot template** tab and click **Create template** to customize your own animated screenshot templates.
You can set the image format, frame rate, image dimensions and image quality when creating a template, but the time period for generating an animated screenshot must be specified in scheme settings. For detailed directions, see Schemes.

Item	Description
Template name	Max 64 characters; supports Chinese characters, letters, digits, and underscores (_)
Image format	WEBP or GIF
Frame rate (fps)	1-30
Image quality	0-100. The larger the value, the higher the quality and the larger the image size.
Image dimensions (px)	0 or 128-4096 for either dimension

The templates created can be found in the template list, which displays information including template name, image type, frame rate, image quality, image dimensions, and template type. You can view, edit, or delete a custom template, but preset templates can be viewed only, not edited or deleted.

Preset templates

Template ID	Format	Resolution	Frame Rate (fps)
20000	GIF	Same as source	2
20001	WebP	320 x Proportionally scaled	2

Intelligent Analysis Template

Last updated：2024-06-12 14:57:52

The system provides preset intelligent analysis templates, which you can directly use in workflow management. You can also create your own intelligent analysis templates based on business needs. Click **Create Intelligent Analysis Template** to enter the template customization settings.

Configuration Item	Description
Template Name	Max 64 characters; supports Chinese characters, letters, digits, spaces, underscores (_), hyphens (-), and periods (.)
Content analysis configuration	Intelligent labeling, intelligent categorization, intelligent thumbnail generation, and frame-specific labeling

Note:
You can view the **system preset** intelligent analysis templates in MPS console > Intelligent Analysis Templates. The templates created are displayed in the content analysis template list, where you can view the details of, edit, or delete a template.

Intelligent Identification Template

Last updated：2024-06-12 15:00:10

The system provides preset intelligent identification templates, which you can use directly. You can also create your own intelligent identification templates based on business needs. Click **Create Intelligent Recognition Template** to enter the template customization settings.

Configuration Item	Description
Template name	It only supports Chinese characters, English letters, digits, spaces, underscores (_), hyphens (-), and periods (.). The length cannot exceed 64 characters.
Content identification item	Configuration items include face identification, full text identification, full speech identification, voice translation, and object identification.

Note:

You can view the **system preset** intelligent identification templates in MPS console > Intelligent Identification Templates.

The templates created are displayed in the template list, where you can filter to view, edit, or delete the templates.

Intelligent Review Template

Last updated：2024-06-12 14:55:33

1. MPS provides preset moderation templates, which can be added directly to a scheme. You can also click **Create template** to customize your own moderation templates.
Template name: Up to 64 characters; supports Chinese characters, letters, digits, spaces, underscores (_), hyphens (-), and periods (.).
Moderation items: Image recognition, speech recognition, and text recognition. The subitems of the selected moderation items will appear in the column on the right.

Moderation Item	Subitem	Description
Image recognition	Pornographic content	Porn, vulgarity, intimacy, and sexiness
	Terrorist content	Bloody scenes, explosions, and fires
	Politically sensitive content	Banned icons, and celebrities in sports and the entertainment industry
Speech recognition	Pornographic content	Porn, vulgarity, intimacy, and sexiness
	Politically sensitive content	Banned icons, and celebrities in sports and the entertainment industry
Text recognition	Pornographic content	Porn, vulgarity, intimacy, and sexiness
	Politically sensitive content	Banned icons, and celebrities in sports and the entertainment industry

2. For each subitem, you can set a **Confirm Threshold** and a **Suspicion Threshold**, which determine the strictness of moderation. If they are left empty, the default values will be used.
Confirm threshold: MPS analyzes the videos uploaded and gives them confirmation scores. If the score of a video exceeds the confirm threshold, the video will be marked confirmed. The value range of the threshold is 0-100. The default value is recommended.
Suspicion threshold: MPS analyzes the videos uploaded and gives them suspicion scores. If the score of a video exceeds the suspicion threshold, the video will be marked suspicious. You can initiate human moderation for suspicious videos on the video moderation page. The value range of the threshold is 0-100. The default value is recommended.
Note:
You can view the **system preset** auditing templates in MPS console > Intelligent Auditing Templates.

3. The templates created are displayed in the moderation template list, where you can view the details of, edit, or delete a template.

Audio/Video Enhancement

Last updated：2023-03-03 14:28:44

MPS provides preset audio/video enhancement templates, which can be added directly to a scheme. You can also click **Create template** to customize your own audio/video enhancement templates.

Configuration Item	Description
Template name	Max 64 characters; supports Chinese characters, letters, digits, spaces, underscores (_), hyphens (-), and periods (.).
Container format	MP4, FLV, or HLS
Type	Video or audio enhancement. Only video enhancement is supported currently.
Encoding standard	H264, H265, or AV1
Resolution	You can either specify the long and short sides or width and height of the output video. The valid values are `0` and [128, 4096]. `0` means to keep the dimension the same as the original.
Frame rate	[0, 100]. `0` means to keep the frame rate the same as the original.
Super resolution	High resolution model (default) or low resolution model
Low-light enhancement	Enhance details and contrast in low-light scenes to improve visual experiences.
HDR	HDR10 or HLG, which delivers a wider color range and more color details.
Overall enhancement	Leverage AI technologies to balance image textures, remove artifacts, smooth video images, and enhance image details to improve visual experiences.
Color enhancement	Make colors more real and enhance colors to some degree to improve visual experiences.
Detail enhancement	Enhance details in videos and increase the clarity of videos.
Face enhancement	Enhance key facial features based on face recognition technologies.

Configuration Item	Description
Banding removal	Remove banding and reduce noise in videos.
Smoothing	The compression of videos during transcoding may result in blocking artifacts, ringing artifacts, mosquito noise, and color contamination. This feature fixes such issues.
Image noise removal	Reduce the noise introduced during the video capturing process without losing details.

Stream Record Template

Last updated：2023-08-31 16:25:42

1.MPS does not provide preset stream record templates. You can click **Create template** to customize stream record templates. Fill in the corresponding information on the create template page.

Item	Description
Template name	Max 64 characters; supports Chinese characters, letters, digits, underscores (_), hyphens (-), and periods
Template description	Max 64 characters; supports Chinese characters, letters, digits, underscores (_), hyphens (-), and periods
Each TS time	Must be in the range of 5～30 seconds.
Recording cycle	Must be in the range of 10～720 minutes. After exceeding the set recording cording, a new file will be generated.

2.The templates created can be found in the stream record template list, which displays information including template name, template description, each TS time, recording cycle. You can also view the details of, edit, or delete a template on this page.

Resource Packs

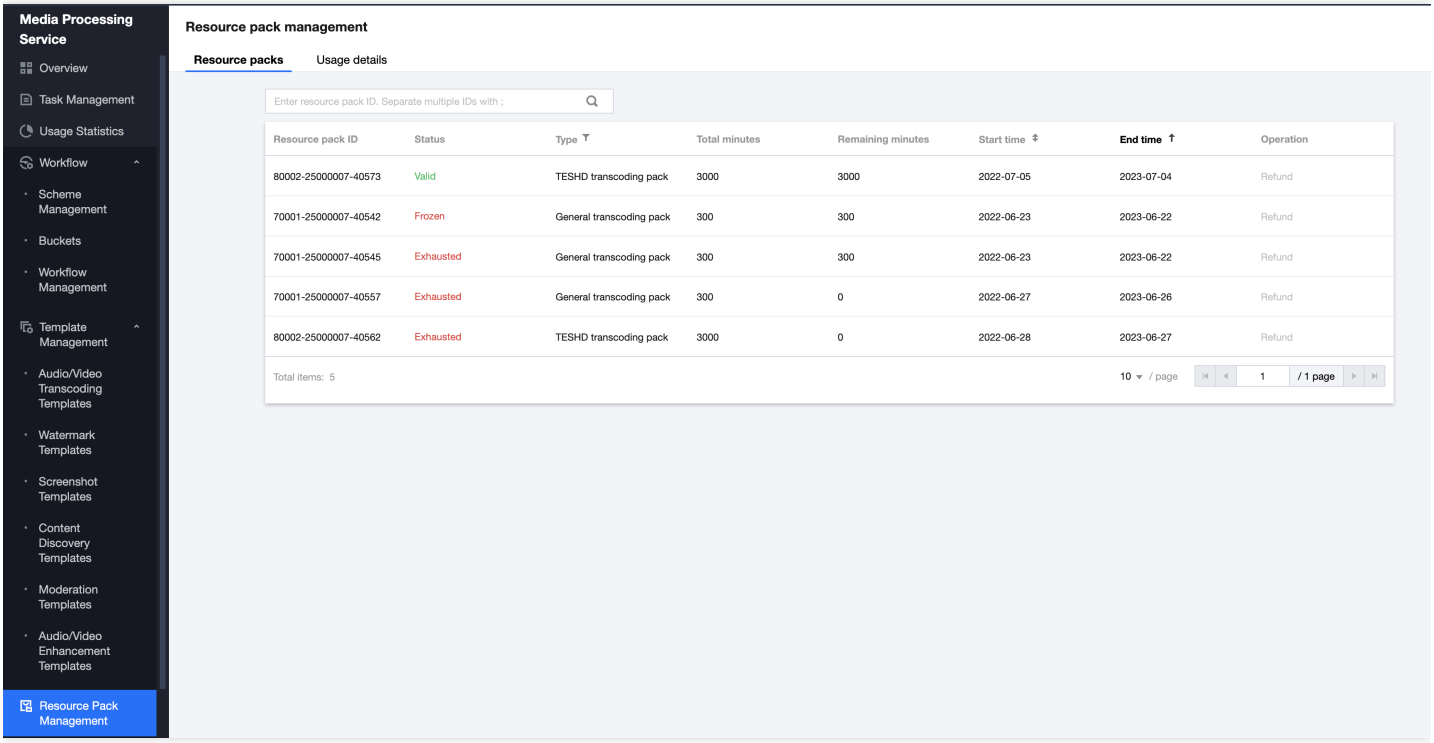
Last updated：2023-03-03 11:44:11

Overview

This page shows the general transcoding and Top Speed Codec (TSC) transcoding resource packs you have purchased and their usage.

Viewing Resource Packs

Log in to the MPS console and select Resource Packs on the left sidebar. Under the **Resource packs** tab, you can view the information of the resource packs you have purchased.

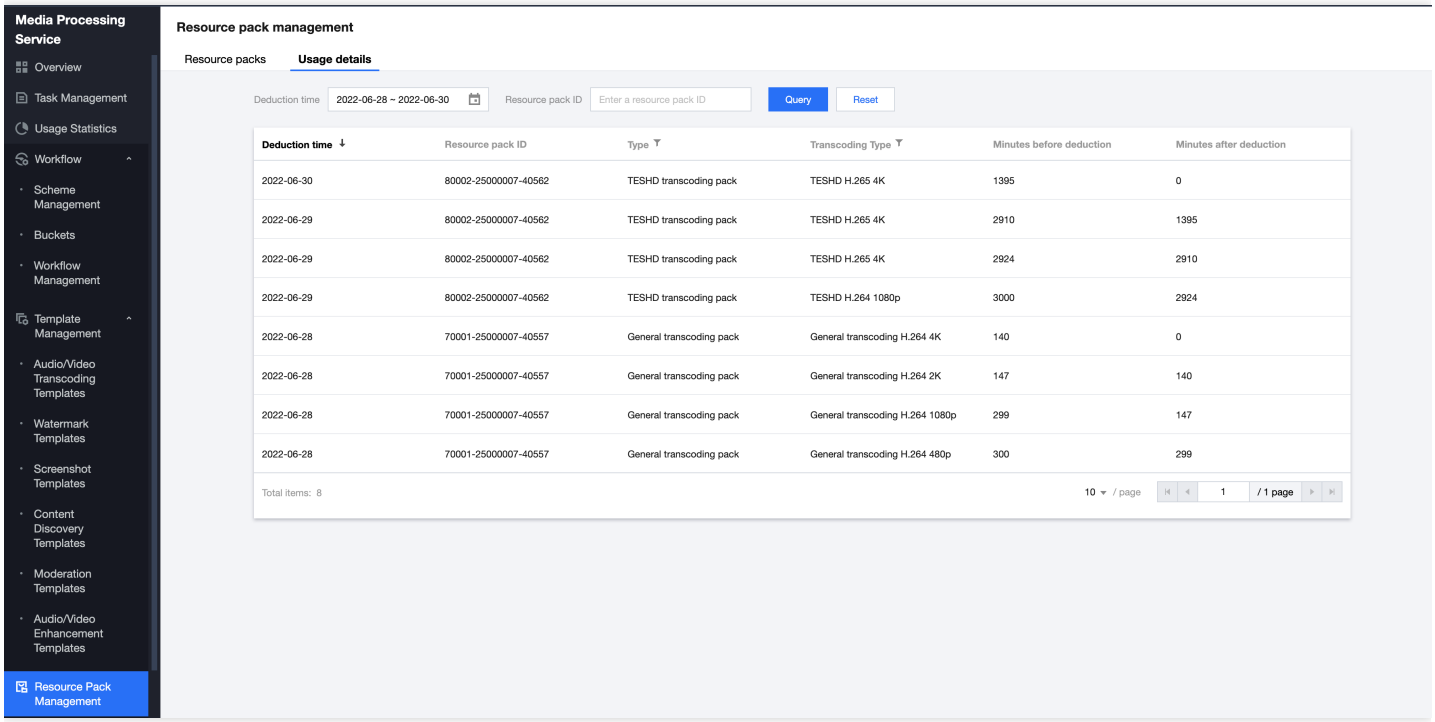


Header	Description
Resource pack ID	The unique identifier of a resource pack. You can enter a resource pack ID in the search box to search for a resource pack.

Header	Description
Status	The current status of a resource pack, which may be valid, expired, frozen, or exhausted. • **Valid**: The resource pack is valid and can be used. • **Frozen**: The resource pack has been frozen for some reason and can no longer be used. • **Expired**: The resource pack has expired and can no longer be used. The validity period of a resource pack is one year. • **Exhausted**: The resource pack has been used up.
Type	The resource pack type, which may be general transcoding or TSC transcoding. You can view only your general transcoding packs or TSC transcoding packs by selecting the corresponding type.
Total minutes	The total number of minutes a resource pack offers, which does not change after you start using the pack.
Remaining minutes	The number of remaining minutes in a resource pack, which decreases after you start using the pack. When the number of remaining minutes becomes zero, the status of the pack will become expired.
Start time	The time when a resource pack became valid.
End time	The time when a resource pack expires, which is one year after the start time.
Operation	You can click **Refund** to refund a resource pack. Note: **Resource packs are refundable only within five days of purchase.**

Viewing Usages

Log in to the MPS console and select Resource Packs on the left sidebar. Under the **Usage details** tab, you can view the usage details of your resource packs.



You can view the deductions of a specific resource pack (**resource pack ID**) in a specific time period (**deduction time**).

Header	Description
Deduction time	The time when a deduction occurred.
Resource pack ID	The ID of the resource pack from which minutes were deducted.
Type	The resource pack type. You can select a type to view deductions for that type.
Transcoding type	The transcoding type of a deduction. The usages for the same transcoding type are added up each day.
Minutes before deduction	The remaining minutes of a resource pack before the deduction occurred.
Minutes after deduction	The remaining minutes of a resource pack after the deduction occurred.

Cloud Access Management Sample

Last updated：2024-01-02 11:27:49

Introduction

You can authorize users to view and use the specific resources in the Media Processing Service (MPS) console via the Cloud Access Management (CAM) policies. This document provides authorization examples to view and use the specific resources, which can help users understand how to use the specific CAM policies by using the MPS console.

Examples

Read and write full access(MPS)

You can use the policy named QcloudMPSFullAccess for users. This policy is designed to grant users the permissions to access all the resources in MPS.
The detailed steps are as follows:
Refer to Authorization Management for instructions on how to grant the preset policy QcloudMPSFullAccess to users.

Access for MPS role

You can use the policy named QcloudAccessForMPSRole for users. This policy is designed to grant users the permissions to read the Object Storage (COS) bucket list, read and write bucket configurations and read or upload objects. It also includes the capability to transmit messages via the Message Queue (CMQ).
The detailed steps are as follows:
Refer to Authorization Management for instructions on how to grant the preset policy QcloudAccessForMPSRole to users.

Access for MPS role in deliver to SCF

You can use the policy named QcloudAccessForMPSRoleInDeliverToSCF for users. This policy is designed for association for MPS QCSRole, used for temporary access to other cloud service resources by MPS.
The detailed steps are as follows:
Refer to Authorization Management for instructions on how to grant the preset policy QcloudAccessForMPSRoleInDeliverToSCF to users.