

Media Processing Service

Integration Tutorials

Product Documentation



Copyright Notice

©2013-2025 Tencent Cloud. All rights reserved.

Copyright in this document is exclusively owned by Tencent Cloud. You must not reproduce, modify, copy or distribute in any way, in whole or in part, the contents of this document without Tencent Cloud's the prior written consent.

Trademark Notice



All trademarks associated with Tencent Cloud and its services are owned by the Tencent corporate group, including its parent, subsidiaries and affiliated companies, as the case may be. Trademarks of third parties referred to in this document are owned by their respective proprietors.

Service Statement

This document is intended to provide users with general information about Tencent Cloud's products and services only and does not form part of Tencent Cloud's terms and conditions. Tencent Cloud's products or services are subject to change. Specific products and services and the standards applicable to them are exclusively provided for in Tencent Cloud's applicable terms and conditions.

Contents

Integration Tutorials

- Media AI Integration Tutorial

 - Smart Subtitle Access Tutorial

 - LLM Summarize Tutorial

 - Intelligent Highlights Tutorial

 - Smart Erase Tutorial

 - Video Splitting (Long Videos to Short Videos) Tutorial

 - Horizontal-to-Vertical Video Transformation Tutorial

- Media Quality Inspection Integration

- MPS Live Stream Recording integration

- Terminal SDK integration

- DRM integration

- Other tutorials

 - Filename Variable

 - Using Amazon S3 Buckets with MPS

 - MPS Task Callback Notification

 - MPS Task Callback Backup to COS

Integration Tutorials

Media AI Integration Tutorial

Smart Subtitle Access Tutorial

Last updated : 2025-04-15 16:19:01

Overview

The Smart Captions and Subtitles Function offers real-time voice recognition for video files and live streams, converting speech to subtitles in multiple languages. It's ideal for live broadcasts and international video transcription, with customizable hotwords and glossary libraries for improved accuracy.

Key features

Comprehensive Platform Support: Offers processing capabilities for on-demand files, live streams, and RTC streams. Live broadcast real-time simultaneous captioning supports steady and gradient modes, with a low barrier to integration and no need for modifications on the playback end.

High Accuracy: Utilizes large-scale models, and supports hotwords and glossary databases, achieving industry-leading accuracy.

Rich Language Variety: Supports hundreds of languages, including various dialects. Capable of recognizing mixed-language speech, such as combinations of Chinese and English.

Customizable Styles: Enables embedding open subtitles into videos, with customizable subtitle styles (font, size, color, background, position, etc.).

Scenario 1: Processing Offline Files

Method 1: Initiating a Zero-Code Task from the Console

Initiating a Task Manually

Log in to the Media Processing Service (MPS) console and click **Create Task** > [Create VOD Processing Task](#).

1. Specify an input file.

You can choose a video file from a Tencent Cloud Object Storage (COS) bucket or provide a video download URL. The current subtitle generation and translation feature does not support using AWS S3 as an input file source.

2. Process the input file.

Select **Create Orchestration** and insert the "Smart Subtitle" node.

You can choose a preset template or use custom parameters. For a detailed template configuration guide, see [Smart Subtitle Template](#) and [Custom Hotword Lexicon](#).

System preset templates are shown in the table below:

Template Name/ID	Template Capability
Generate_Chinese_Subtitle_For_Chinese_Video 100	Recognize the Chinese speech in the source video and generate a Chinese subtitle file (WebVTT format).
Generate_English_Subtitle_For_Chinese_Video 121	Recognize the Chinese speech in the source video, translate it into English, and generate an English subtitle file.
Generate_Chinese_And_English_Subtitle_For_Chinese_Video 122	Recognize the Chinese speech in the source video, translate it into English, and generate a Chinese-English bilingual subtitle file.
Generate_English_Subtitle_For_English_Video 200	Recognize the English speech in the source video and generate an English subtitle file.
Generate_Chinese_Subtitle_For_English_Video 211	Recognize the English speech in the source video, translate it into Chinese, and generate a Chinese subtitle file.
Generate_Chinese_And_English_Subtitle_For_English_Video 212	Recognize the English speech in the source video, translate it into Chinese, and generate an English-Chinese bilingual subtitle file.

3. Specify an output path.

Specify the storage path of the output file.

4. Initiate a task.

Click **Create** to initiate a task.

Automatically Triggering a Task Through the Orchestration (Optional)

If you want to upload a video file to the COS bucket and achieve automatic smart subtitles according to preset parameters, you can:

1. Enter **On-demand Orchestration** in the menu, click **Create VDD Orchestration**, select the smart subtitle node in task configuration, and configure parameters such as the bucket and directory to be triggered.

2. Go to the **On-demand Orchestration** list, find the new orchestration, and enable the switch at **Enable**.

Subsequently, any new video files added to the triggered directory will automatically initiate tasks according to the preset process and parameters of the orchestration, and the processed video files will be saved to the output path configured in the orchestration.

Note:

It takes 3-5 minutes for the orchestration to take effect after being enabled.

Method 2: API Call

Method 1

Call the [ProcessMedia](#) API and initiate a task by specifying the **Template ID**. Example:

```
{
  "InputInfo": {
    "Type": "URL",
    "UrlInputInfo": {
      "Url": "https://test-1234567.cos.ap-guangzhou.myqcloud.com/video/test.m
    }
  },
  "SmartSubtitlesTask": {
    "Definition": 122 //122 is the ID of the preset Chinese source video-genera
  },
  "OutputStorage": {
    "CosOutputStorage": {
      "Bucket": "test-1234567",
      "Region": "ap-guangzhou"
    },
    "Type": "COS"
  },
  "OutputDir": "/output/",
  "Action": "ProcessMedia",
  "Version": "2019-06-12"
}
```

Method 2

Call the [ProcessMedia](#) API and initiate a task by specifying the **Orchestration ID**. Example:

```
{
  "InputInfo": {
    "Type": "COS",
    "CosInputInfo": {
      "Bucket": "facedetectioncos-125*****11",
      "Region": "ap-guangzhou",
      "Object": "/video/123.mp4"
    }
  },
  "ScheduleId": 12345, //Replace it with a custom orchestration ID. 12345 is a sa
  "Action": "ProcessMedia",
  "Version": "2019-06-12"
}
```

Note:

If there is a callback address set, see the [ParseNotification](#) document for response packets.

Subtitle Application to Videos (Optional Capability)

Call the [ProcessMedia](#) API, initiate a **transcoding task**, specify the vtt file path for the subtitle, and specify subtitle application styles through the [SubtitleTemplate](#) field.

Example:

```
{
  "MediaProcessTask": {
    "TranscodeTaskSet": [
      {
        "Definition": 100040, //Transcoding template ID. It should be repla
        "OverrideParameter": { //Overwriting parameters that are used for f
          "SubtitleTemplate": { //Subtitle application configuration.
            "Path": "https://test-1234567.cos.ap-nanjing.myqcloud.com/m
            "StreamIndex": 2,
            "FontType": "simkai.ttf",
            "FontSize": "10px",
            "FontColor": "0xFFFFFFFF",
            "FontAlpha": 0.9
          }
        }
      }
    ]
  },
  "InputInfo": { //Input information.
    "Type": "URL",
    "UrlInputInfo": {
      "Url": "https://test-1234567.cos.ap-nanjing.myqcloud.com/mps_autotest/s
    }
  }
}
```

```
  },
  "OutputStorage": { //Output bucket.
    "Type": "COS",
    "CosOutputStorage": {
      "Bucket": "test-1234567",
      "Region": "ap-nanjing"
    }
  },
  "OutputDir": "/mps_autotest/output2/", //Output path.
  "Action": "ProcessMedia",
  "Version": "2019-06-12"
}
```

Querying Task Results

Via the Console

Navigate to the [VOD Tasks](#) in the console, where the list will display the tasks that have just been initiated.

When the subtask status is "Successful", clicking on **View Result** allows for a preview of the subtitle.

The generated VTT subtitle file can be found in **Orchestration > COS Bucket > Output Bucket**.

Sample Chinese-English subtitles:

Event Notification Callbacks

When initiating a media processing task with [ProcessMedia](#), you can configure event callbacks through the `TaskNotifyConfig` parameter. Upon the completion of the task, the results will be communicated back to you via the configured callback information, which you can decipher using [ParseNotification](#).

Querying Task Results by Calling an API

Call the [DescribeTaskDetail](#) API and fill in the task ID (for example, 24000022-WorkflowTask-b20a8exxxxxx1tt110253 or 24000022-ScheduleTask-774f101xxxxxx1tt110253) to query task results. Example:

Scenario 2: Live Streams

There are currently 2 solutions for using subtitles and translations in live streams: Enable the subtitle feature through the Cloud Streaming Services (CSS) console, or use MPS to call back text and embed it into live streams. It is recommended to enable the subtitle feature through the CSS console. The solution is introduced as follows:

Method 1: Enabling the Subtitle Feature in the CSS Console

1. Configure the live subtitling feature.

1.1 Enable [CSS](#) and [MPS](#).

1.2 Log in to the [CSS console](#), [create a subtitle template](#), and bind the transcoding template.

2. Obtain subtitle streams.

When the transcoding stream (append the transcoding template name `_transcoding template name` bound with the subtitle template to the corresponding live stream's StreamName to generate a transcoding stream address) is obtained, subtitles will be displayed. For detailed rules of splicing addresses for obtaining streams, see [Splicing Playback URLs](#).

Note:

Currently, there are 2 forms of subtitle display: real-time dynamic subtitles and delayed steady-state subtitles. For real-time dynamic subtitles, the subtitles in live broadcast will dynamically correct the content word by word based on the speech content, and the output subtitles change in real time. For delayed steady-state subtitles, the system will display the live broadcast with a delay according to the set time, but the viewing experience of the complete sentence subtitle mode is better.

Method 2: Calling Back Text through MPS

Currently, it is not supported to use the MPS console to initiate live stream smart subtitle tasks. You can initiate them through the API.

Below are usage examples. For detailed API documentation, see [ProcessLiveStream](#). For the real-time callback package, see [ParseLiveStreamProcessNotification](#).

Note:

Currently, using MPS to process live streams requires the use of the **Intelligent Identification** template. This is achieved using Automatic Speech Recognition or speech translation.

```
{
  "Url": "http://5000-wenzhen.liveplay.myqcloud.com/live/123.flv",
  "AiRecognitionTask": {
    "Definition": 10101 //10101 is the preset Chinese subtitle template ID, whi
  },
  "OutputStorage": {
    "CosOutputStorage": {
      "Bucket": "6c0f30dfvodgzp*****0800-10*****53",
      "Region": "ap-guangzhou-2"
    }
  }
}
```

```
    },
    "Type": "COS"
  },
  "OutputDir": "/6c0f30dfvodgzp*****0800/0d1409d3456551*****652/",
  "TaskNotifyConfig": {
    "NotifyType": "URL",
    "NotifyUrl": "http://****.qq.com/callback/qtatest/?token=*****"
  },
  "Action": "ProcessLiveStream",
  "Version": "2019-06-12"
}
```

LLM Summarize Tutorial

Last updated : 2025-04-23 16:38:42

Free Trial

Note :

The function of the MPS Demo is relatively simple, only for experiencing the basic effect, please use the API access to test the complete effect.

1. Open [MPS.LIVE](#), enter the LLM Summarize experience page, select Offline Video (Offline File) or Live Streaming, and click **One-Click Processing**.
2. Once the processing is complete, you can view the results.

API Integration

Initiating a Summary Task

Call the [Media Processing Service \(MPS\) API](#), select [AiAnalysisTask](#), set **Definition** to **22 (preset large language model (LLM) summarize template)**, and enter extended parameters in **ExtendedParameter** for specific capabilities. For details, see [Extended Parameter Description](#) below.

Example:

```
{
  "InputInfo": {
    "Type": "URL",
    "UrlInputInfo": {
      "Url": "https://facedetectioncos-1251132611.cos.ap-guangzhou.myqcloud.c
    }
  },
  "AiAnalysisTask": {
    "Definition": 22, //Preset LLM summarize template ID.
    "ExtendedParameter": "{\\"des\\"":{"split\\"":{"method\\"":"llm\\""},\\"mo
  },
}
```

```
"OutputStorage": {
  "CosOutputStorage": {
    "Bucket": "test-mps-123456789",
    "Region": "ap-guangzhou-2"
  },
  "Type": "COS"
},
"OutputDir": "/output/",
"TaskNotifyConfig": {
  "NotifyType": "URL",
  "NotifyUrl": "http://qq.com/callback/qtatest/?token=xxxxxx"
},
"Action": "ProcessMedia",
"Version": "2019-06-12"
}
```

API Explorer Quick Verification

You can perform quick verification through [API Explorer](#). After filling in relevant parameter information on the page, you can initiate an online API call.

Extended Parameter Description

ExtendedParameter is used to personalize the summary task, which can be left unfilled, combined with the default effect, and used on-demand for directions that need to be improved.

Note:

API Explorer will automatically convert the format. You only need to enter the corresponding ExtendedParameter in JSON format without converting it to a string. If calling the API directly, you need to escape the JSON string.

For the complete list of ExtendedParameter's optional parameters and their descriptions, refer to the following table:

```
{
  "des": {
    "split": {
      "method": "llm",
      "model": "deepseek-v3",
      "max_split_time_sec": 100,
      "extend_prompt": "This video is a medical scenario video, which is segmen"
    },
    "need_ocr": true,
    "ocr_type": "ppt",
    "only_segment": 0,
    "text_requirement": "summary is within 40 characters",
    "dstlang": "zh"
  }
}
```

Parameter	Required	Type	Description
split.method	No	string	Segmentation Method: llm indicates Large Language Model-based segmentation, nlp indicates traditional NLP-based segmentation. The default value is llm .
split.model	No	string	Segmentation llm: Available options include Hunyuan, DeepSeek-V3, DeepSeek-R1. The default value is DeepSeek-V3 .
split.max_split_time_sec	No	int	Forces the maximum segmentation time in seconds to be specified. It is recommended to use it only if necessary, it may affect the segmentation effect. The default value is 3600.
split.extend_prompt	No	string	Requirements for segmentation task prompts. For example: "This instructional video is segmented by knowledge points". It is recommended to initially leave blank for testing and supplement prompts only when results fall short of expectations.
need_ocr	No	bool	Whether to use Optical Character Recognition (OCR) to assist segmentation, true means enabled. The default value is false . If disabled, the system only recognizes the video's speech content to assist in video segmentation; if enabled, it also recognizes the text content on the video image to assist in video segmentation.
ocr_type	No	string	OCR auxiliary type : ppt: Processes on-screen content as PowerPoint slides and segments videos based on slide transitions. other: Applies alternative segmentation methods. The default value is ppt .
only_segment	No	int	Whether to only segment without generating a summary. The default value is 0. 1: Only segment without generating a summary. 0: Segment and generate a summary.
text_requirement	No	string	Requirements for generating a summary. For example, the character limit is "summary is within 40 characters".
dstlang	No	string	Title and summary language. The default value is "zh". "zh": Chinese.

			"en": English.
--	--	--	----------------

Querying Task Results

Task callbacks: When initiating an MPS task using [ProcessMedia](#), you can set callback information through the `TaskNotifyConfig` parameter. After the task is completed, the task results will be called back through the configured callback information. You can parse the event notification results through [ParseNotification](#).

Use the `TaskId` returned by [ProcessMedia](#) to call the [DescribeTaskDetail](#) API to query the task processing results.

Parse **WorkflowTask > AiAnalysisResultSet > DescriptionTask > Output > DescriptionSet >**

[MediaAiAnalysisDescriptionItem](#).

Description corresponds to the entire video summary, and Paragraphs corresponds to the intelligent segmentation results of the entire video and the summary of each segment.

Intelligent Highlights Tutorial

Last updated : 2024-11-29 15:22:31

Overview

The Intelligent Highlights feature uses intelligent algorithms to automatically capture and generate highlights in a video, providing users with quick review and sharing.

		
<p>Films/TV shows highlights: action scenes, main character appearances, background music, etc.</p>	<p>Sports highlights: Goal moments</p>	<p>Game video highlights: First blood, pentakill, clutch escape</p>

Presetting Template

Media Processing Service (MPS) offers an Intelligent Highlights preset template (**Template ID: 26**). You can initiate Intelligent Highlights tasks based on this template. For detailed steps, please refer to the section below [Initiating Intelligent Highlights Task](#).

Template name/ID	Analysis Items	Creation time	Update Time	Template Type	Operation
Presetting-Template28 28		Sep 10, 2024 15:41:13 (UTC+08:00)	Sep 11, 2024 15:35:45 (UTC+08:00)	Preset	View Copy Ter
Presetting-Template27 27	Video segmentation	Oct 29, 2024 10:09:28 (UTC+08:00)	Oct 29, 2024 10:27:11 (UTC+08:00)	Preset	View Copy Ter
Presetting-Template26 26	Highlights	Jul 04, 2024 18:11:14 (UTC+08:00)	Jul 05, 2024 10:11:36 (UTC+08:00)	Preset	View Copy Ter
Presetting-Template24 24		Dec 07, 2023 10:06:55 (UTC+08:00)	Oct 14, 2024 10:43:10 (UTC+08:00)	Preset	View Copy Ter
Presetting-Template22 22		Dec 06, 2023 20:24:23 (UTC+08:00)	Dec 07, 2023 10:31:12 (UTC+08:00)	Preset	View Copy Ter
Presetting-Template20 20	Intelligent categorization, Intelligent video tagging, Intelligent cover generation, Tagging video frames	Jan 01, 2017 00:00:00 (UTC+08:00)	Jan 18, 2021 11:20:44 (UTC+08:00)	Preset	View Copy Ter
Presetting-Template10 10	Intelligent categorization, Intelligent video tagging, Intelligent cover generation	Jan 01, 2017 00:00:00 (UTC+08:00)	Jan 18, 2021 11:20:44 (UTC+08:00)	Preset	View Copy Ter

Total items: 7

10 / page 1 / 1p

Initiating Intelligent Highlights Tasks

Scenario One: Processing Offline Video Files

Method 1: API Integration

1. Quick Verification using API Explorer

First, please go to the [MPS console](#) to activate the service and confirm [COS Authorization](#) is completed.

Then, navigate to the [API Explorer](#) online debugging page, select `ProcessMedia` interface, and fill in input/output paths, and template ID. Set `AiAnalysisTask` **Definition to 26** (Presetting template for intelligent highlights), and use **ExtendedParameter** for specific functionalities. Details on extended parameters are provided in the section below [Extended Parameters](#).

Note:

API explorer will automatically convert, so you can directly fill in the corresponding json for ExtendedParameter without converting it into a string. However, if you directly call the API, you need to escape the JSON string.

ExtendedParameter example:

```
{"hht":{"top_clip":10, "force_cls":5003, "need_vad":1, "threshold":0.9, "merge_tim
```

For the meaning of the parameters, please refer to the following section [Extended Parameter description](#). To ensure the processing effect, it is recommended that you contact us to confirm the specific configuration offline.

2. Initiating via API

The above explained how to use the API explorer to call and debug the interface online. You can also directly initiate a POST request to Tencent Cloud. API request domain: `mps.tencentcloudapi.com`. While initiating a POST request, the definition is the preset intelligent highlight template ID (26). Below is a reference example for the request:

Note:

When directly calling the API, you need to escape the JSON string when inputting the `ExtendedParameter` parameter.

```
{
  "InputInfo": {
    "Type": "URL",
    "UrlInputInfo": {
      "Url": "https://mg-aidata-1258344699.cos-internal.ap-guangzhou.tencentc"
    }
  },
  "OutputStorage": {
    "Type": "COS",
```


VOD Processing Tasks

This page only shows tasks in the past seven days

Create task

Task ID	Status	Task type	Creation time	End time	Operation
26 [redacted]-ebcd8	Completed	Intelligent Analysis	Nov 15, 2024 11:52:21 (UTC+08:00)	Nov 15, 2024 11:54:25 (UTC+08:00)	Hide details Restart End Play source video

Subtask No.	Subtask status	Subtask type	Template Type	Start time	End time	Output	Operation
1	Successful	Intelligent Analysis	Intelligent Analysis	Nov 15, 2024 11:52:21 (UTC...	Nov 15, 2024 11:53:37 (UTC...	-	View Details View Down

Total items: 1 10 / page / 1 page

When the subtask status is "Success", you can go to **COS Bucket > Output Bucket** to find your output directory, and the files starting with `hht` in the directory are the Intelligent Highlights output files, including video files and cover images.

COS Bucket

Source buckets **Output bucket**

Output bucket / yu [redacted] 107 / output /

[Upload](#) [New folder](#) [Refresh](#)

File name	Size	Modification Time	Operation
hht-02411151153-1642745335-0.mp4	19.73 MB	2024-11-15 11:53:27	Preview Download
hht-02411151153-642745335-0.mp4.jpg	128.87 KB	2024-11-15 11:53:36	Preview Download

Total items: 2 100 / page / 1 page

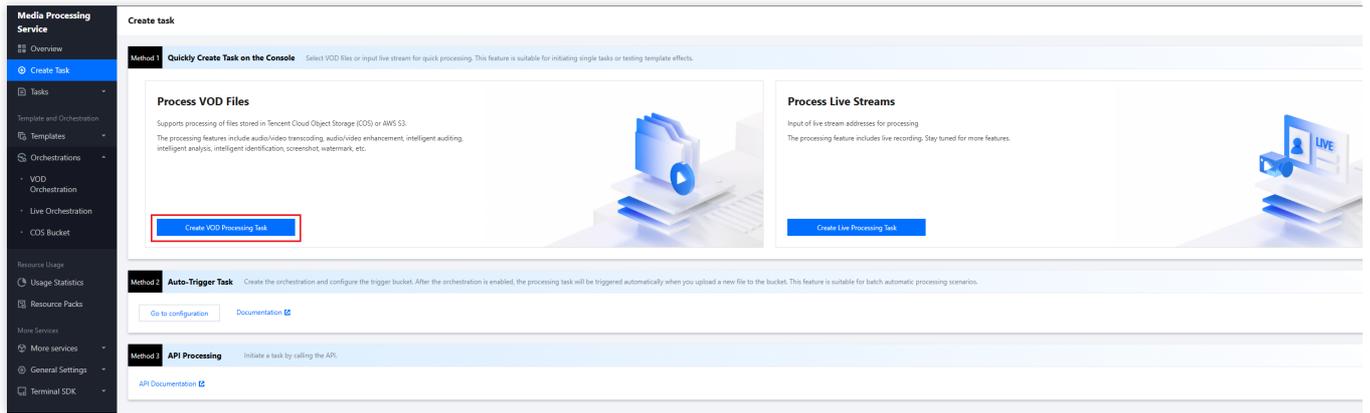
Method 2: Console Task Initiation (Zero-Code Automatic Generation)

Note:

Initiating a task from the console requires a preset template (preset intelligent highlights parameters). Due to some special parameters in the highlights that cannot be configured in the template, it may affect the effect of the Intelligent Highlights. Therefore, it is recommended to use the API integration.

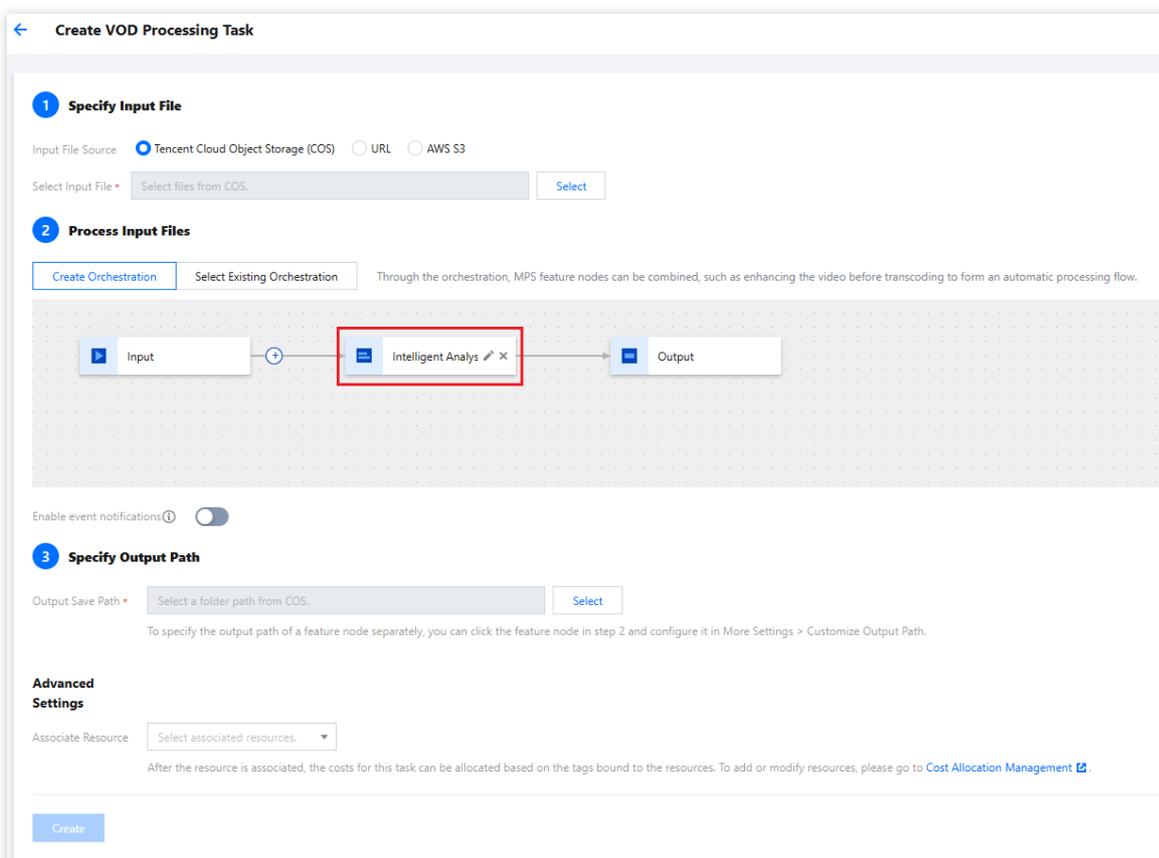
1. Creating a Task

1.1. Go to [MPS console](#) and then click **Creating a Task > Quick Create a VOD Processing Task**.



1.2. First, specify the input video file. Currently, the Horizontal-to-Vertical Video Transformation feature supports two types of input sources: [Tencent Cloud Object Storage \(COS\)](#) and URL download link. AWS S3 is not supported.

1.3. Then, add **Intelligent Analysis** at the "Process Input Files" step.



1.4. In the pop-up Intelligent Analysis Settings window, select the ****Intelligent Highlights Preset Template (Template ID:26)****.

Select template ✕

Intelligent Analysis Template

You can also [create a template](#) and then [refresh](#) this list.

Template name/ID	Analysis Items	Creation time	Update Time	Template Type	Operation
<input type="radio"/> Presetting-Template28 28		Sep 10, 2024 15:41:13 (UTC+08:00)	Sep 11, 2024 15:35:45 (UTC+08:00)	Preset	View
<input type="radio"/> Presetting-Template27 27	Video segmentation	Oct 29, 2024 10:09:28 (UTC+08:00)	Oct 29, 2024 10:27:11 (UTC+08:00)	Preset	View
<input type="radio"/> Presetting-Template26 26	Highlights	Jul 04, 2024 18:11:14 (UTC+08:00)	Jul 05, 2024 10:11:36 (UTC+08:00)	Preset	View
<input type="radio"/> Presetting-Template24 24		Dec 07, 2023 10:06:55 (UTC+08:00)	Oct 14, 2024 10:43:10 (UTC+08:00)	Preset	View
<input type="radio"/> Presetting-Template22 22		Dec 06, 2023 20:24:23 (UTC+08:00)	Dec 07, 2023 10:31:12 (UTC+08:00)	Preset	View
<input type="radio"/> Presetting Template20 20	Intelligent categorization, ...	Jan 01, 2017 00:00:00 (UTC+08:00)	Jan 18, 2021 11:20:44 (UTC+08:00)	Preset	View
<input type="radio"/> Presetting Template10 10	Intelligent categorization, ...	Jan 01, 2017 00:00:00 (UTC+08:00)	Jan 18, 2021 11:20:44 (UTC+08:00)	Preset	View

Total items: 7 10 / page 1 / 1 page

Confirm
Cancel

1.5. Finally, specify the output video save path, and click **Create** to initiate the task.

1 Specify Input File

Input File Source Tencent Cloud Object Storage (COS) URL AWS S3

Select Input File [Select](#)

2 Process Input Files

[Create Orchestration](#) [Select Existing Orchestration](#) Through the orchestration, MPS feature nodes can be combined, such as enhancing the video before transcoding to form an automatic processing flow.

Input → Intelligent Analysis → Output

Enable event notifications

3 Specify Output Path

Output Save Path [Select](#)

To specify the output path of a feature node separately, you can click the feature node in step 2 and configure it in More Settings > Customize Output Path.

Advanced Settings

Associate Resource

After the resource is associated, the costs for this task can be allocated based on the tags bound to the resources. To add or modify resources, please go to [Cost Allocation Management](#).

[Create](#)

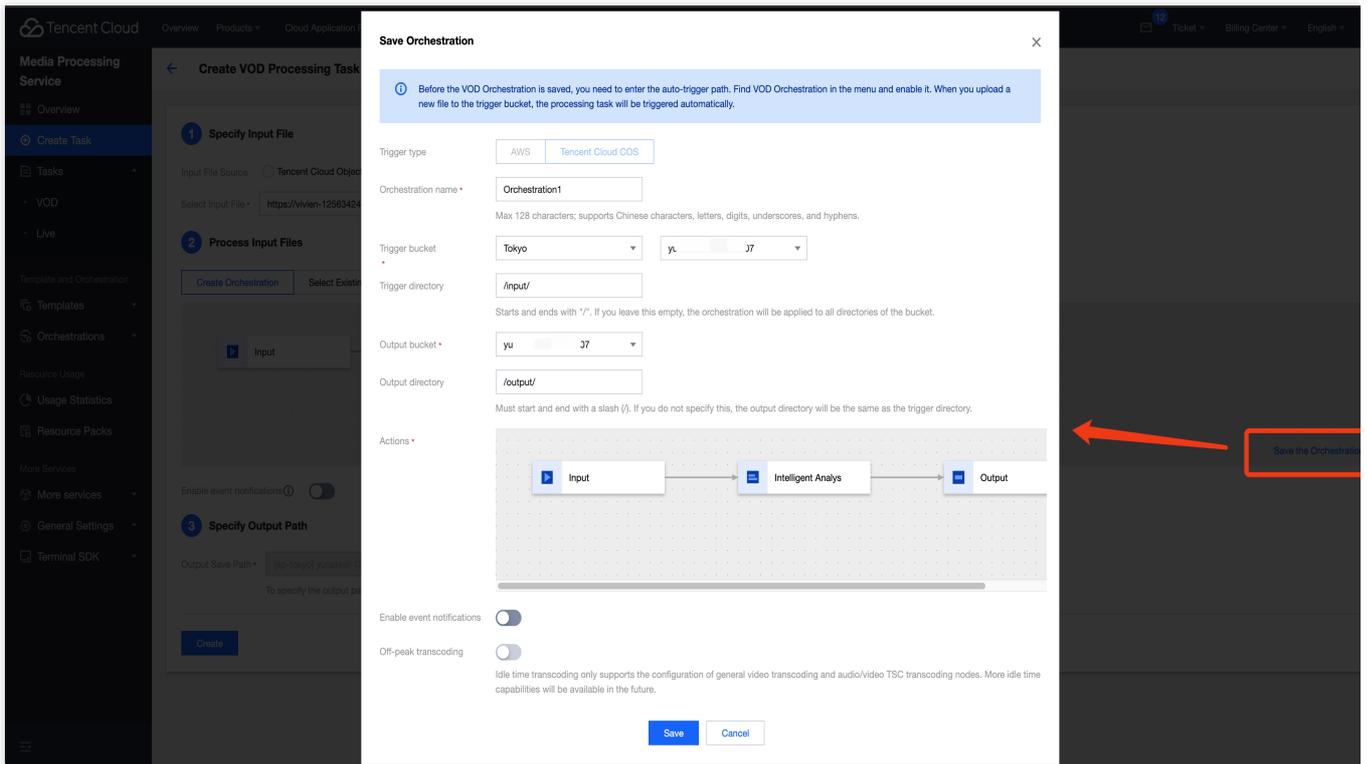
2. Querying Task Results

Refer to the above text [3. Querying Task Results](#).

3. Automatically Triggering Tasks (Optional)

If you want to upload a video file to the COS bucket and achieve automatic Smart Erase according to preset parameters, you can:

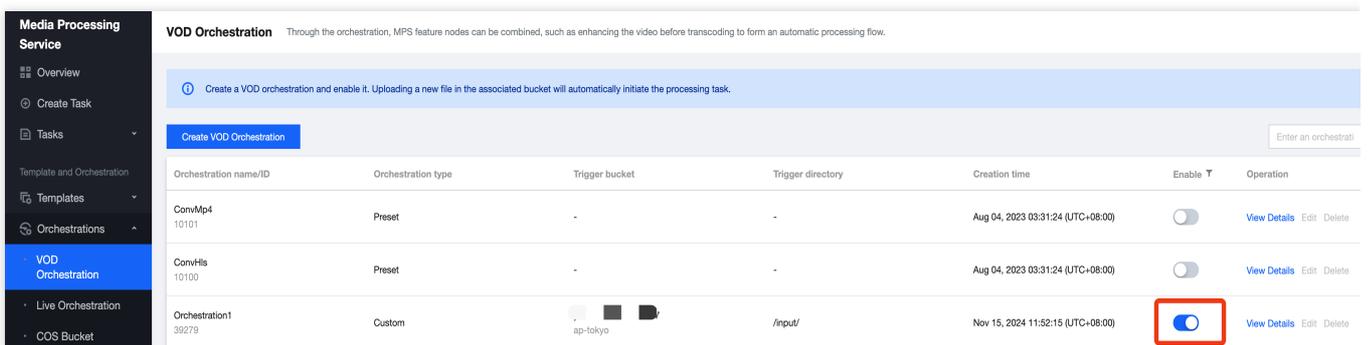
3.1. Click **Save the Orchestration** when creating the task, and configure the Trigger Bucket, Trigger Directory, and other parameters in the pop-up window.



3.2. Then, go to the **VOD Orchestration List**, find the newly created orchestration, and enable it by clicking the **Enable** button. As for the subsequent new video files in the Trigger Directory, tasks will be automatically triggered according to the preset process and parameters in the orchestration, and the processed video files will be saved to the output path configured by the orchestration.

Note:

It takes 3-5 minutes to take effect after the orchestration is successfully enabled.



Scenario Two: Processing Live Streams

1. Initiating Requests

Initiating Requests via API Explorer

To initiate a live stream processing task by calling the API, you can refer to the [Initiate Processing on Live Streams](#). You can click [API Explorer Debugging](#) in the file to enter the page, and fill in the relevant parameter information to initiate an online call.

The OutputStorage can be filled in by referring to the offline video scene processing above. An ExtendedParameter example is as follows, and the specific parameter meaning can be found in the [Extended Parameters](#).

```
{"hht":{"top_clip":10, "force_cls":5003, "need_vad":1, "res_save_type":1}}
```

The screenshot displays the API Explorer for the **ProcessLiveStream** API (mps 2019-06-12). The interface includes a sidebar with API categories, a search bar, and a main panel for parameter configuration. A 'Send request' button is visible at the top right. Several parameters are highlighted with red boxes and corresponding annotations:

- Uri**: Labeled as 'Live stream URL', with the value `http://www.abc.com/abc.m3u8`.
- NotifyType**: Labeled as 'Event notification can synchronize the progress and status of your tasks in real time', with the value `URL`.
- OutputStorage**: Labeled as 'Output file save path', showing fields for `Type` (COS), `Bucket` (mycos-123456), and `Region` (ap-chongqing).
- Definition**: Labeled as 'ID of the Intelligent Highlights template', with the value `26`.
- ExtendedParameter**: Labeled as 'Extended parameter for Intelligent Highlights', with the value `{ "http": {"top_clip": 10, "force_clip": 5003, "need_vad": 1, "res_save_type": 1}}`.

Initiating via API

A POST request is initiated directly to Tencent Cloud, and the definition is the ID of the created video analysis template. Below is a request reference example:

```
{
  "Url": "http://mps-pull.test.org/live/test.flv",
  "TaskNotifyConfig": {
    "NotifyType": "URL",
    "NotifyUrl": "http://test.cloud.com/callback"
  }
}
```

```

},
"OutputStorage": {
  "Type": "COS",
  "CosOutputStorage": {
    "Bucket": "mg-aidata-1258344699",
    "Region": "ap-guangzhou"
  }
},
"OutputDir": "/output/",
"AiAnalysisTask": {
  "Definition": 26,
  "ExtendedParameter": "{\"hht\":{\"top_clip\":10, \"force_cls\":5003,\"
}
}

```

2. Receiving Callbacks

Refer to [Parse Live Stream Processing Results](#) to parse AiAnalysisResultInfo fields.

3. Task Termination Protocol

Refer to [Task Management Documentation](#) to manage the initiated tasks.

Extended Parameter Description

Parameter	Required	Type	Description
force_cls	No	int	Specify the highlights category: 5003: Variety/TV Series 4001: Football 4002: Basketball 1001: Honor of Kings 100101: Honor of Kings Competition 1003: League of Legends
need_vad	No	int	VAD is used to identify the end of a sentence in video. VAD extension allows complete video speech, enabled by default. 1: Use VAD 0: Do not use
threshold	No	float	Confidence threshold. The clips below the threshold are filtered out, and each type of highlights has default threshold settings. Remarks: You are advised not to set this parameter for the first time.
res_save_type	No	int	Whether to save the results, which are saved by default.

			<p>1: Save results 0: Output the time period only</p>
output_pattern	No	string	<p>Output video naming format. {} indicates placeholder. {year}-{month}-{day}-{hour}-{minute}-{second}_{start_dts}-{end_dts}-{timestamp}-{session}.mp4 Default output format: hht-{year}{month}{day}{hour}{minute}-{session}-{timestamp}-index.mp4</p>
image_pattern	No	string	<p>image-{start_dts}.jpg The parameters that can be used as placeholders are the same as above. Default output format: hht-{year}{month}{day}{hour}{minute}-{session}-{timestamp}-index.jpg</p>
merge_type	No	int	<p>Note: Only available in offline scenarios. Do not merge for the default value 5003, and merge in other scenarios. Whether to merge the results into one video: 1: Merge (top_clip parameter does not take effect) 0: Do not merge (merge_time parameter does not take effect)</p>
merge_time	No	int	<p>Note: Only available in offline scenarios. The default value 5003 is the actual output and the time shall not be longer than one hour in other scenarios. Specify the video output length when merging into one video.</p>

Smart Erase Tutorial

Last updated : 2025-06-09 09:54:25

Overview

Smart erase function can blur, pixelate, or seamlessly process elements like logos, subtitles, and sensitive info like faces and vehicle license plates in videos, aiding content sharing. It's used in drama, short videos, Vlogs, and international e-commerce.

Key features

Automatically: Capable of automatically recognizing and removing over a dozen common logos, watermarks, subtitles, and sensitive info with effects like blurring and seamless removal.

High Customizability: It allows customization of model parameters for specific video scenarios, improving removal accuracy and making the final imagery appear more natural.

Integration Method 1: Integrating Through API

Call the [Media Processing Service \(MPS\) API](#), select **AiAnalysisTask**, set **Definition** to **24** (preset smart erase template), and enter extended parameters in **ExtendedParameter** for specific capabilities. For details, see [Specifying an Erasure Scenario](#) below.

Note:

If you need to enable the smart erase feature for a custom intelligent analysis template, you can contact us and provide the **template ID**, and Tencent Cloud MPS developers will configure and enable the smart erase feature for you.

1. API Explorer Quick Verification

You can perform quick verification through [API Explorer](#). After filling in relevant parameter information on the page, you can initiate an online API call.

Note:

If API Explorer is used, fill in the corresponding JSON content for `ExtendedParameter`. API Explorer will automatically convert it to a string.

Parameter example for API Explorer:

Parameters for directly calling an API:

```
{\\"delogo\\":{\\"cluster_id\\":\\"gpu_zhiyan\\",\\"CustomerAppId\\":\\"subtitle_er
```

2. `ExtendedParameter`: Common Parameters (For Specifying Erasure Scenarios)

The following elaborates on how the `ExtendedParameter` parameter passing can specify different erasure scenarios.

Note:

Currently, each request **can only select one scenario capability and does not support multiple selections**. If you need to use a combination of multiple capabilities, contact us for evaluation and support.

Scenario 1: Watermark Removal

If `ExtendedParameter` is not specified, the watermark removal scenario is used by default.

Currently, we support the recognition and removal of over 10 types of watermarks. For watermarks not within our supported range, we also offer customized training services, however, this will incur additional model training fees.

Scenario 2: Subtitle Removal + Voice Subtitle & Translation + Text To Speech (TTS) & Replacement

Description

Original subtitle removal, subtitle & voice translation, and multilingual subtitle & voice replacement can be accomplished in one go in this scenario, facilitating video dissemination overseas. It is widely applicable to short drama platforms, short video platforms, cross-border e-commerce, and independent media studios. By using this scenario capability, the input video will be processed in the following steps sequentially:

1. Recognize and remove the subtitles in the original video image;
2. Recognize the audio in the original video, generate subtitle files, translate the subtitles, and then:
 - 2.1 Render the translated subtitles to the original video image;
 - 2.2 Use TTS to replace the original video's audio track.
3. Generate a new video.

Note:

This scenario is a combination of multiple features. If you only need to use a specific feature, refer to other scenarios below.

Parameter

```
// Target language: English
{\\"delogo\\":{\\"cluster_id\\":\\"gpu_pp\\",\\"CustomerAppId\\":\\"audio_subtitle_
/*
Note: translate_dst_language is used to specify the target language. If it is left
Valid values: en: English; zh: Chinese.
*/
```

Effect Example

Left: original Chinese short video; Right: processed output video with English subtitles and English dubbing.

Scenario 3: Specified Area Erasure

Description

The area specified by parameters is erased and a new video is generated.

Parameter

```
{\\"delogo\\":{\\"custom_objs\\":{\\"type\\":0,\\"time_objs\\":[{\\"objs\\":[{\\"ty
// Note: custom_objs is used to specify the area to be erased, where (lt_x, lt_y) i
```

Effect Example

Left: original video; Right: output video after erasure.

Scenario 4: Subtitle Extraction and Translation

Description

The subtitles in the video image are recognized, analyzed, and proofread and then translated into the specified language, and both the original and translated subtitle files are generated.

Parameter

```
{\\"delogo\\":{\\"CustomerAppId\\":\\"subtitle_extract\\",\\"subtitle_param\\":
{\\"translate_dst_language\\":\\"en\\"}}

/*
Note: translate_dst_language is used to specify the target language. If translate_d:
Other values: en: English, zh: Chinese.
*/
```

Effect Example

Left: original video; Right: extracted subtitle file.

Scenario 5: Subtitle Removal

Description

The text at the **lower middle part** of the video image is automatically recognized and removed using AI models to generate a new video. This feature offers two editions:

Version 2: This edition is recommended. Delivers enhanced seamless processing with superior detail preservation and optimized execution speed.

Version 1: Specifically designed for specialized subtitle formats (including background shadows, stylized typography, and dynamic effects). Provides extended coverage area for element removal, though with relatively reduced detail fidelity and slower processing performance compared to Version 2.

Version 2 Parameters

```
{\\"delogo\\":{\\"cluster_id\\":\\"gpu_zhiyan\\",\\"CustomerAppId\\":\\"subtitle_er
\\"delogo\\":{\\"cluster_id\\":\\"gpu_zhiyan\\",\\"CustomerAppId\\":\\"subtitle_er
```

Version 1 Parameters

```
{\\"delogo\\":{\\"cluster_id\\":\\"gpu_pp\\",\\"CustomerAppId\\":\\"subtitle_erase\
```

Effect Example

From left to right: original video; subtitle erasing effect by using the Version 1; subtitle erasing effect by using the Version 2.

Scenario 6: Face Mosaic

Description

After faces in the video image are recognized, **mosaic processing** is applied to the faces and a new video is generated.

Parameter

```
{\\"delogo\\":{\\"CustomerAppId\\":\\"facial_mosaic\\"}}
```

Effect Example

Left: original video image; Right: processed video with all faces mosaicked.

Scenario 7: Face Blur

Description

After faces in the video image are recognized, **blur processing** is applied to the faces and a new video is generated.

Parameter

```
{\\"delogo\\":{\\"CustomerAppId\\":\\"facial_blur\\"}}
```

Effect Example

Left: original video image; Right: face blur processing.

Scenario 8: Face and License Plate Mosaic

Description

After faces and license plates in the video image are recognized, mosaic processing is applied to both the faces and license plates and a new video is generated.

Parameter

```
{\\"delogo\\":{\\"CustomerAppId\\":\\"facial_and_numberplate_mosaic_v2\\"}}
```

Effect Example

Left: original video image; Right: both faces and license plates mosaicked.

3. Additional Details on ExtendedParameters

The preceding section provided a succinct overview of several prevalent methods for passing **ExtendedParameter**, aimed at designating erasure scenarios. What follows is a display of all the parameters supported by **ExtendedParameter** along with their descriptions:

```
"delogo":{
  "CustomerAppId": "subtitle_extract", # string; Set up scene parameters: Di
  "cluster_id": "", # string; Reserved fields: Used for schedulin
  "output_patten": "{task_type}-{session_id}", # string; Output file name:
  "als_filter": { # JSON object: recognition results filter.
    "min_ocr_height": 10, # Float; Must be greater than or equal to 0. Fo
    "max_ocr_height": 0.06, # Float; Must be greater than or equal to 0. Fo
    "active_areas": [ # JSON array: Area filter. Only recognition res
      {
        "lt_x": 0.1, # float, valid if >= 0; x coordinate of top-left
        "lt_y": 0.6, # float, valid if >= 0; y coordinate of top-left
        "rb_x": 0.9, # float, valid if >= 0; x coordinate of bottom-r
        "rb_y": 0.95 # float, valid if >= 0; y coordinate of bottom-ri
      }
    ]
  }
}
```


Querying Task Results by Calling an API

Call the [DescribeTaskDetail](#) API and fill in the task ID (for example, 24000022-WorkflowTask-b20a8exxxxxx1tt110253 or 24000022-ScheduleTask-774f101xxxxxx1tt110253) to query task results. Example:

Event Notification Callback

When initiating an MPS task using [ProcessMedia](#), you can set callback information through the `TaskNotifyConfig` parameter. After the task is completed, the task results will be called back through the configured callback information. You can parse the event notification results through [ParseNotification](#).

Integration Method 2: Initiating a Task from Console (Zero Code)

Note:

When an erasure task is initiated from the console, the default scenario is **watermark removal**. For other erasure scenarios, use the API to specify an erasure scenario through parameters. For details, refer to the above [Integration Method 1: Integrating Through API](#).

1. Creating a Task

1.1 Log in to the [MPS console](#) and click **Create Task > Create VOD Processing Task**.

1.2 Specify an input video file. Currently, the smart erase feature supports two input sources: [Tencent Cloud Object Storage \(COS\)](#) and URL download addresses. AWS S3 is currently not supported.

1.3 In the "Process Input File" step, add the **Intelligent Analysis** node.

In the intelligent analysis settings drawer that pops up, select the preset smart erase template (template ID: 24). If you need to enable the smart erase feature for a custom intelligent analysis template, you can contact us and provide the **template ID**, and Tencent Cloud MPS developers will configure and enable the smart erase feature for you.

Note:

The preset template (template ID: 24) defaults to the **watermark removal** scenario. For other erasure scenarios, refer to the above method 1 of integrating through API.

1.4 After specifying the save path for the output video after erasure, click **Create** to initiate the task.

2. Querying Task Results

After the task is completed, you can go to the console, choose **COS Bucket > Output Bucket**, and find the output file. For detailed directions, see [Querying Task Results](#) above.

3. Automatically Triggering a Task (Optional Capability)

If you require automatically performing smart erase according to the preset parameters after a video file is uploaded in the COS bucket, you can:

3.1 When creating a task, click **Save The Orchestration**, and configure parameters such as Trigger Bucket and Trigger Directory in the pop-up window.

3.2 Go to the **VOD Orchestration** list, find the new orchestration, and turn on the switch at **Enable**. Subsequently, any new video files added to the trigger directory will automatically initiate tasks according to the preset process and parameters of the orchestration, and the processed video files will be saved to the output path configured in the orchestration.

Note:

It takes 3-5 minutes for the orchestration to take effect after being enabled.

FAQs

Which logos can be erased?

This service erases logos based on AI recognition. Currently, over ten logos can be recognized and erased. For logos that are not supported currently, the customized training service is provided, which incurs a model training fee.

Are fees charged for videos without a logo?

Yes. The service still performs recognition even if the video has no logo, which also consumes computing resources.

Is live streaming supported?

Currently, only VOD files are supported by the external interface. For live streaming processing needs, please get in touch with the developer.

Task information will relay the task results.

How to specify the output file name?

You may specify the output filename within the **ExtendedParameter** through the parameter **output_pattern**.

The placeholder symbol is `{}`, and the placeholders support `task_type`, `session_id`, with the default output being `{task_type}-{session_id}`.

Usage example:

```
//Example code before translation, only suitable for use in API Explorer:
{
  "delogo": {
    "CustomerAppId": "subtitle_extract",
    "subtitle_param": {
      "translate_dst_language": ""
    },
    "output_patten": "custom-{task_type}-{session_id}"
  }
}
// If using the API directly, escape the above code as a string:{\\"delogo\\":{\\"d

// The output file name for the above parameters will be: custom-delogo-02EF93096AD
```

Video Splitting (Long Videos to Short Videos) Tutorial

Last updated : 2025-04-27 14:14:55

Video splitting can segment a complete long video. For example, it can split complete news broadcast material into multiple news event videos, significantly enhancing the splitting quality of news and sports videos, promoting secondary creation, and saving labor and hardware costs. Video splitting supports processing offline videos and live streams. For details, see [Processing Offline Videos](#) and [Processing Live Streams](#).

Processing Offline Videos

Integration Method 1: Initiating a Task via API

Call the [Media Processing Service \(MPS\) API](#), select **AiAnalysisTask**, set **Definition** to **27 (preset video splitting template)**, and enter **extended parameters in** `ExtendedParameter` for specific capabilities. For details, see [Specifying a Splitting Scenario](#) below.

1. Specifying a Splitting Scenario

Note:

Several preset `ExtendedParameter` parameters are provided below.

To ensure splitting effects, it is recommended that you contact us. We can confirm the specific parameters based on your video scenarios and provide ongoing optimization support.

Scenario 1: News Splitting

Description

Characteristics such as the director's desk and "breaking news" in news videos are recognized to split the news. The output includes the split video segments, the cover image of each segment, and the start and end times of each segment.

Parameter

If `ExtendedParameter` is **not specified**, the news splitting scenario is used by default.

Effect Example

The original news (the 30-minute video on the left) has been split into multiple short videos of a few minutes each (the videos on the right).

Scenario 2: Large Language Model (LLM) Splitting**Description**

The text is extracted by recognizing the video's speech and text content, and the video is split into segments intelligently based on the large language model (LLM). The output includes the split video segments, the cover image of each segment, and the start and end times, title, and summary of each segment.

Parameter

Enter the following parameters in ExtendedParameter. For specific parameters, it is recommended to confirm offline. The output includes the split video segments, the cover image of each segment, and the start and end times, title, and summary of each segment.

```
/*Example of filling in the parameters*/
{
  "des": {
    "split": {
      "method": "llm",
      "model": "deepseek-v3",
      "max_split_time_sec": 100,
      "extend_prompt": "This video is a medical scenario video, which is segm
    }
  },
  "strip": {
    "type": "content"
  }
}
```

Refer to the table below for optional parameters in the "des" field:

Parameter	Required	Type	Description
split.method	No	string	Segmentation Method: llm indicates Large Language Model-based segmentation, nlp indicates traditional NLP-based segmentation. The default value is llm .
split.model	No	string	Segmentation llm: Available options include Hunyuan, DeepSeek-V3, DeepSeek-R1. The default value is DeepSeek-V3 .

split.max_split_time_sec	No	int	Forces the maximum segmentation time in seconds to be specified. It is recommended to use it only if necessary, it may affect the segmentation effect. The default value is 3600.
split.extend_prompt	No	string	Requirements for segmentation task prompts. For example: "This instructional video is segmented by knowledge points". It is recommended to initially leave blank for testing and supplement prompts only when results fall short of expectations.
dstlang	No	string	Video language, used to specify the language for video speech recognition and summary generation. The default value is "zh". "zh": Chinese. "en": English.

Effect Example

Example of LLM Output after Splitting

Scenario 3: Target Splitting**Description**

Key frames where specified targets such as objects and characters appear in the video are recognized, and the corresponding segments are extracted. For example, for surveillance videos, only the segments with people appearing are extracted. The output includes the split video segments, the cover image of each segment, and the start and end times of each segment.

Parameter

Enter the following parameters in ExtendedParameter. For the specific targets to be detected, it is recommended to confirm offline.

```
{"strip":{"type":"object","objects":["person"],"object_set":[91020415]}}
```

Effect Example

Customer case: Segments with people appearing are extracted from surveillance videos to reduce storage costs.

2. API Explorer Quick Verification

You can perform quick verification through [API Explorer](#). After filling in relevant parameter information on the page, you can initiate an online API call.

Note: API Explorer will automatically convert the format. You only need to enter the corresponding `ExtendedParameter` in JSON format without converting it to a string.

3. Querying Task Results

Task callbacks: When initiating an MPS task using [ProcessMedia](#), you can set callback information through the `TaskNotifyConfig` parameter. After the task is completed, the task results will be called back through the configured callback information. You can parse the event notification results through [ParseNotification](#).

Query via the [DescribeTaskDetail](#) API:

For tasks started with the API and a template as described in **Integration Method 1** above, use the `TaskId` from [ProcessMedia](#) (for example: 24000022-WorkflowTask-b20a8exxxxxx1tt110253) to parse

```
AiAnalysisResultSet in WorkflowTask .
```

For tasks started via [ProcessMedia](#) without a template but with a `ScheduleId` (the subsequent section on [automatic task triggering](#) explains how to create a schedule), the returned `TaskId` will include "ScheduleTask" (e.g. 24000022-ScheduleTask-774f101xxxxxx1tt110253). In this scenario, use the `TaskId` to parse

```
ActivityResultSet in ScheduleTask .
```

For tasks initiated from the console, as described in **Integration Method 2** below, go to [Tasks -> VOD](#) for the task ID and results. For some task results not currently previewable on the console, such as the titles and summaries of segmented outputs, you can parse the `ActivityResultSet` in `ScheduleTask` in the [DescribeTaskDetail](#) API to obtain them.

Query via console: Log in to the console and go to [Tasks -> VOD](#), where the newly initiated tasks are displayed in the task list.

When the subtask status is "Successful", you can go to **COS Bucket > Output Bucket**, find your output directory, and locate the files starting with `strip-` in the directory, which are the output files of video splitting (segmented videos and cover images).

Note:

Text content such as titles and summaries will not be output to the bucket, and it should be obtained through event callbacks or API queries.

Integration Method 2: Initiating a Task from Console (Zero Code)

Note:

When a video splitting task is initiated from the console, the default scenario is **news splitting**. For other splitting scenarios, use the API to specify a splitting scenario through parameters. For details, refer to the above [Integration Method 1: Initiating a Task via API](#).

1. Creating a Task

1.1 Log in to the [MPS console](#) and click **Create Task > Create VOD Processing Task**.

1.2 Specify an input video file. Currently, the video splitting feature supports two input sources: [Tencent Cloud Object Storage \(COS\)](#) and URL download addresses. AWS S3 is currently not supported.

1.3 In the "Process Input File" step, add the **Intelligent Analysis** node.

In the intelligent analysis settings drawer that pops up, select the **preset video splitting template (template ID: 27)**. **If you need to enable the video splitting feature for a custom intelligent analysis template, you can contact us and provide the** template ID, and Tencent Cloud MPS developers will configure and enable the video splitting feature for you.

Note:

The preset video splitting template (template ID: 27) defaults to the **news splitting scenario**. For other splitting scenarios, use the API to specify a splitting scenario through parameters. For details, refer to the above [Integration Method 1: Initiating a Task via API](#).

1.4 After specifying the save path for the output video, click **Create** to initiate the task.

2. Querying Task Results

Refer to the above [Querying Task Results](#).

3. Automatically Triggering a Task (Optional Capability)

If you require automatically performing video splitting according to the preset parameters after a video file is uploaded in the COS bucket, you can:

3.1 When creating a task, click **Save The Orchestration**, and configure parameters such as Trigger Bucket and Trigger Directory in the pop-up window.

3.2 Go to the **VOD Orchestration** list, find the new orchestration, and turn on the switch at **Enable**. Subsequently, any new video files added to the trigger directory will automatically initiate tasks according to the preset process and parameters of the orchestration, and the processed video files will be saved to the output path configured in the orchestration.

Note:

It takes 3-5 minutes for the orchestration to take effect after being enabled.

Processing Live Streams

Integration Method: Initiating a Task via API

Call the [ProcessLiveStream](#) API, select **AiAnalysisTask**, and set **AiAnalysisTaskInput - Definition** to 27 (preset video splitting template).

Enter extended parameters in **ExtendedParameter** for specific capabilities.

1. Specifying a Splitting Scenario

Live streams currently support news splitting and NLP splitting scenarios, and do not support the target splitting scenario. For details, see the above [Specifying a Splitting Scenario](#).

2. Querying Task Results

Receive task callbacks: When initiating an MPS task using [ProcessLiveStream](#), set callback information through the `TaskNotifyConfig` parameter. During live stream processing, the task results will be called back in real time through the configured callback information. You can refer to [ParseLiveStreamProcessNotification](#) to parse the `AiAnalysisResultInfo` field to obtain the task results.

Horizontal-to-Vertical Video Transformation Tutorial

Last updated : 2025-02-27 17:31:30

Overview

About Horizontal-to-Vertical Video Transformation

Horizontal-to-vertical video transformation is not merely a rotation but involves identifying the region of interest (ROI) and cropping a video to a certain proportion suitable for playback on mobile devices. Horizontal-to-vertical video transformation enables batch generation of short videos and allows existing horizontal video resources to be converted into vertical video resources.



Intelligent cropping is performed by following the ROI (typically the location of the ball in sports videos) when the video is converted into a vertical one.

Input and Output Formats

The input video files support the following formats:

Encoding standards: MPEG, H.264, and H.265.

Container formats: .mp4, .avi, .mkv, .mov, and .mpg.

The output video files are uniformly encoded in H.264 and formatted in .mp4. You can preview videos using the Google Chrome browser. If you require transcoding and remuxing of formats, you can process it locally or use the audio/video transcoding feature provided by Media Processing Service (MPS).

Integration Method 1: Initiating a Task via API

1. Calling an API

You can directly initiate a POST request to Tencent Cloud. The API request domain name is `mps.tencentcloudapi.com`. Call the [MPS API](#), select **AiAnalysisTask**, and set Definition to **28 (preset horizontal-to-vertical video transformation template)**. `ExtendedParameter` is an extended parameter, and its value is an **escaped JSON string**. For specific parameter meanings, see [Extended Parameter Description](#) below.

AiAnalysisTaskInput

AI video intelligent analysis input parameter types

Used by actions: `CreateSchedule`, `CreateWorkflow`, `DescribeTaskDetail`, `DescribeWorkflows`, `ModifySchedule`, `ParseNotification`, `ProcessLiveStream`, `ProcessMedia`, `ResetWorkflow`.

Name	Type	Required	Description
Definition	Integer	Yes	Video content analysis template ID.
ExtendedParameter	String	No	An extended parameter, whose value is a stringified JSON. Note: This parameter is for customers with special requirements. It needs to be customized offline. Note: This field may return null, indicating that no valid values can be obtained.

Request Example

Note:

Currently, the horizontal-to-vertical video transformation feature supports two input sources: [Tencent Cloud Object Storage \(COS\)](#) and URL download addresses. AWS S3 is currently not supported.

```
{
  "Action": "ProcessMedia",
  "Version": "2019-06-12",
  "InputInfo": {
    "Type": "URL",
    "UrlInputInfo": {
      "Url": "https://..." // Replace it with the URL of the video that needs
    }
  },
  "OutputStorage": {
    "CosOutputStorage": {
      "Bucket": "BucketName",
      "Region": "BucketRegion"
    },
    "Type": "COS"
  },
  "OutputDir": "/mycos/htv_test/result/",
  "AiAnalysisTask": {
```

```
"Definition": 28, // Preset horizontal-to-vertical video transformation tem
"ExtendedParameter": "{\"htv\": {\"AlgorithmType\": 1}}\"
}
"TaskNotifyConfig": {
  "NotifyType": "URL",
  "NotifyUrl": "http://callback_url"
}
}
```

2. API Explorer Quick Verification

You can perform quick verification through [API Explorer](#). After filling in relevant parameter information on the page, you can initiate an online API call.

Cloud API

API Explorer

API Doctor

Media Processing Service (MPS)

ProcessMedia mps 2019-06-12

Input Parameters

Region

Parameter input method: Form, JSON, Recommended parameters

InputInfo

Type: URL

CosInputInfo

Uri: //mycos-123456.cos.ap-nanjing.myqcloud.com/MPS/input/demo.mp

OutputStorage (Optional)

Type: COS

CosOutputStorage

Bucket: mycos-123456

Region: ap-nanjing

OutputDir (Optional): /output/

ScheduleId (Optional): integer

MediaProcessTask (Optional)

AIContentReviewTask (Optional)

AIAnalysisTask (Optional)

Definition: 28

ExtendedParameter

{\"htv\": {\"AlgorithmType\": 2, \"FaceDetect\": 1, \"FaceD

AIRecognitionTask (Optional)

AIQualityControlTask (Optional)

TaskNotifyConfig (Optional)

NotifyType: URL

NotifyMode: string

NotifyUrl: http://www.qq.com/callback

CmqModel

Online invocation

Sample Code

Sample CLI

Sample Signature

Param

Note that sending requests via the API is equivalent to real operations

Click "Send Request" below to send the parameters entered on the left to the corresponding A

Send request

Video file address to be processed

Output file save path

ID of the Horizontal to Vertical template

Extended parameter for Horizontal to Vertical

Event notification can synchronize the progress and status of your tasks in real time

Note:

API Explorer will automatically convert the format. You only need to enter the corresponding ExtendedParameter in JSON format without converting it to a string. If calling the API directly, you need to escape the JSON string.

3. Extended Parameter Description

Extended parameters can enable specific capabilities. Since the MPS API cannot parse extended parameters, the value of `ExtendedParameter` is a **serialized JSON string**. The `ExtendedParameter` for horizontal-to-vertical video transformation should be placed under `htv`. Below is an example of a JSON before serialization. Input the escaped parameters when using the API:

```
{
  "htv": {
    "AlgorithmType": 3,
    "Ratio": "16:9",
    "ModelName": "sport",
    "FaceDetect": 1,
    "FaceDetectConfig": {
      "FaceScoreThd": 80,
      "FaceAccuracy": "Efficiency",
      "FallbackConfig": {
        "NoFaceDetect": "Scale",
        "DoubleFace": "SplitScreenVertical",
      },
    },
    "OutputPattern": "{sessionId}-{timestamp}"
    "BlurWeight": 41,
    "SmoothWeight": 0.75, //
  }
}
// Before escaping (usable in API Explorer): {"htv": {"AlgorithmType": 3, "FaceDet
// After escaping (required when the API is called directly): {"\"htv\": {\"Algor
```

Name	Type	Description
AlgorithmType	Integer	Designated Algorithm Categories: 1: a general model with a relatively rapid processing speed. 2: supports a variety of models and is tailored for optimization. 3: Utilizes a precise face detection algorithm; when two faces are detected, they are displayed in a split-screen format, with efforts made to center the faces as much as possible. 5: Scale the video directly and center it on the portrait screen. Use an image processed with a frosted glass effect as the background.
Ratio	String	Video aspect ratio, which is a string and parsed internally. If parsing fails, the default value of 9:16 is used for cropping (for example, "9:16" indicates converting to a video with an aspect ratio of 9:16, taking the original video's height).
FaceDetectConfig	Object	Face detection configurations.
OutputPattern	String	For customizing the filename, <code>timestamp</code> and <code>sessionId</code> serve

		<p>as available substitution parameters.</p> <p>For instance, <code>"htv-{{sessionId}}-{{timestamp}}"</code> would result in the output file being named <code>"htv-xxxx-202412250000"</code>, where <code>"xxxx"</code> represents the actual sessionId of the task.</p> <p>If not specified, the default output filename will be <code>"htv-{{sessionId}}"</code>.</p>
BlurWeight	Integer	<p>Blurring parameter: the higher the value, the more pronounced the blurring effect. Excessively high parameter values may impede processing speed.</p>
SmoothWeight	Float	<p>A floating-point number between 0 and 1, which controls the parameter for smoothing speed. The smaller the value, the faster the camera moves.</p>

FaceDetectConfig

Name	Type	Description
FaceScoreThd	Integer	The recognition threshold for the face detection algorithm. A face is considered valid only when the recognition score exceeds this threshold.
FaceAccuracy	String	Optional, the number of executions for the face detection algorithm, defaults to "Balance". Other selectable options include "Efficiency" and "Precision".
FallbackConfig	Object	The fallback strategy for face detection includes scenarios with "NoFaceDetect" (no faces detected) and "DoubleFace" (two faces detected).

FallbackConfig

Name	Type	Description
NoFaceDetect	String	Options: "Scale", "ScaleWithoutBlur" (default).
DoubleFace	String	Options: "Scale", "ScaleWithoutBlur", "SplitScreenVertical" (default).

Scale: Center the frame through scaling, and replace the background with an image treated with a frosted glass effect.

ScaleWithoutBlur: Center the frame through scaling, and replace the background with pure black.

SplitScreenVertical: The default processing logic for dual faces involves splitting the screen vertically, with each face centered in the top and bottom areas respectively.

4. Querying Task Results

Task callbacks: When initiating an MPS task using [ProcessMedia](#), you can set callback information through the TaskNotifyConfig parameter. After the task is completed, the task results will be called back through the configured callback information. You can parse the event notification results through [ParseNotification](#). The [related data structures](#) listed below are provided for reference.

Query via the [DescribeTaskDetail](#) API:

For tasks started with the API and a template as described in **Integration Method 1** above, use the `TaskId` from [ProcessMedia](#) (for example: 24000022-WorkflowTask-b20a8exxxxxx1tt110253) to parse

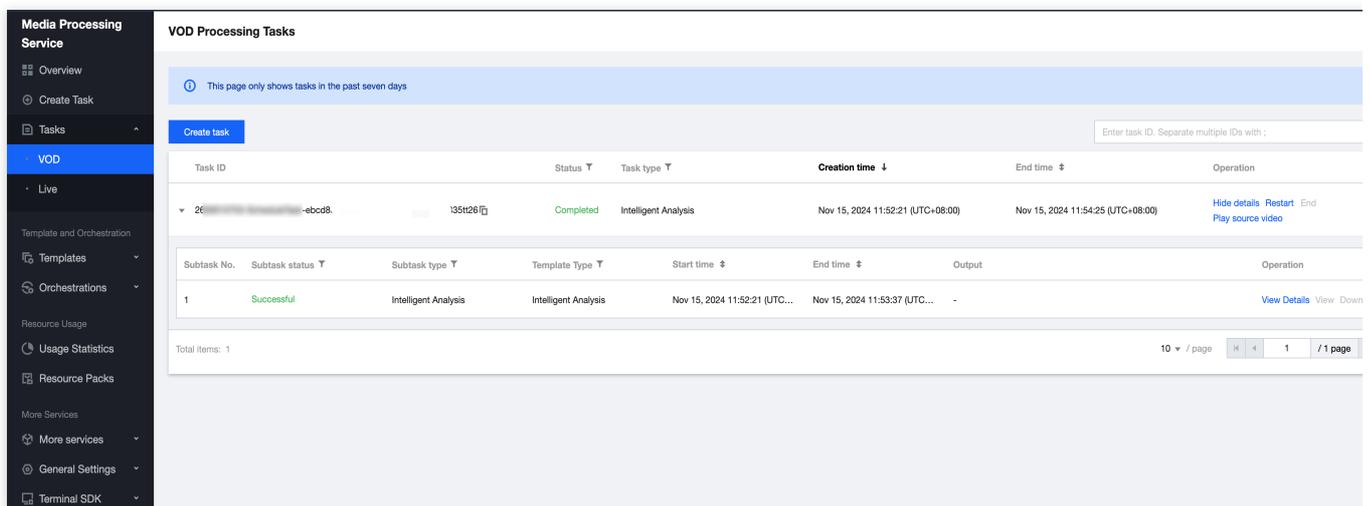
`AiAnalysisResultSet` in `WorkflowTask`. The [related data structures](#) listed below are provided for reference.

For tasks started via [ProcessMedia](#) without a template but with a `ScheduleId` (the subsequent section on [automatic task triggering](#) explains how to create a schedule), the returned `TaskId` will include "ScheduleTask" (e.g. 24000022-ScheduleTask-774f101xxxxxx1tt110253). In this scenario, use the `TaskId` to parse

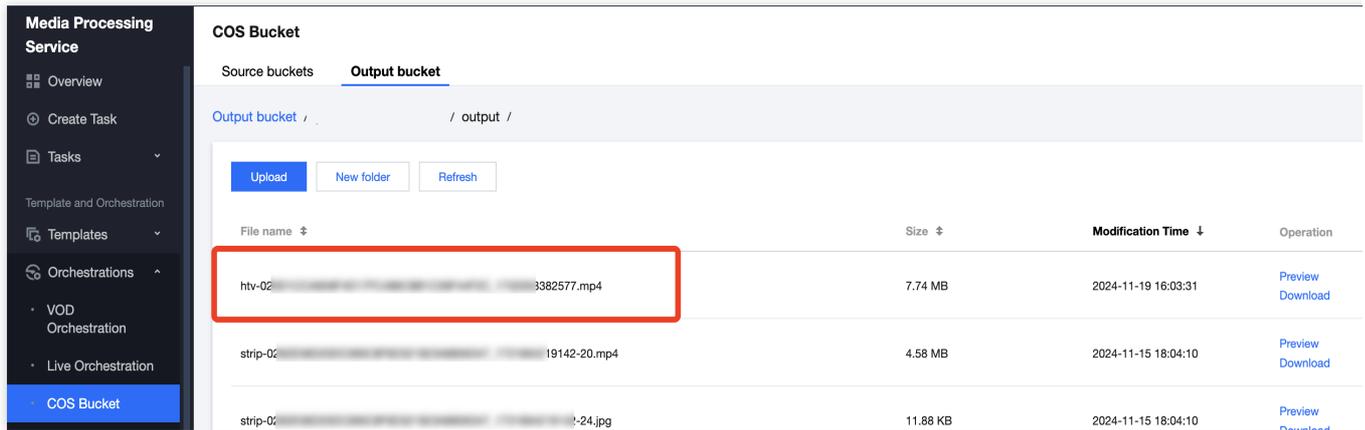
`ActivityResultSet` in `ScheduleTask`.

For tasks initiated from the console, as described in **Integration Method 2** below, go to [Tasks -> VOD](#) for the task ID and results. You can also parse the `ActivityResultSet` in `ScheduleTask` in the [DescribeTaskDetail](#) API to obtain the task results.

Query via console: Log in to the console and go to [VOD Processing Tasks](#), where the newly initiated tasks are displayed in the task list.



When the subtask status is "Successful", you can go to **COS Bucket > Output Bucket**, find your output directory, and locate the files starting with htv- in the directory, which are the output videos after horizontal-to-vertical video transformation.



Related Data Structures

AiAnalysisTaskHorizontalToVerticalResult

Horizontal-to-vertical video transformation result type.

Referenced by the following APIs: DescribeTaskDetail and ParseNotification.

Name	Type	Description
Status	String	Task status, including PROCESSING, SUCCESS, and FAIL.
ErrCode	Integer	Error code. 0: Successful; other values: Failed.
Message	String	Error message.
Input	AiAnalysisTaskHorizontalToVerticalInput	Horizontal-to-vertical video transformation task input.
Output	AiAnalysisTaskHorizontalToVerticalOutput	Horizontal-to-vertical video transformation task output. Note: This field may return null, indicating that no valid value is obtained.

AiAnalysisTaskHorizontalToVerticalInput

Horizontal-to-vertical video transformation task input type.

Referenced by the following APIs: DescribeTaskDetail and ParseNotification.

Name	Type	Description
Definition	Integer	Horizontal-to-vertical video transformation template ID.

AiAnalysisTaskHorizontalToVerticalOutput

Horizontal-to-vertical video transformation result information.

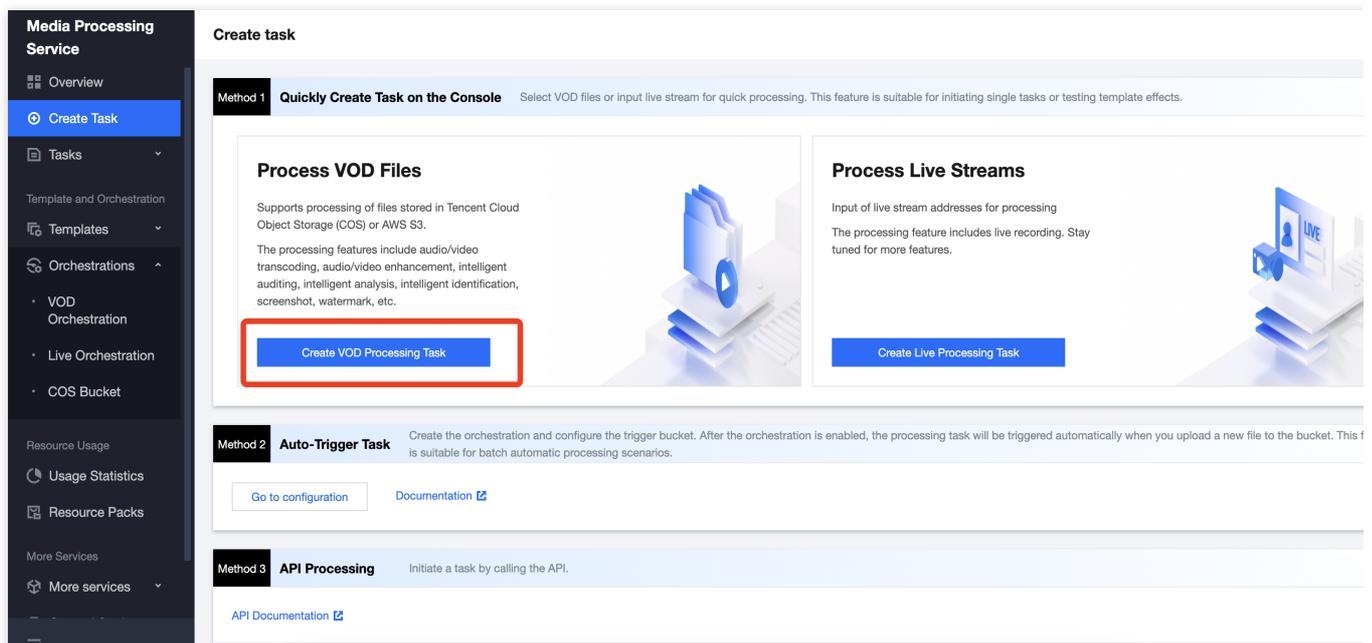
Referenced by the following APIs: DescribeTaskDetail and ParseNotification.

Name	Type	Description
Path	String	Horizontal-to-vertical video transformation list.
OutputStorage	TaskOutputStorage	Storage location of videos after horizontal-to-vertical transformation. Note: This field may return null, indicating that no valid value is obtained.

Integration Method 2: Initiating a Task from Console (Zero Code)

1. Creating a Task

1.1 Log in to the [MPS console](#) and click **Create Task > Create VOD Processing Task**.



1.2 Specify an input video file. Currently, the horizontal-to-vertical video transformation feature supports two input sources: [Tencent Cloud COS](#) and URL download addresses. AWS S3 is currently not supported.

1.3 In the "Process Input File" step, add the **Intelligent Analysis** node.

← Create VOD Processing Task

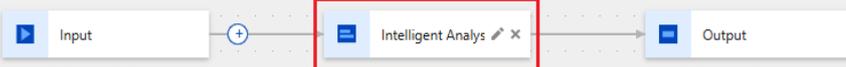
1 Specify Input File

Input File Source Tencent Cloud Object Storage (COS) URL AWS S3

Select Input File

2 Process Input Files

Through the orchestration, MPS feature nodes can be combined, such as enhancing the video before transcoding to form an automatic processing flo



Enable event notifications

3 Specify Output Path

Output Save Path

To specify the output path of a feature node separately, you can click the feature node in step 2 and configure it in More Settings > Customize Output Path.

Advanced Settings

Associate Resource

After the resource is associated, the costs for this task can be allocated based on the tags bound to the resources. To add or modify resources, please go to [Cost Allocation Management](#).

In the intelligent analysis settings drawer that pops up, select the ****preset horizontal-to-vertical video transformation template (template ID: 28)****.

Note:

If you need to enable the horizontal-to-vertical video transformation feature for a custom intelligent analysis template, you can contact us and provide the **template ID**, and Tencent Cloud MPS developers will configure and enable the horizontal-to-vertical video transformation feature for you.

Select template

Intelligent Analysis Template

You can also [create a template](#) and then [refresh](#) this list.

Template name/ID	Analysis Items	Creation time	Update Time	Template Type	Operation
<input type="radio"/> analysis 57374	Intelligent video tagging、Intelligent...	Jun 04, 2024 11:05:40 (UTC+08:00)	Jun 04, 2024 11:05:40 (UTC+08:00)	Custom	View
<input type="radio"/> Presetting-Template28 28	Intelligent landscape-to-portrait	Sep 10, 2024 15:41:13 (UTC+08:00)	Sep 11, 2024 15:35:45 (UTC+08:00)	Preset	View
<input type="radio"/> Presetting-Template27 27	Video segmentation	Oct 29, 2024 10:09:28 (UTC+08:00)	Oct 29, 2024 10:27:11 (UTC+08:00)	Preset	View
<input type="radio"/> Presetting-Template26 26	Highlights	Jul 04, 2024 18:11:14 (UTC+08:00)	Jul 05, 2024 10:11:36 (UTC+08:00)	Preset	View
<input type="radio"/> Presetting-Template24 24	Intelligent removal (watermark removal)	Dec 07, 2023 10:06:55 (UTC+08:00)	Oct 14, 2024 10:43:10 (UTC+08:00)	Preset	View
<input type="radio"/> Presetting-Template22 22	Large model video summary	Dec 06, 2023 20:24:23 (UTC+08:00)	Dec 07, 2023 10:31:12 (UTC+08:00)	Preset	View
<input type="radio"/> Presetting Template20 20	Intelligent categorization、...	Jan 01, 2017 00:00:00 (UTC+08:00)	Jan 18, 2021 11:20:44 (UTC+08:00)	Preset	View
<input type="radio"/> Presetting Template10 10	Intelligent categorization、...	Jan 01, 2017 00:00:00 (UTC+08:00)	Jan 18, 2021 11:20:44 (UTC+08:00)	Preset	View

Total items: 8

10 / page

Navigation controls: back, forward, page 1 / 1 page, refresh

1.4 After specifying the save path for the output video, click **Create** to initiate the task.

Create VOD Processing Task

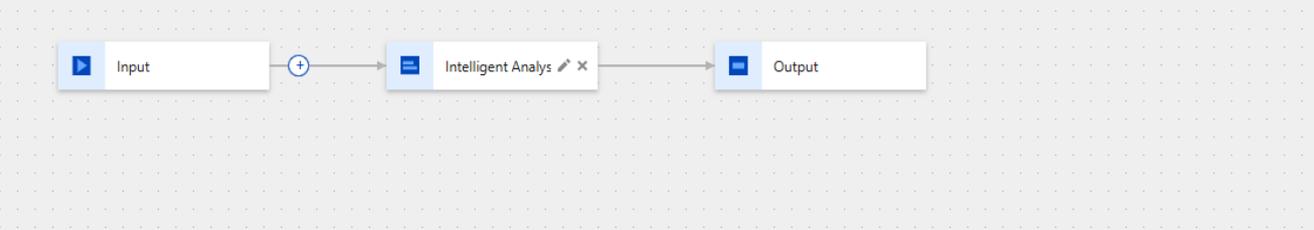
1 Specify Input File

Input File Source Tencent Cloud Object Storage (COS) URL AWS S3

Select Input File *

2 Process Input Files

Through the orchestration, MPS feature nodes can be combined, such as enhancing the video before transcoding to form an automatic processi



```
graph LR; Input[Input] --> IA[Intelligent Analysis]; IA --> Output[Output];
```

Enable event notifications

3 Specify Output Path

Output Save Path *

To specify the output path of a feature node separately, you can click the feature node in step 2 and configure it in More Settings > Customize Output Path.

Advanced Settings

Associate Resource

After the resource is associated, the costs for this task can be allocated based on the tags bound to the resources. To add or modify resources, please go to [Cost Allocation Management](#).

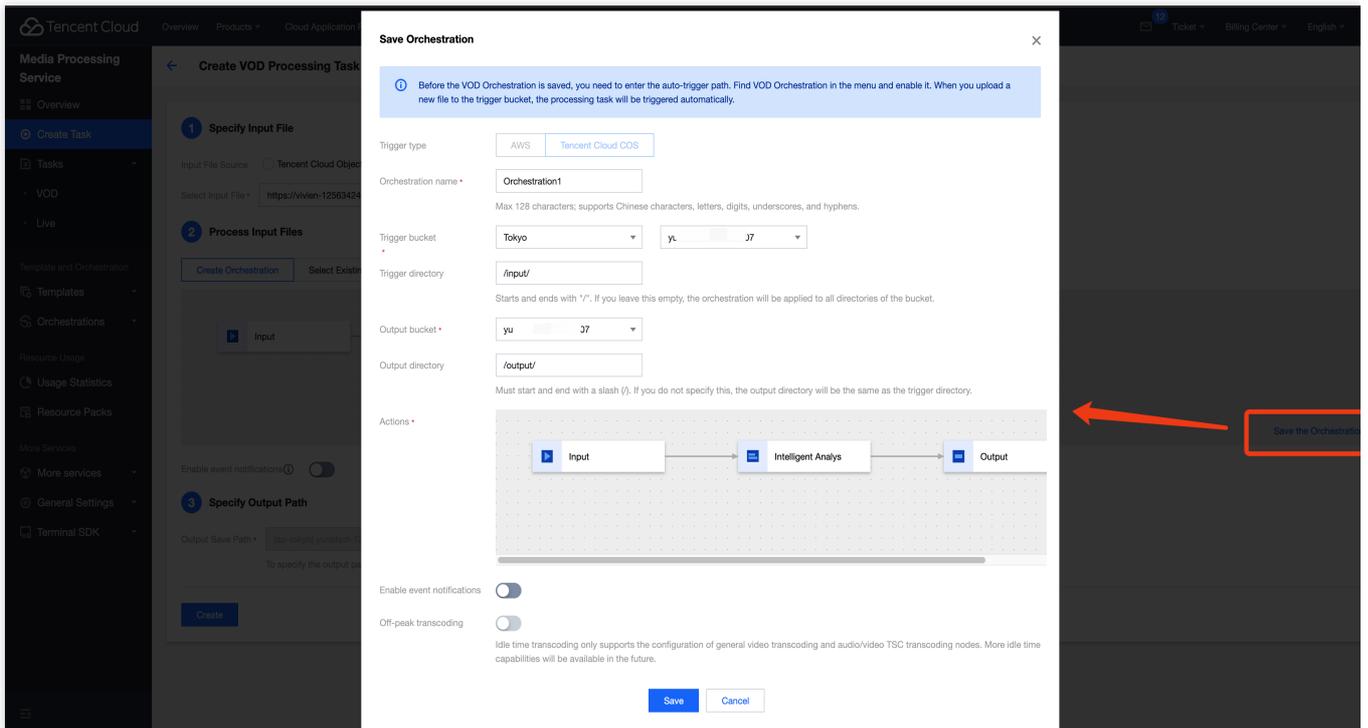
2. Querying Task Results

Refer to the above [Querying Task Results](#).

3. Automatically Triggering a Task (Optional Capability)

If you require automatically performing horizontal-to-vertical video transformation according to the preset parameters after a video file is uploaded in the COS bucket, you can:

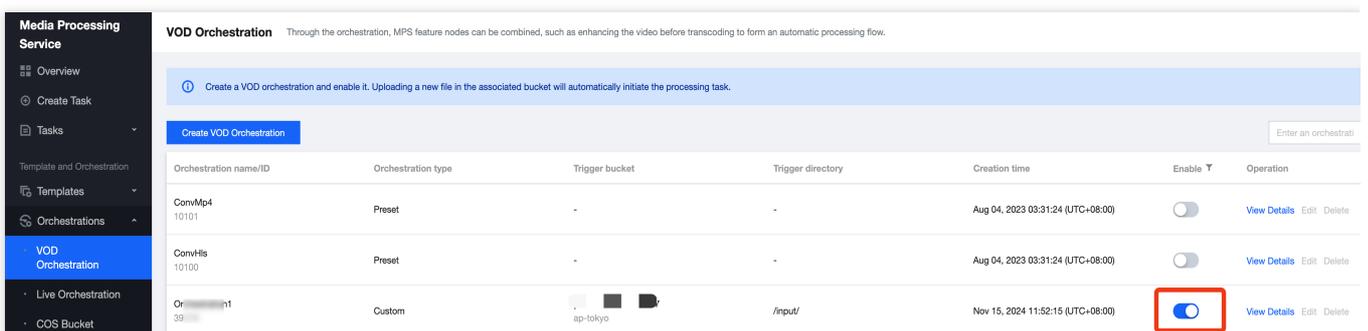
3.1 When creating a task, click **Save The Orchestration**, and configure parameters such as Trigger Bucket and Trigger Directory in the pop-up window.



3.2 Go to the **VOD Orchestration** list, find the new orchestration, and turn on the switch at **Enable**. Subsequently, any new video files added to the trigger directory will automatically initiate tasks according to the preset process and parameters of the orchestration, and the processed video files will be saved to the output path configured in the orchestration.

Note:

It takes 3-5 minutes for the orchestration to take effect after being enabled.



Media Quality Inspection Integration

Last updated : 2025-02-06 11:37:56

Scenario 1: VOD File Quality Inspection

Method 1: Initiating a Task in the Console

Step 1: Creating VOD Orchestration

1. Log in to the MPS console, click [Create VOD Orchestration](#), and add a Media Quality Inspection node in the Actions field.

←

Create orchestration

Trigger type AWS Tencent Cloud COS

Orchestration name *
Max 128 characters; supports Chinese characters, letters, digits, underscores, and hyphens.

Trigger bucket * Guangzhou te

Trigger directory
Starts and ends with "/". If you leave this empty, the orchestration will be applied to all directories of the bucket.

Output bucket * t

Output directory
Must start and end with a slash (/). If you do not specify this, the output directory will be the same as the trigger directory.

Enable event notifications

Off-peak transcoding
Currently, off-peak transcoding is only supported for audio/video transcoding nodes. More will be supported in the future.

Actions *

Click to add a feature node

▶
Input

+

▶
Output

- Audio/Video Transcoding
- Audio/Video Enhancement
- Intelligent Analysis
- Intelligent Identification
- Intelligent Auditing
- Media Quality Inspection
- Screenshot

Advanced Settings

Associate Resource Select associated resources. ▼
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](#).

Create
Cancel

2. After the node is added, a new page pops up. Select a predefined system template or create a custom template based on the actual business scenario on this page. Then, save the settings.

Media Quality Inspection Settings [Billing Modes](#)

[Select template](#) [Create Custom Template](#)

Select template ▾ 30-Quality Scoring [Select](#)

Quality Score	Enable No Reference Score
Quality Detection	Disabled
Format Diagnosis	Disabled

[Save settings](#) [Cancel](#)

3. Click **Create** at the bottom of the page after node configuration is completed to complete orchestration creation.
4. Return to the VOD orchestration list after the orchestration is created, find the newly created orchestration in the list, and click the switch to enable it. The orchestration will take effect in about 3-5 minutes after it is enabled.

VOD Orchestration Through the orchestration, MPS feature nodes can be combined, such as enhancing the video before transcoding to form an automatic processing flow.

✔ You have enabled this orchestration. It will take effect in 3-5 minutes.

❗ Create a VOD orchestration and enable it. Uploading a new file in the associated bucket will automatically initiate the processing task.

Create VOD Orchestration

Orchestration name/ID	Orchestration type	Trigger bucket	Trigger directory	Creation time	Enable	Operation
ConvMultiHls 10102	Preset	-	-	Sep 20, 2024 03:31:24 (UTC+08:00)	<input type="checkbox"/>	View Details Edit Delete
ConvMp4 10101	Preset	-	-	Aug 04, 2023 03:31:24 (UTC+08:00)	<input type="checkbox"/>	View Details Edit Delete
ConvHls 10100	Preset	-	-	Aug 04, 2023 03:31:24 (UTC+08:00)	<input type="checkbox"/>	View Details Edit Delete
vod 43016	Custom	te b: 1: ap-guangzhou	/	Jan 15, 2025 10:31:31 (UTC+08:00)	<input checked="" type="checkbox"/>	View Details Edit Delete

Total items: 4 10 / page / 1 page

Step 2: Initiating a VOD Quality Inspection Task

Upload VOD files requiring quality inspection to the trigger directory specified in the orchestration configuration after the orchestration takes effect. The uploaded files will be processed for quality inspection according to the configured node and template of the orchestration.

Step 3: Managing VOD Quality Inspection Tasks

Quality inspection tasks can be viewed on the [VOD Processing Tasks](#) page.

Task ID	Status	Task type	Creation time	End time	Operation																
21	Completed	Media Quality Inspection	Feb 05, 2025 15:45:44 (UTC+08:00)	Feb 05, 2025 15:46:12 (UTC+08:00)	Hide details Restart End Play source																
<table border="1"> <thead> <tr> <th>Subtask No.</th> <th>Subtask status</th> <th>Subtask type</th> <th>Template Type</th> <th>Start time</th> <th>End time</th> <th>Output</th> <th>Operation</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Successful</td> <td>Media Quality Inspection</td> <td>Media Quality Inspection</td> <td>Feb 05, 2025 15:45:44 (UTC+08:00)</td> <td>Feb 05, 2025 15:46:01 (UTC+08:00)</td> <td>-</td> <td>View Details View Down</td> </tr> </tbody> </table>						Subtask No.	Subtask status	Subtask type	Template Type	Start time	End time	Output	Operation	1	Successful	Media Quality Inspection	Media Quality Inspection	Feb 05, 2025 15:45:44 (UTC+08:00)	Feb 05, 2025 15:46:01 (UTC+08:00)	-	View Details View Down
Subtask No.	Subtask status	Subtask type	Template Type	Start time	End time	Output	Operation														
1	Successful	Media Quality Inspection	Media Quality Inspection	Feb 05, 2025 15:45:44 (UTC+08:00)	Feb 05, 2025 15:46:01 (UTC+08:00)	-	View Details View Down														
26	Completed	Audio/Video Transcoding	Feb 05, 2025 08:08:08 (UTC+08:00)	Feb 05, 2025 08:08:36 (UTC+08:00)	View details Restart End Play source																
26	Completed	Audio/Video Transcoding	Feb 05, 2025 08:08:06 (UTC+08:00)	Feb 05, 2025 08:08:18 (UTC+08:00)	View details Restart End Play source																
26	Completed	Audio/Video Transcoding	Feb 05, 2025 08:07:01 (UTC+08:00)	Feb 05, 2025 08:07:29 (UTC+08:00)	View details Restart End Play source																
26	Completed	Audio/Video Transcoding	Feb 05, 2025 08:07:01 (UTC+08:00)	Feb 05, 2025 08:07:13 (UTC+08:00)	View details Restart End Play source																
26	Completed	Audio/Video Transcoding	Feb 05, 2025 08:07:01 (UTC+08:00)	Feb 05, 2025 08:07:29 (UTC+08:00)	View details Restart End Play source																
26	Completed	Audio/Video Transcoding	Feb 05, 2025 08:07:00 (UTC+08:00)	Feb 05, 2025 08:07:29 (UTC+08:00)	View details Restart End Play source																
26	Completed	Audio/Video Transcoding	Feb 05, 2025 08:07:00 (UTC+08:00)	Feb 05, 2025 08:07:13 (UTC+08:00)	View details Restart End Play source																
26	Completed	Audio/Video Transcoding	Feb 05, 2025 08:07:00 (UTC+08:00)	Feb 05, 2025 08:15:29 (UTC+08:00)	View details Restart End Play source																
26	Completed	Audio/Video Transcoding	Feb 05, 2025 08:06:53 (UTC+08:00)	Feb 05, 2025 08:07:06 (UTC+08:00)	View details Restart End Play source																

Total items: 2614 10 / page [1](#) / 262 pages

Method 2: Calling the API for Processing

Step 1: Initiating a VOD Quality Inspection Task

To initiate a processing task for video URLs or media files in COS, see [ProcessMedia](#) in API Documentation.

Request example:

```
POST / HTTP/1.1
Host: mps.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ProcessMedia

{
  "InputInfo": {
    "Type": "COS",
    "CosInputInfo": {
      "Bucket": "test-<appid>",
      "Region": "ap-shanghai",
      "Object": "/video/test.mp4"
    }
  },
  "AiQualityControlTask": {
    "Definition": 10
  }
}
```

Example description:

1. Type can be set to COS or URL. Fill in the source file path based on the Type value.
2. Definition indicates the ID of the template configured in the task. Templates are created by calling `CreateQualityControlTemplate`.

Response example:

```
}
  "Response": {
    "TaskId": "26000002-ScheduleTask-8c0bb3a13e10462fc405262c623aeff4tt7"
  }
}
```

Example description: TaskId indicates the unique ID of the task, which is used to query and manage tasks.

Step 2: Querying the Task Details

You can query the execution status and detailed result of a task by task ID. For more information, see [DescribeTaskDetail](#) in API Documentation.

Request example:

```
POST / HTTP/1.1
Host: mps.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeTaskDetail
```

```
{
  "TaskId": "26000002-ScheduleTask-8c0bb3a13e10462fc405262c623aeff4tt7"
}
```

Response example:

```
}
  "Response": {
    "WorkflowTask": {
      "Output": {
        "QualityControlResultSet": [
          {
            "Type": "BackWhiteEdge",
            "QualityControlItems": [
              {
                "Confidence": 100,
                "StartTimeOffset": 12,
                "EndTimeOffset": 12
              }
            ]
          }
        ]
      }
    }
  }
}
```

```
    ],
    "ContainerDiagnoseResultSet": [
      {
        "Category": "StreamAbnormalCharacteristics",
        "DateTimeSet": [],
        "SeverityLevel": "Warning",
        "TimestampSet": [
          11.006
        ],
        "Type": "AudioDuplicatedFrame"
      }
    ],
    "QualityEvaluationScore": 68
  }
}
```

Scenario 2: Live Stream Quality Inspection

Method 1: Initiating a Task in the Console

Step 1: Creating Live Stream Orchestration

1. Log in to the MPS console, click [Create Live Orchestration](#), and add the Media Quality Inspection node in the Actions field.

Create Live Orchestration

Orchestration name *
Max 128 characters; supports Chinese characters, letters, digits, underscores, and hyphens.

Output bucket *

Output directory
Must start and end with /

Actions *

Click to add a feature node

```
graph LR; Input[Input] --> Output[Output]; LR[Live recording]; MQI[Media Quality Inspection];
```

Enable event notifications

2. After the node is added, a new page pops up. Select a predefined system template or create a custom template based on the actual business scenario on this page. Then, save the settings.

Media Quality Inspection Settings [Billing Modes](#)

[Select template](#) [Create Custom Template](#)

Select template * 40-Picture Quality Detection [Select](#)

Quality Score	Disabled
Quality Detection	Mosaic Detection, Screen Glitch Detection, Blur Detection, Jitter Detection, Noise Detection, QR Code Detection, Barcode Detection, Mini Program Code Detection, Solid Color Screen Detection, Black and White Edge Detection, Low Light Detection, Overexposure Detection, Mute Detection, Bass Detection, Audio Distortion Detection
Format Diagnosis	Disabled

[Save settings](#) [Cancel](#)

3. Click **Create** at the bottom of the page after node configuration is completed to complete orchestration creation.
4. Return to the live stream orchestration list after the orchestration is created, and find the newly created orchestration in the list.

Live Orchestration

Create Live Orchestration

Orchestration name/ID	Output bucket	Creation time	Operation
live 20858	ap-guangzhou	Jan 15, 2025 10:36:11 (UTC+08:00)	View Details Edit Delete

Total items: 1 10 / page / 1 page

Step 2: Creating a Live Stream Quality Inspection Task

Go to the [Live Processing Tasks](#) page, click **Create task**, enter the live stream address to be processed on the task creation page, select the live stream orchestration created in the previous step, complete other information as needed, and click **Create** to complete the creation.

Create Live Processing Task

1 Specify Input File

Live stream address *

2 Process Input Files

Create Orchestration [Select Existing Orchestration](#)

Select Existing Orchestration *

Enable event notifications

3 Specify Output Path

Output Save Path *

The priority order of output paths is the customized output path of each feature node in orchestration > this output path > the output path configured in orchestration. Therefore, if this path is different from the output path configured in the selected orchestration, this path will be used as the default output path for this task. If a feature node in the orchestration has a custom output path, the output file of the node will be saved separately in the custom path.

Step 3: Managing Live Stream Quality Inspection Tasks

Quality inspection tasks can be viewed on the [Live Processing Tasks](#) page.

Method 2: Calling the API for Processing

Step 1: Initiating a Live Stream Quality Inspection Task

To initiate a live stream processing task, see [ProcessLiveStream](#) in API Documentation.

Request example:

```
POST / HTTP/1.1
Host: mps.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ProcessLiveStream

{
  "Url": "rtmp://tlivecloud.com/live/test",
  "TaskNotifyConfig": {
    "NotifyType": "URL",
    "NotifyUrl": "http://tlivecloud.com/callback"
  },
  "AiQualityControlTask": {
    "Definition": 10
  }
}
```

Example description:

1. Url indicates the live stream address.
2. TaskNotifyConfig indicates the callback service address. When an issue is detected in the video stream, the issue information will be sent to this address in real time.

Response example:

```
}
  "Response": {
    "TaskId": "24000002-live-procedure-813dc41e6fdc22dcf24aa6e9c61cp92"
  }
}
```

Example description: TaskId indicates the unique ID of the task, which is used to query and manage tasks.

Step 2: Parsing Live Stream Notifications and Performing Callback for Issues

After a message is received, the content of an MPS live stream processing event notification is parsed from the msgBody field in the message. For details, see [ParseLiveStreamProcessNotification](#).

If TaskNotifyConfig is set when a live stream quality inspection task is initiated, the information on detected live stream issues detected will be sent to the configured address in real time.

Callback request example:

```
POST / HTTP/1.1
Content-Type: application/json
```

```
{
  "NotificationType": "AiQualityControlResult",
  "TaskId": "24000002-procedure-live-813dc41e6fdc22dcf24aa6e9c61cp92",
  "AiQualityControlResultInfo": {
    "QualityControlResultSet": [
      {
        "Type": "BackWhiteEdge",
        "QualityControlItems": [
          {
            "Confidence": 100,
            "StartTimeOffset": 12,
            "EndTimeOffset": 12
          }
        ]
      }
    ],
    "DiagnoseResultSet": [
      {
        "Category": "StreamStatusException",
        "Type": "StreamOpenFailed",
        "Timestamp": 0,
        "Description": "Open url failed.",
        "DateTime": "2023-11-06T06:37:28Z",
        "SeverityLevel": "Fatal"
      }
    ]
  }
}
```

Example description: QualityControlResultSet indicates the information on issues detected through content quality inspections. DiagnoseResultSet indicates the information on issues detected through format diagnosis.

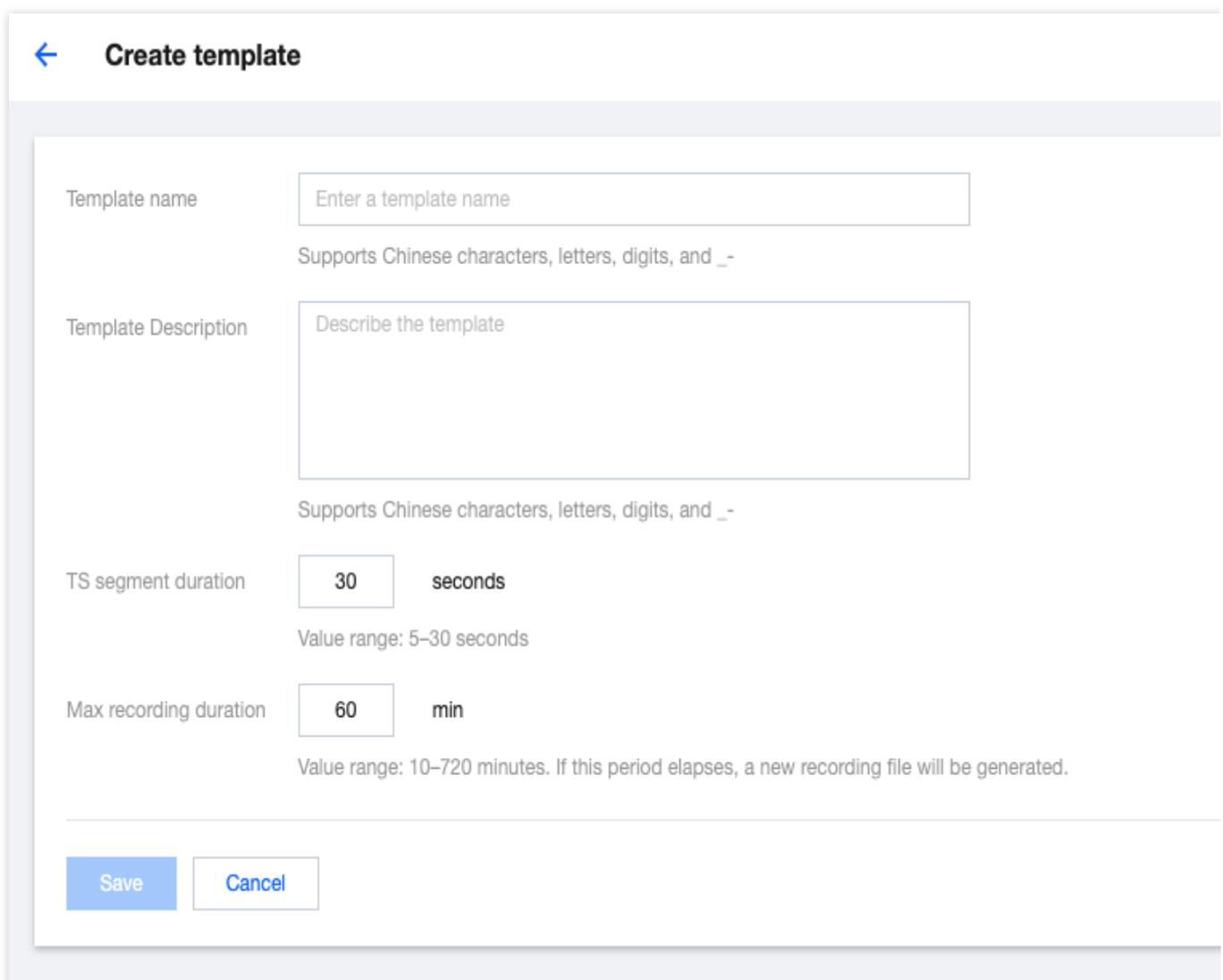
MPS Live Stream Recording integration

Last updated : 2023-10-09 12:45:56

With Media Processing Service (MPS), you can record live streaming content by URL.

Directions

1. On the [Live Recording Templates](#) page, create a new live recording template. The console provides a default recording template.



The screenshot shows a 'Create template' form with the following fields and options:

- Template name:** A text input field with the placeholder 'Enter a template name'. Below it, a note states: 'Supports Chinese characters, letters, digits, and _-'. The field is currently empty.
- Template Description:** A larger text input field with the placeholder 'Describe the template'. Below it, a note states: 'Supports Chinese characters, letters, digits, and _-'. The field is currently empty.
- TS segment duration:** A numeric input field containing '30' and a unit dropdown menu set to 'seconds'. Below it, a note states: 'Value range: 5-30 seconds'.
- Max recording duration:** A numeric input field containing '60' and a unit dropdown menu set to 'min'. Below it, a note states: 'Value range: 10-720 minutes. If this period elapses, a new recording file will be generated.'

At the bottom of the form, there are two buttons: a blue 'Save' button and a white 'Cancel' button with a blue border.

2. On the [Live Schemes](#) page, create a new scheme. On this page, you need to select a COS bucket and specify a directory for the output. In actions diagram below, click and add a "Live Recording" step.

Create scheme

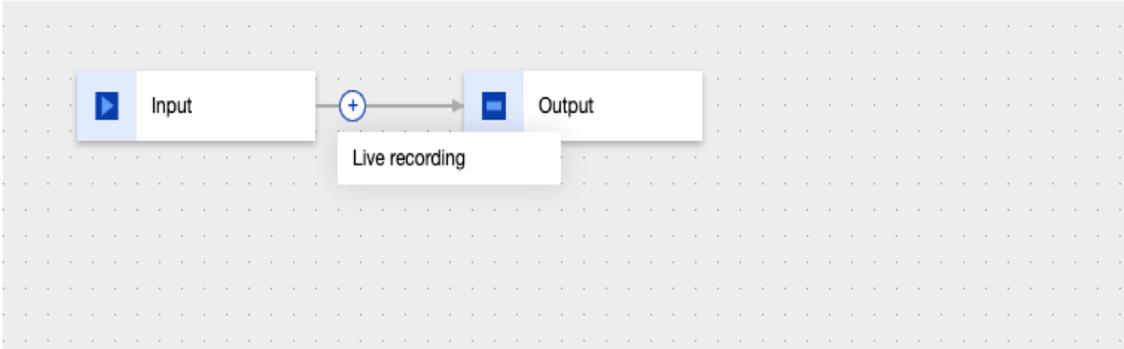
Scheme name
Max 128 characters; supports Chinese characters, letters, digits, underscores, and hyphens.

Output bucket
You don't have any buckets yet. Please go to the [COS console](#) to create one.

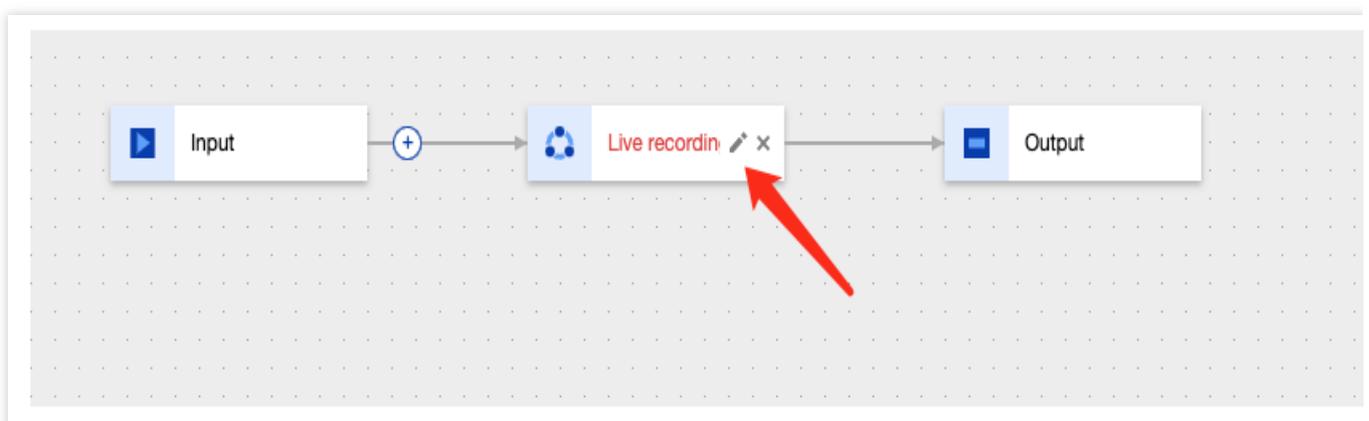
Output Directory
Must start and end with /

Enable event notifications

Actions



3. Click the edit button on the right side of the Live Recording step to perform detailed configuration.



4. In the detailed configuration:

- (1) Select the recording template;
- (2) Select the output bucket;
- (3) Edit the output path. The path of the output file, which can be relative or absolute.

Live recording

Recording template

Template Type: Live recording

Recording template: [Select](#)

Recording output

Output bucket: [Select](#)

If no bucket is selected here, the output bucket specified for the scheme will be used.

Output Path: [Select](#)

The path of the output file, which can be relative or absolute. The default is the relative path {taskId}/{rand}/{streamId}_record_{definition}.m3u8.
For the meaning of each field, see [Filename Variable](#).

[Save](#) [Cancel](#)

Note :

Please note that removing the random field {rand} from the path may cause a file to be overwritten by a different file with identical field values.

5. After completing the above information, click "Create" to establish a live scheme.

6. Go to [Live tasks](#) management page and create a new task. Enter the live streaming address that needs to be recorded and select the scheme. Click "Create Task".

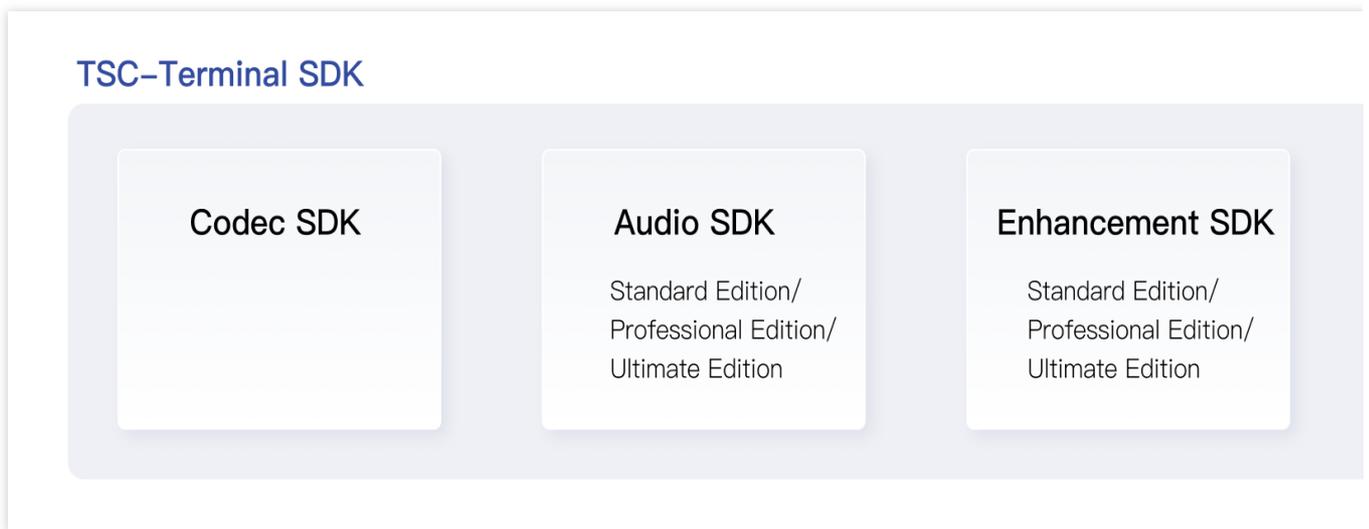
Note :

Please make sure that the live streaming address is filled correctly. If the live streaming fails to be pulled, it will be retried 3 times. If the live streaming still cannot be obtained, the recording task will fail.

Terminal SDK integration

Last updated : 2024-10-15 12:06:40

The terminal SDK is a suite of audio and video terminal product capabilities launched by Tencent Cloud. It encompasses three types of SDKs for video encoding, audio enhancement, and video enhancement. Tailored to meet diverse customer needs, it supports access from multiple terminals such as mobile, web, and PC.



Terminal Video Codec SDK

Tencent's Top Speed Codec (TSC) terminal video encoder is designed for scenarios requiring low computational power, low latency, and high-quality image on the terminal side. Compared with hardware encoding, its advantages include:

1. Stable, reliable, and quick to start.
2. At the same quality level, it saves bitrate, enhances transmission stability, reduces downlink distribution bandwidth, and saves on storage costs.
3. At the same bitrate, it improves image quality and enhances user experience.
4. A rich set of features meets diverse business needs, such as using Regions of Interest (ROI) encoding to improve the image quality in the face region and dynamically adjusting encoding configuration to adapt to network fluctuations.

For details, see [TSC Terminal Video Codec SDK](#).

Terminal Audio SDK

The client audio SDK provides audio encoding and enhancement capabilities. It achieves effects including adaptive noise suppression, acoustic echo cancellation, and automatic gain control, significantly improving audio quality by eliminating echo and noise.

For details, see [TSC Terminal Audio SDK](#).

Terminal Enhancement SDK

The client enhancement SDK, based on efficient image processing algorithms and AI model inference capabilities, achieves terminal video super-resolution, image quality enhancement, frame interpolation, and other features.

For details, see [TSC Terminal Enhancement SDK](#).

TSC Terminal Video Codec SDK

Product Overview

Compared with Video on Demand (VOD) and Cloud Streaming Services (CSS) encoding, terminal-side encoding requires different solutions.

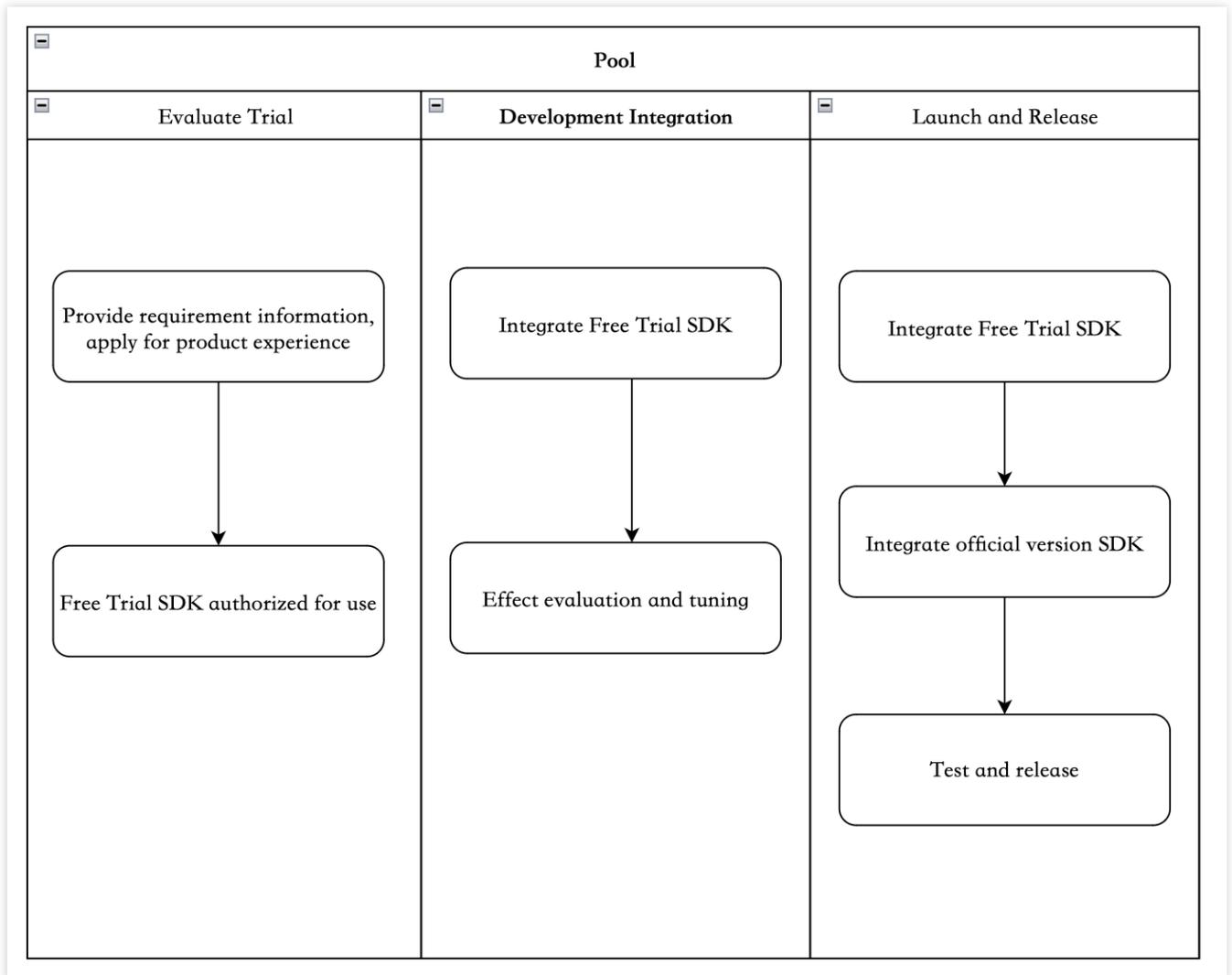
Encoding Mode	VOD	CSS	Terminal-side Codec
Typical Business	WeTV, video account, and other mainstream on-demand services	Video account live streaming, Tencent sports live streaming, and other mainstream live streaming services	VooV Meeting, WeChat video call, and 5G remote control services
Latency Requirements	Pursues an extreme compression rate, with no latency requirements.	Pursues a high compression rate, allowing second-level latency.	Pursues a high compression rate while requiring zero latency.
Real-Time Requirements	Pursues an extreme compression rate, with no real-time requirements.	Allows multi-frame average real-time under multi-threading.	Requires real-time encoding under single-threading.
Network Condition Constraints	Encoding process is unrelated to network status, with fixed encoding configuration.	Encoding process is unrelated to network status, with fixed encoding configuration.	Encoding process is strongly related to network status, requiring dynamic adjustment of encoding configuration based on network status.

Scenario Characteristics	1 -> N, no interaction	1 -> N, no interaction	N <-> N, strong interaction
Solution	Server-side encoding	Server-side encoding	Terminal-side encoding

Tencent's Top Speed Codec (TSC) terminal video encoder is designed for scenarios requiring low computational power, low latency, and high-quality image on the terminal side. Compared with hardware encoding, its advantages include:

1. Stable, reliable, and quick to start.
2. At the same quality level, it saves bitrate, enhances transmission stability, reduces downlink distribution bandwidth, and saves on storage costs.
3. At the same bitrate, it improves image quality and enhances user experience.
4. A rich set of features meets diverse business needs, such as using Regions of Interest (ROI) encoding to improve the image quality in the face region and dynamically adjusting encoding configuration to adapt to network fluctuations.

SDK Access Process



1. Evaluation and Trial: Customers provide system platform and demand information, and [apply for product trial](#).

System platform: Android, iOS, Windows, macOS, etc.

Use cases: live streaming, VOD

Encoding specification: encoding format, resolution, frame rate, bitrate, latency requirements, etc.

Optimization objectives: bitrate savings, image quality enhancement, CPU savings, and respective assessment metrics (PSNR, SSIM, VMAF, etc)

2. Development and Integration: Integrate the beta version of the SDK into the app, for performance evaluation and custom optimization.

Based on customer effect evaluation results and specific business scenario needs, provide in-depth optimization support.

3. Launch and Release: Apply for a license, integrate the official version of the SDK with license authorization, and test and launch the app.

If the license is about to expire or has expired, you can apply for a license renewal.

SDK Integration

The video codec SDK is implemented in C/C++/Assembly, providing a unified C interface for various system platforms.

Android

- Provides ARMv7 and ARMv8 version dynamic libraries, and the application is integrated via NDK.
- Provides Java interface encapsulation. The interface is basically consistent with Android's hardware encoding MediaCodec, facilitating parallel replacement of MediaCodec.

iOS

Provides ARMv8 and x86_64 version XCFramework.

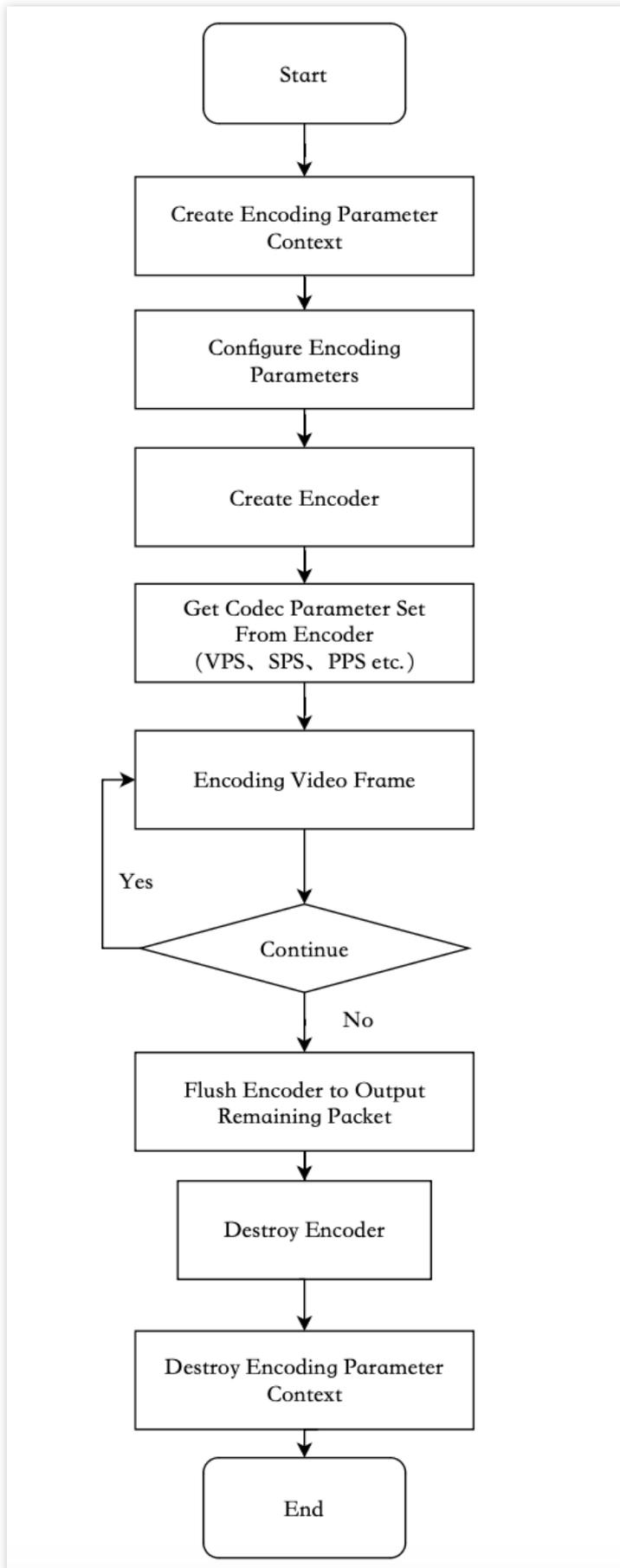
macOS

Provides ARMv8 and x86_64 version framework.

Windows

Provides x86 and x86_64 version dynamic libraries.

Basic Video Encoding Process



TSC Terminal Audio SDK

Product Overview

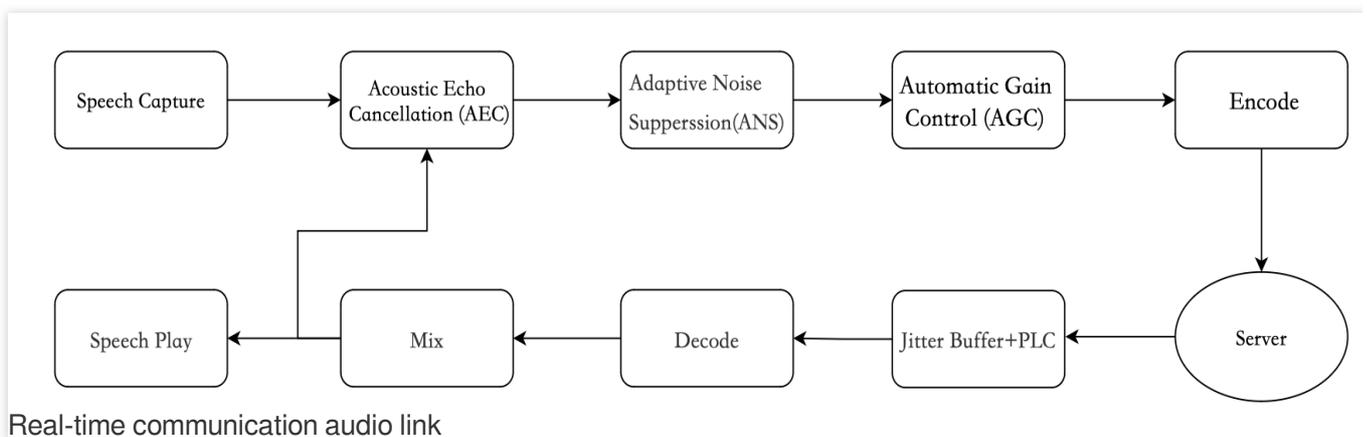
The client audio SDK provides audio encoding and enhancement capabilities, significantly improving audio quality by eliminating echo and noise.

Details of features for each edition are as follows:

Feature Point	Standard Edition	Professional Edition	Premium Edition
Acoustic Echo Cancellation	Supported	Supported	Supported
Automatic Gain Control	Supported	Supported	Supported
Adaptive Noise Suppression	Supported	Supported	Supported
Echo Cancellation Music Mode	-	Supported	Supported
Volume Equalization	-	Supported	Supported
AI Intelligent Noise Reduction	-	Supported	Supported
Audio Encoding	-	-	Supported
AI Codec	-	-	Supported

Real-Time Communication Audio 3A

Audio 3A technology is a set of basic features in sound signal processing, commonly used in real-time communication systems such as video conferencing, calls, and live microphone connections, to ensure high-quality audio signal transmission, and provide better communication quality and audio listening experience. 3A stands for Adaptive Noise Suppression (ANS), Acoustic Echo Cancellation (AEC), and Automatic Gain Control (AGC).



ANS

The main feature of ANS is to eliminate the background noise components in the voice signal, reduce interference, and therefore improve speech intelligibility and perceptual quality. Based on the additive noise model assumption, the audio signal captured by the microphone can be considered as a superposition of the pure voice signal and noise interference. By tracking and estimating noise in non-voice segments of the audio, and then subtracting the noise component energy in the voice segments, a clearer voice signal can be obtained.

AEC

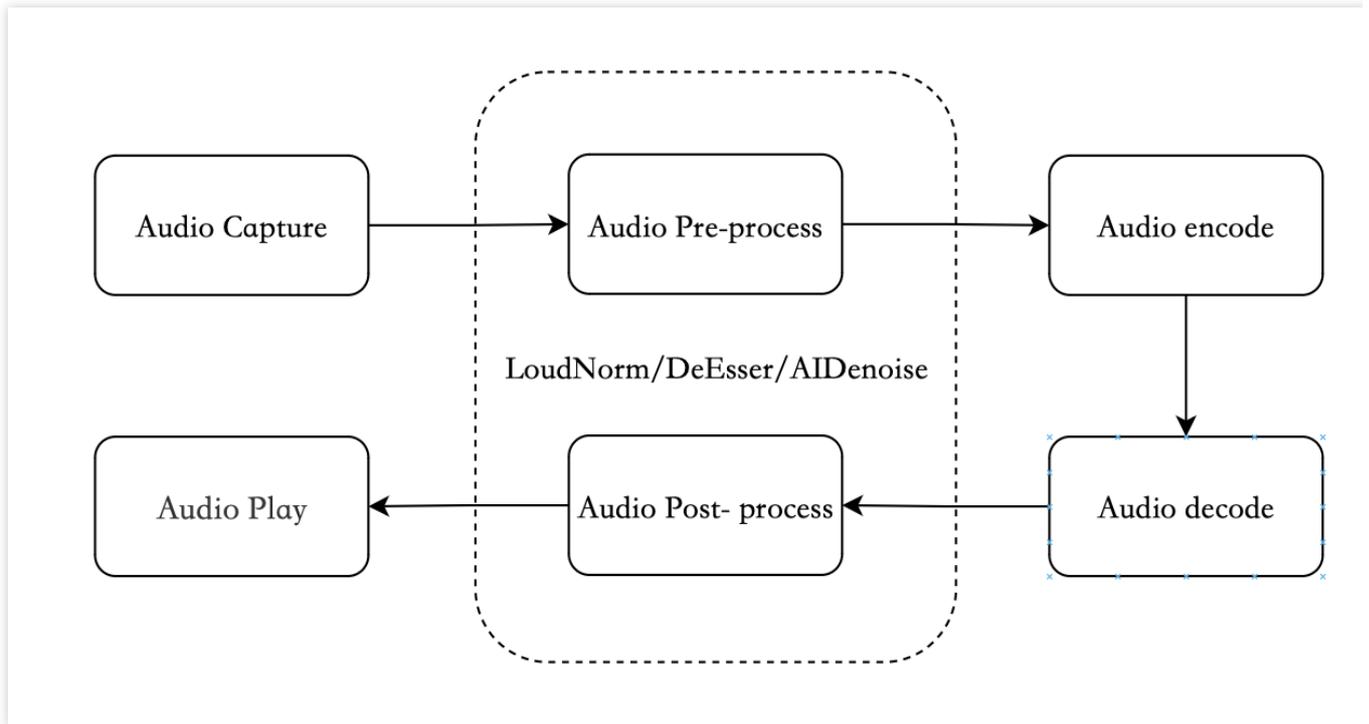
AEC mainly addresses the echo problem in audio communication. During a call, the sound played by the speaker is directly captured by the microphone or captured after reflection, causing the remote user to hear their own voice. This can seriously affect call quality. AEC technology can process the near-end signal based on the remote reference signal, effectively eliminating or reducing this echo phenomenon, thereby enhancing the call experience.

AGC

AGC is responsible for adjusting the volume during the transmission of audio signals. When the volume of the sound source is too low or too high, it can significantly affect the call experience. AGC can automatically detect the loudness of the audio stream and dynamically adjust the volume level to keep it within a comfortable range. AGC can alleviate the volume instability caused by factors such as differences in recording device collection, speaker volume, and distance.

Use Cases

The SDK can be applied in the preprocessing of audio encoding in uplink push and the post-processing of audio decoding in downlink pull, to enhance sound quality. Currently, it supports Android, iOS, Windows, and macOS clients.

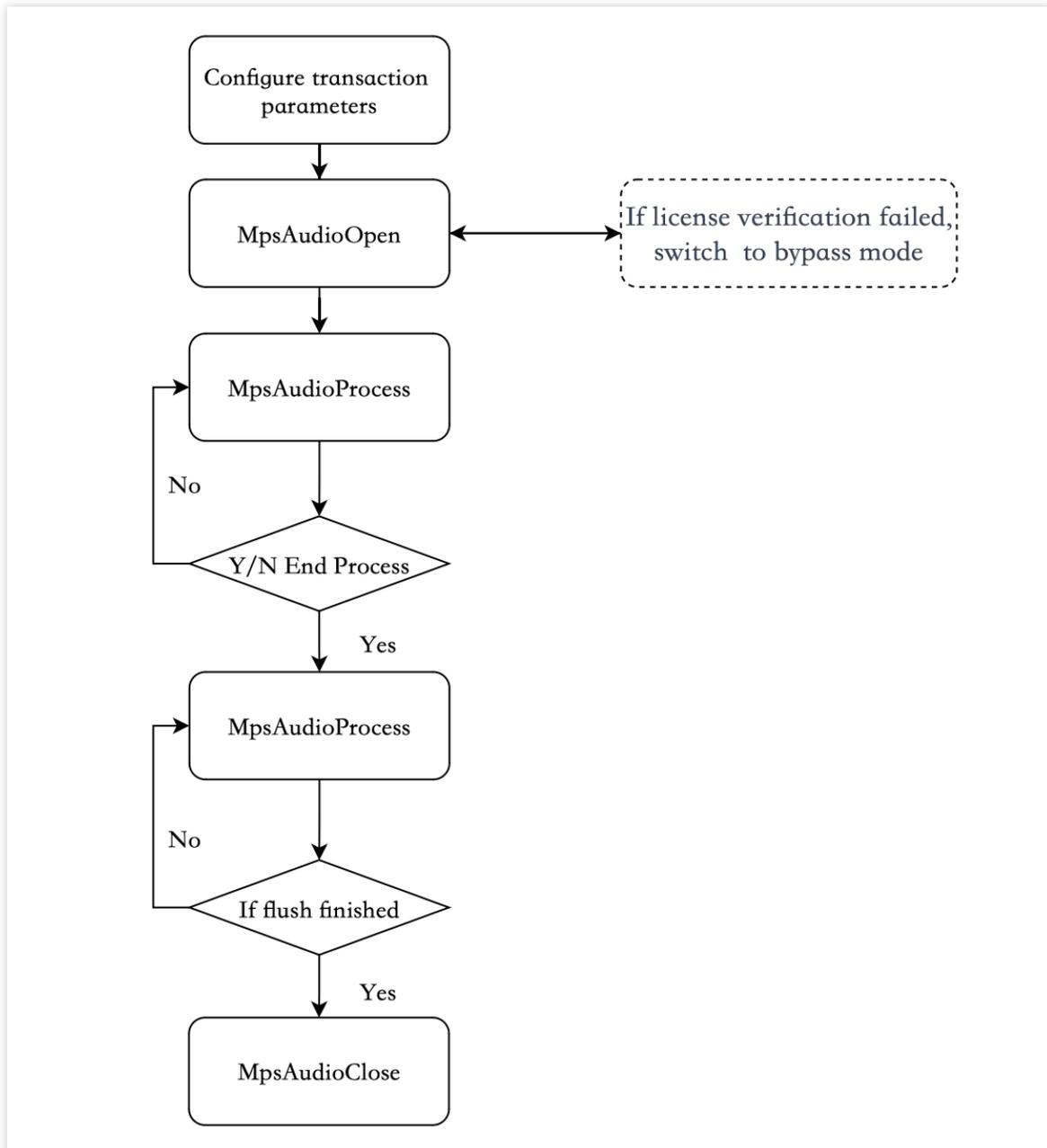


Online teaching scenario: Eliminating noise and echo enhances the clarity of sound during the teaching process.

In-game voice scenario: Equalizing loud and soft voices improves player listening experience and game experience.

Live streaming scenario: Anchor voice noise reduction and voice gain control improve the overall live streaming quality in voice chat, song rooms, and similar scenarios.

SDK API Calling Process



TSC Terminal Enhancement SDK

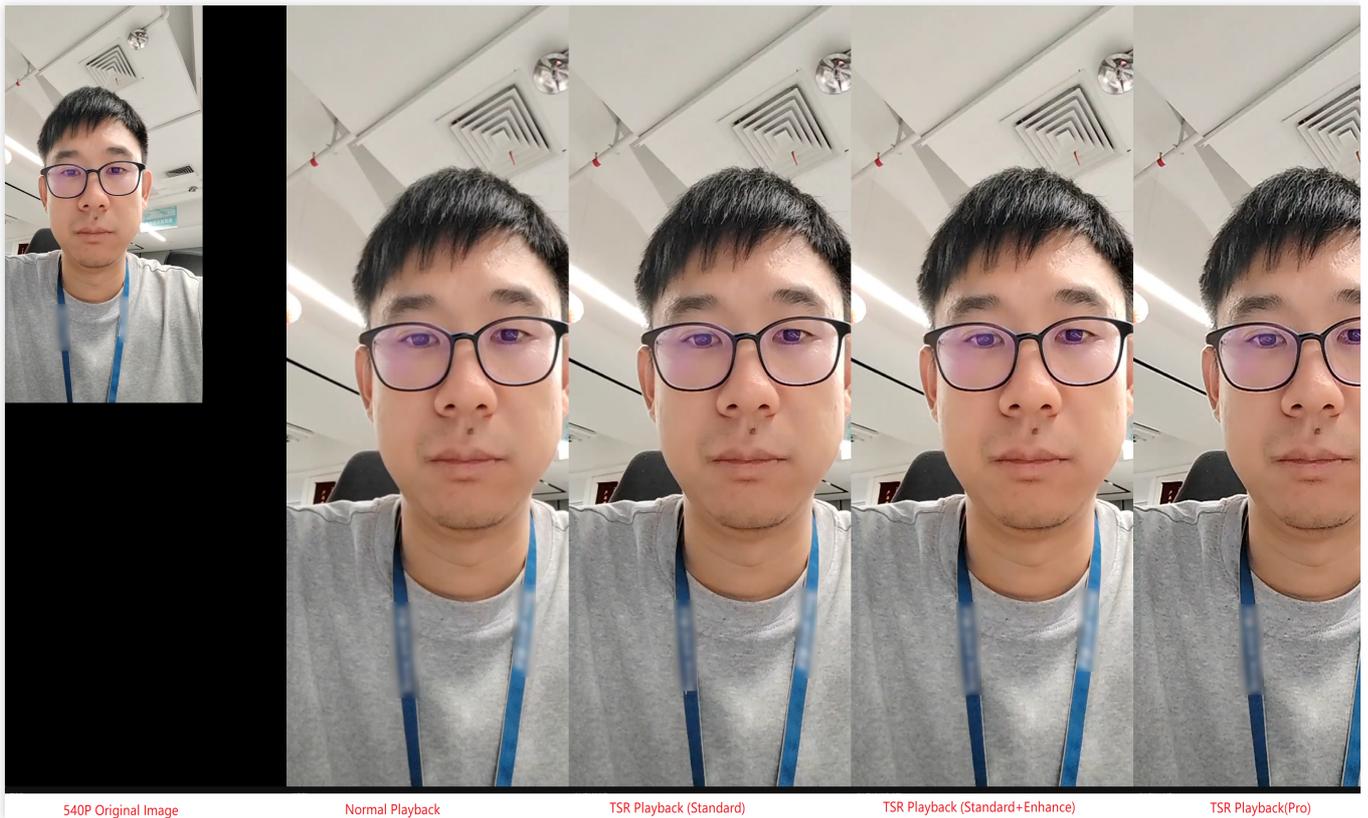
Product Overview

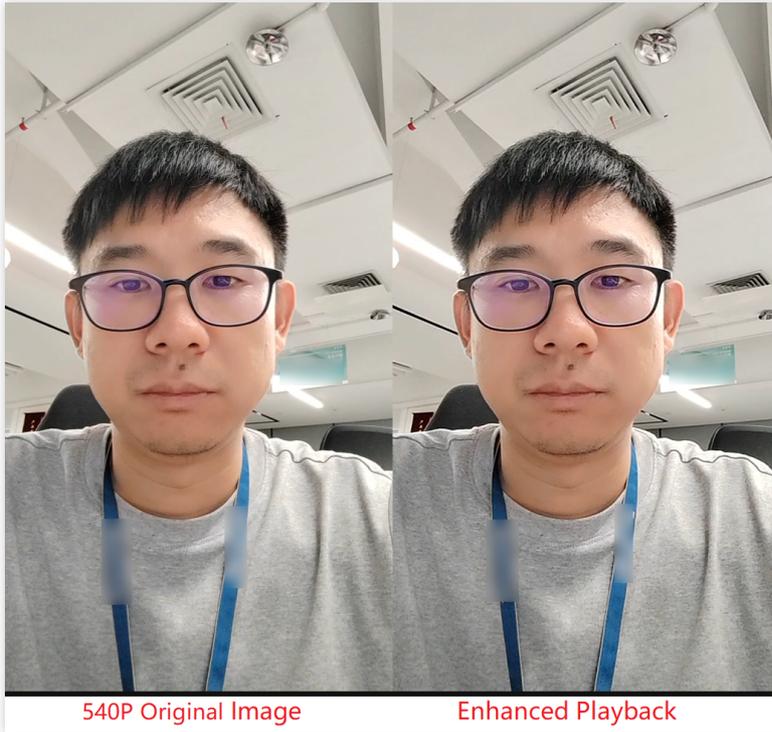
The client enhancement SDK, based on efficient image processing algorithms and AI model inference capabilities, achieves terminal video super-resolution, image quality enhancement, frame interpolation, and other features.

Details of features for each edition are as follows:

Feature Point	Standard Edition	Professional Edition	Premium Edition
---------------	------------------	----------------------	-----------------

Standard super-resolution	Supported	Supported	Supported
Standard super-resolution+Enhancement parameters (Contrast/Color/Brightness)	Supported	Supported	Supported
Professional super-resolution	-	Supported	Supported
AI image quality enhancement	-	Supported	Supported
AI frame interpolation enhancement	-	-	Supported





The advantage of the Standard Edition is the performance, with our algorithms achieving good super-resolution effects at minimal time and energy consumption. It is compatible with almost all mobile phones of different performances. Additionally, the Standard Edition offers image enhancement features, which can adjust image brightness, color saturation, and contrast.

The advantage of the Professional Edition is the effect. Using AI model inference, it can regenerate missing texture details in the original image, achieving the best image enhancement and super-resolution effects. The Professional Edition requires computational power of the device and is recommended for use on mid to high-end mobile phones.

Performance

Standard super-resolution

System	Device Model	Device Configuration	Basic Super-Resolution Parameter	CPU (%)	Memory (MB)	Frame Rate	GPU (%)	Power Consum (mAh)
Android	HUAWEI Mate50 (2022)	Chip: Snapdragon 8+ Gen1 CPU: 3.0 GHz GPU: Adreno 730 Battery: 4272.8 mAh	720P - Off	2.8	48	59.9	5	138.01
			720P x 1.5	3	64	60.4	10	196.55
			576P x 1.25	3	60.1	59.9	7	/
			4K x 1.25	3	163.2	59.9	46.4	/

Android	Sony Xperia 5 II (2020)	Chip: Snapdragon 865 CPU: 2.84 GHz GPU: Adreno 650 Battery: 3104 mAh	720P - Off	1	135.9	59.1	4	133.78
			720P x 1.5	2	146.8	59.2	10	152.41
			576P x 1.25	2	139.2	59.2	6	/
			4K x 1.25	2	311.2	59.2	46.7	/
Android	Xiaomi 6 (2017)	Chip: Snapdragon 835 CPU: 2.45 GHz GPU: Adreno 540	720P x 1.5	2.9	119	60	18.9	/
Android	Redmi Note 4 (2016)	Chip: MediaTek MT6797 Helio X20 CPU: MT6797 2.0 GHz GPU: ARM Mali-T880	720P x 1.5	9.4	137.9	60.6	74.5	/
Android	Honor 8 Youth Edition (2016, budget phone)	Chip: HiSilicon Kirin 655 CPU: HI6250 2.3 GHz GPU: ARM Mali-T830	720P - Off	2	77	58.8	Not supported	/
			720P x 1.5	2	83.4	58.1	Not supported	/
iOS	iPhone 13 (2021)	CPU: 3.23 GHz GPU: quad- core Battery: 3065.65 mAh	720P - Off	5.9	54.4	59.5	15.9	64.99
			720P x 1.5	6	63.8	59.5	24	88.29
			576P x 1.25	4.7	57.3	59.5	18.9	/
			4K x 1.25	9.2	162.2	59.5	60.6	/

iOS	iPhone 6P (2014)	CPU: Apple A9 GPU: PowerVR GT7600	720P - Off	13	40.5	59.5	22.8	/
			720P x 1.5	18.8	49.4	59.6	50.2	/

Professional super-resolution

System	Device Model	Device Configuration	Professional Super-Resolution Parameter	CPU (%)	Memory (MB)	Frame Rate	GPU (%)	Power Consumption (mAh)
Android	HUAWEI Mate50 (2022)	Chip: Snapdragon 8+ Gen1 CPU: 3.0 GHz GPU: Adreno 730 Battery: 4272.8 mAh	720P - Off	3	66	60	3	138.01
			720P x 1.5	13	123	48	10	342.9
			576P x 1.25	13	105	60	7	333.13
			540P x 2	13	105	60	11	322.73
Android	Sony Xperia 5 II (2020)	Chip: Snapdragon 865 CPU: 2.84 GHz GPU: Adreno 650 Battery: 3104 mAh	720P - Off	1	142	59.1	3	133.78
			720P x 1.5	13	196	39	8	294.06
			576P x 1.25	13	148	58	8	/
			540P x 2	13	159	40	7	/
iOS	iPhone 13 (2021)	CPU: 3.23 GHz GPU: quad-core Battery: 3065.65 mAh	720P - Off	6	73	60	14	64.99
			720P x 1.5	15	94	40	14	/
			576P x 1.25	10	84	60	16	/
			540P x 2	9	76	60	21	/

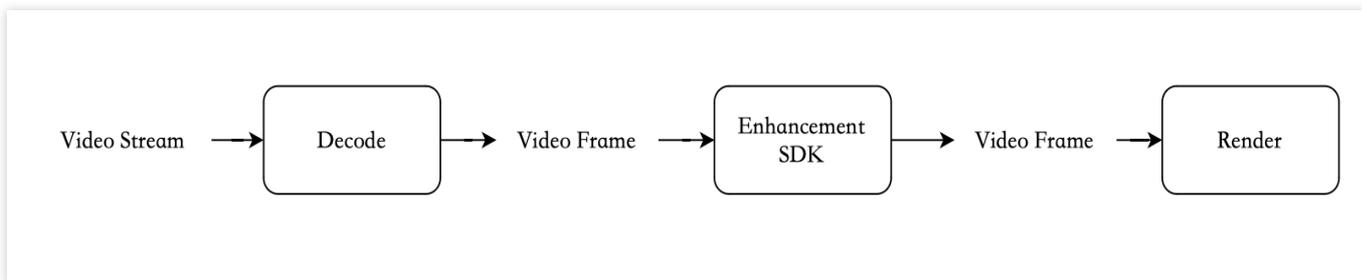
AI image quality enhancement

System	Device Model	Device Configuration	Professional Enhancement	CPU (%)	Memory (MB)	Frame Rate	GPU (%)
--------	--------------	----------------------	--------------------------	---------	-------------	------------	---------

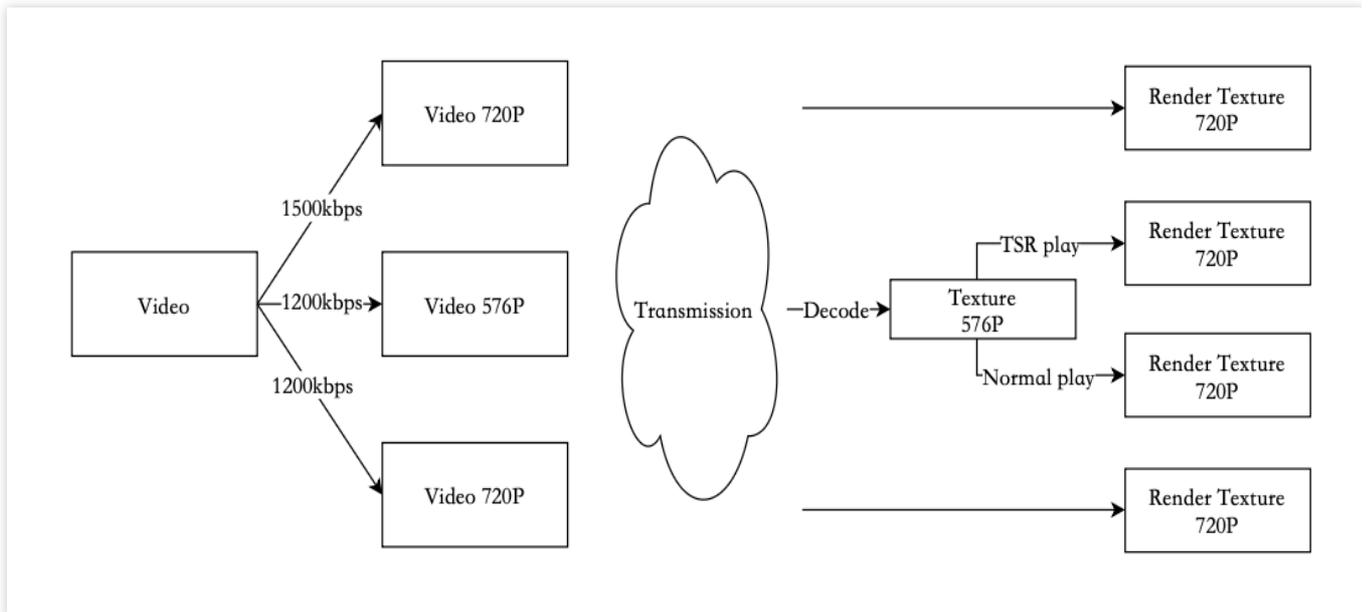
			Resolution				
Android	HUAWEI Mate50 (2022)	Chip: Snapdragon 8+ Gen1 CPU: 3.0 GHz GPU: Adreno 730 Battery: 4272.8 mAh	720P	13	140	55	7
			576P	13	126	74	5
			540P	13	130	78	7
Android	Sony Xperia 5 II (2020)	Chip: Snapdragon 865 CPU: 2.84 GHz GPU: Adreno 650 Battery: 3104 mAh	720P	13	184	41	5
			576P	13	174	59	5
			540P	13	142	43	4
iOS	iPhone 13 (2021)	CPU: 3.23 GHz GPU: quad-core Battery: 3065.65 mAh	720P	17	91	40	11
			576P	12	70	60	11
			540P	9	68	60	11

Use Cases

1. Enhance terminal players to improve video playback quality and smoothness.



2. Save costs by reducing the resolution and bitrate of video distribution, and then minimize experience loss through terminal playback enhancement.



For example, in cloud gaming scenarios, the capability of real-time video super-resolution on the terminal can reduce the computational power of cloud rendering and encoding, save transmission bandwidth, and save costs. In the following example, a game scene transmitted from the cloud at 720P (5.6Mbps) is up-scaled to 1080P in real-time on the terminal. The viewing effect is close to a scene transmitted directly at 1080P (8.2Mbps) from the cloud, saving 30% of bandwidth.

SDK Integration

Compatibility

Android platform: Applicable to Android 5.0 and later (API 21, OpenGL ES 3.1).

iOS platform: Applicable to iPhone 5s and later versions of devices, with the minimum system version being iOS 12.

Package Size

Standard Edition: Android AAR is approximately 0.3 MB (arm64-v8a), and iOS Framework is approximately 0.4 MB.

Professional Edition: Android AAR is approximately 2.1 MB (Single arm64-v8a architecture), and iOS Framework is approximately 1.9 MB.

Integration Guide

Please refer to the [Android](#) and [iOS](#) integration guides.

DRM integration

Last updated : 2025-03-17 15:18:55

Overview

Digital Rights Management (DRM) is a system designed to protect the copyright of digital content through the application of encryption and authorization verification techniques. Its primary functions include:

Content Encryption: Encrypting audio, video, and other digital content to prevent unauthorized distribution;

Permission Control: Implementing granular permission management through license management, including control over playback frequency and device binding;

Secure Transmission: Ensuring the integrity of content during the distribution process.

Media Processing Services (MPS) offers video-on-demand encryption services based on DRM encryption protocols such as Widevine, FairPlay, and PlayReady. By integrating standardized encryption technology with third-party Key Management Systems (e.g., SDMC, DRMtoday, etc.) in depth, it achieves decoupling of content encryption and key management, comprehensively ensuring the security of user content. The DRM encryption services provided by Media Processing focus on content security processing, while key generation, storage, distribution, and license management are provided by third-party DRM service vendors.

The following will illustrate the process of integrating Media Processing's DRM encryption services using DRMtoday as an example.

Integration Process

Preparation

Activate and configure a third-party DRM service, taking DRMtoday as an example.

Step One: Register for the Service

1. Navigate to the official website of [DRMtoday Provider](#). DRMtoday provides a free trial and commercial service purchasing instructions on its website.
2. Click **Get your FREE trial today** for the trial.

castLabs DASHBOARD [Sign in](#)

Sign up

Create your free castLabs account to access our solutions and trials.

Name *

✖ This field may not be blank.

Company email *

ⓘ Please enter your company email as accounts are for business users.

How did you hear about us?

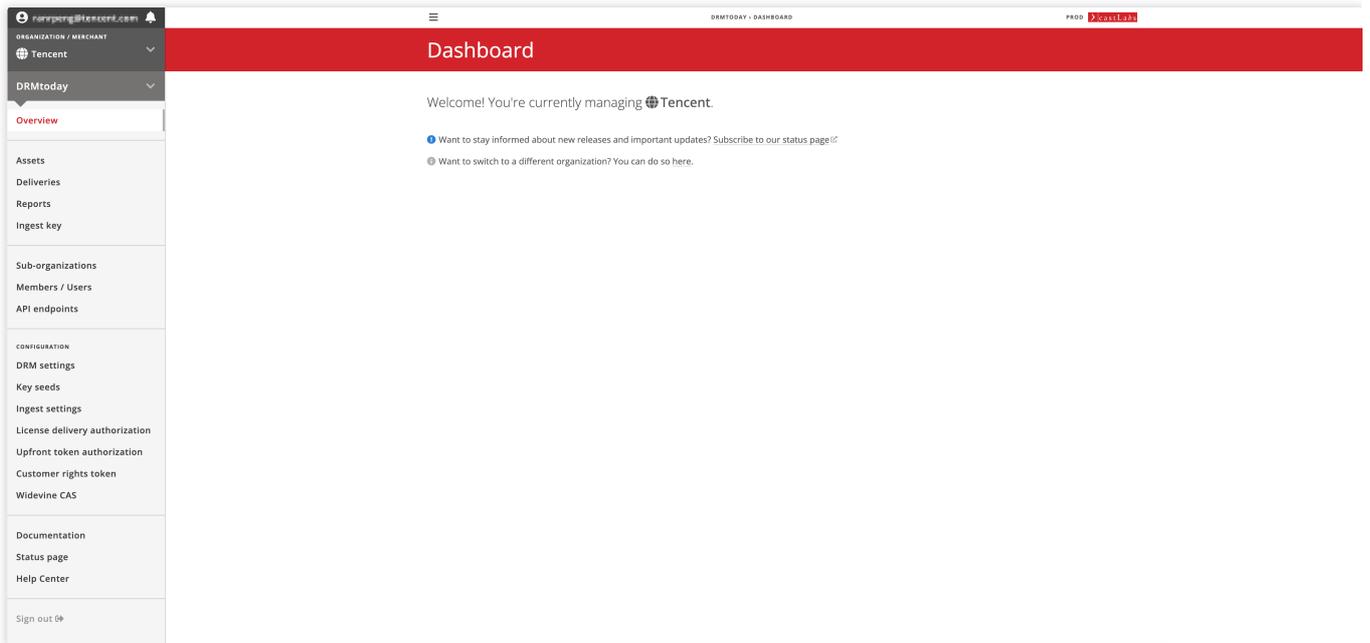
Are you a human?
Please select the correct icon that matches the grey silhouette in the box on the right.



By creating an account, you accept the [Terms & conditions](#) and understand that our [Privacy policy](#) clarifies how we use your personal data.

Already have an account? [Sign in here.](#)

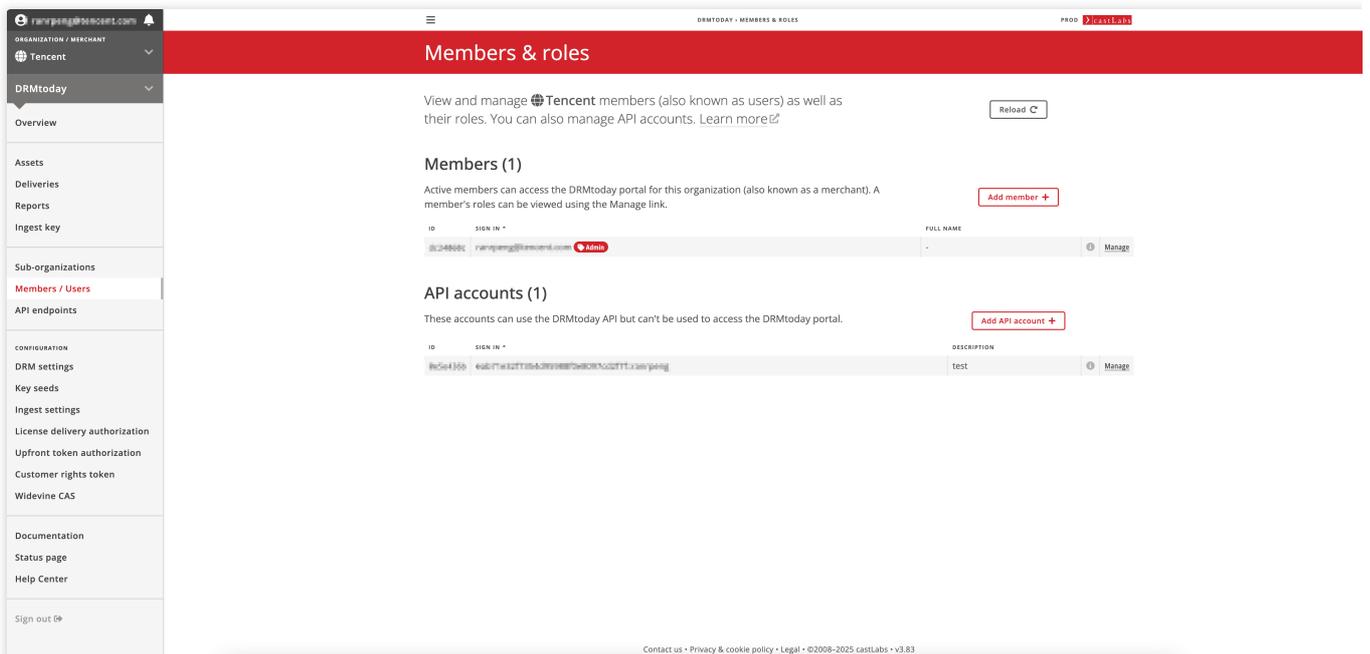
3. Users must register with a corporate email and create an organization to access the next page.



Step Two: Service Configuration

(1) Configure API Account

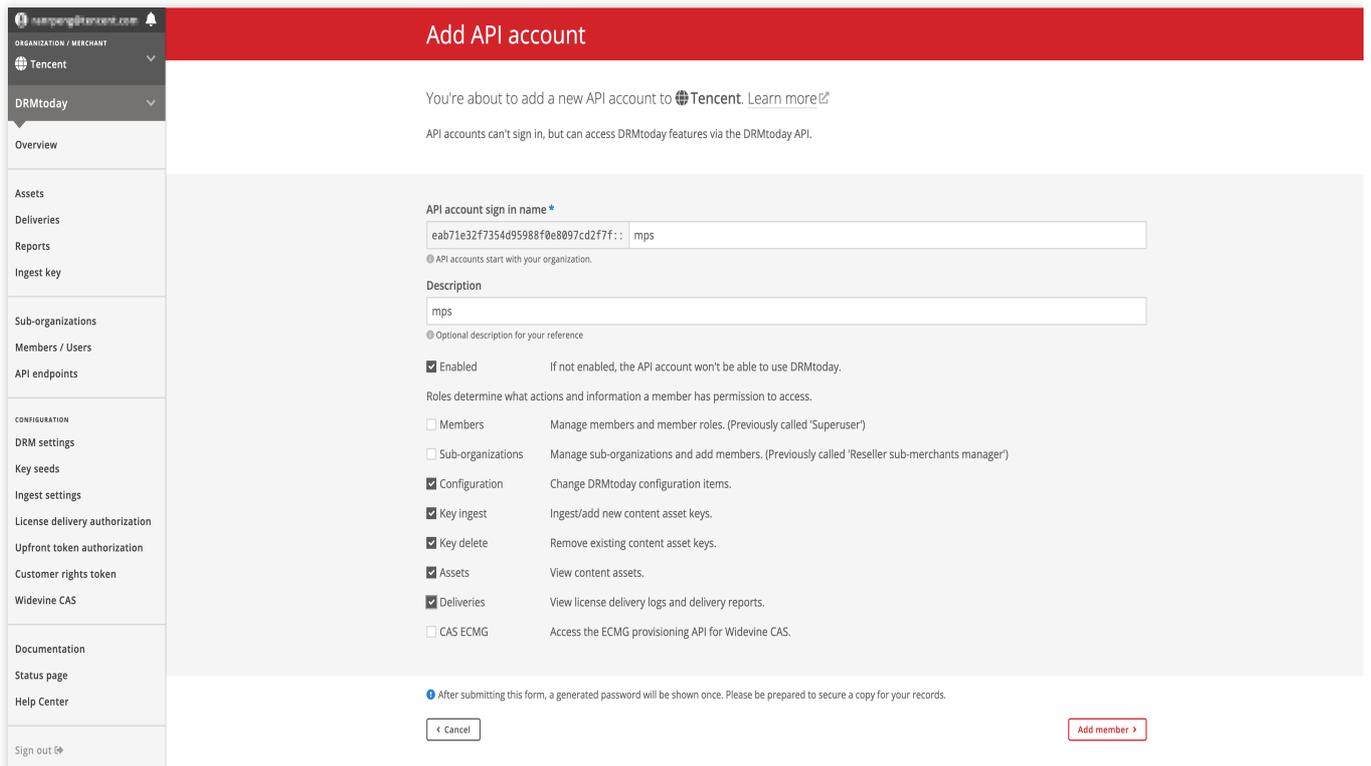
1. Select **Members/Users** from the left sidebar.



2. Click **Add API account**, select options as needed, ensure accuracy, and click **Add member** to confirm.

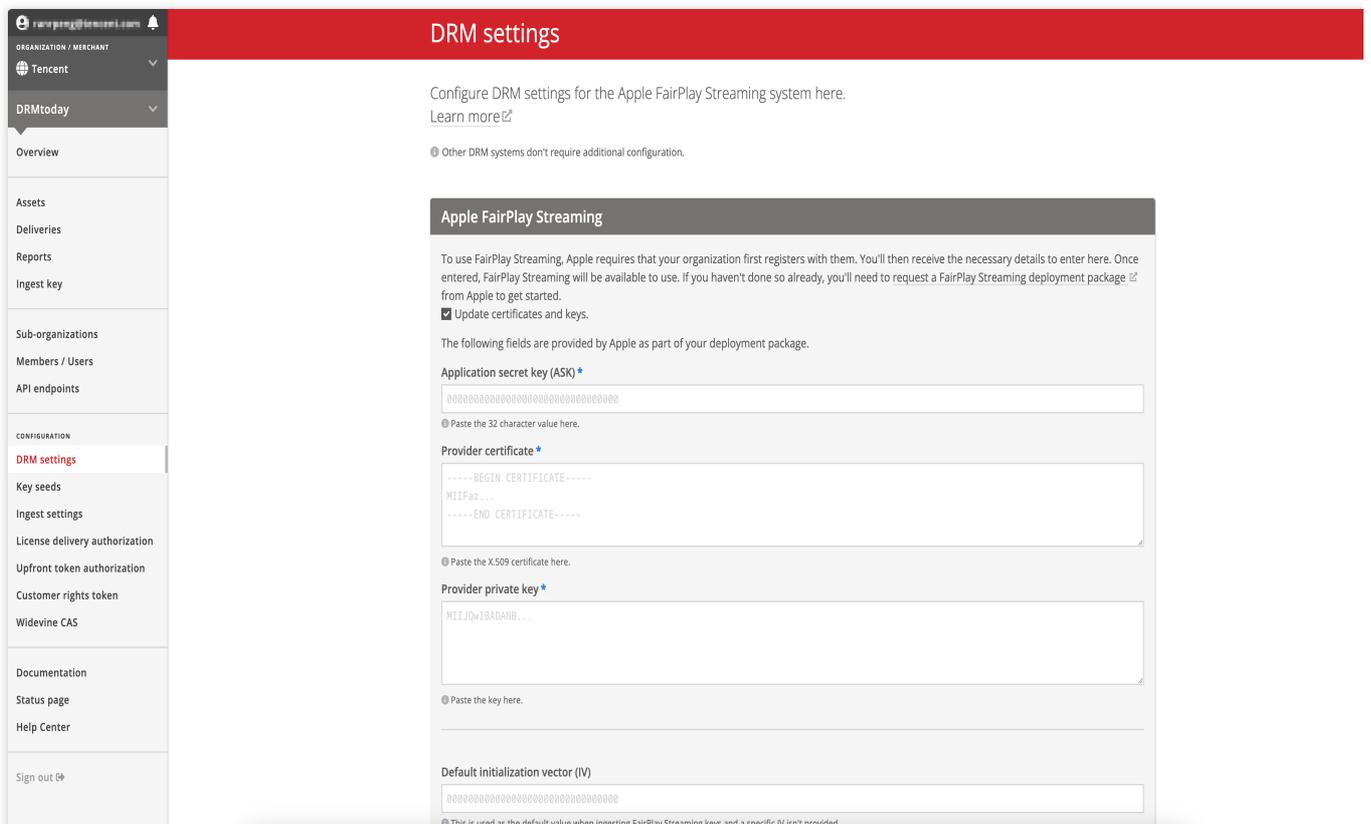
Note:

Upon successful saving, a password prompt will appear. Users are advised to securely store this password for future use.



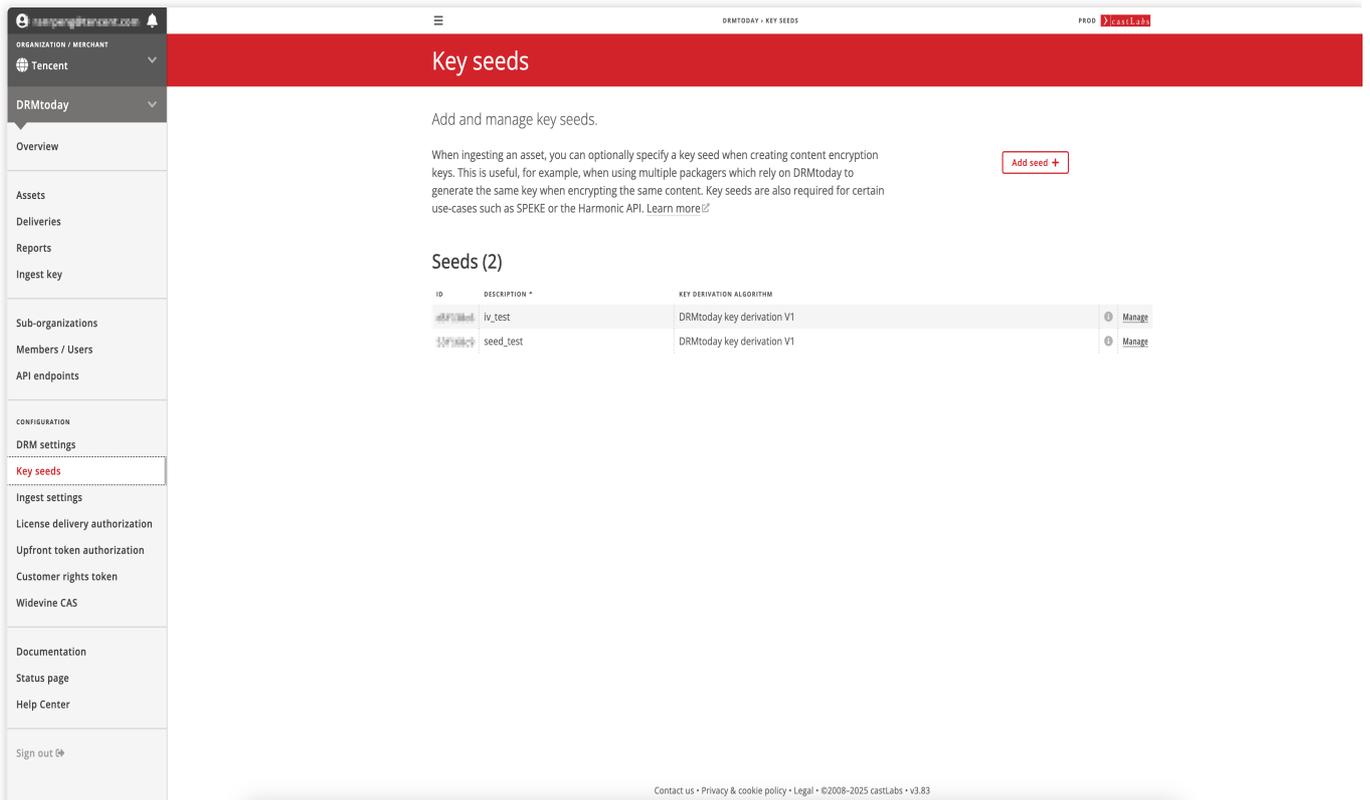
(2) Configuring FairPlay Certificates

Go to left sidebar, choose **DRM settings**, input FairPlay certificate info, and click **Save Settings**.

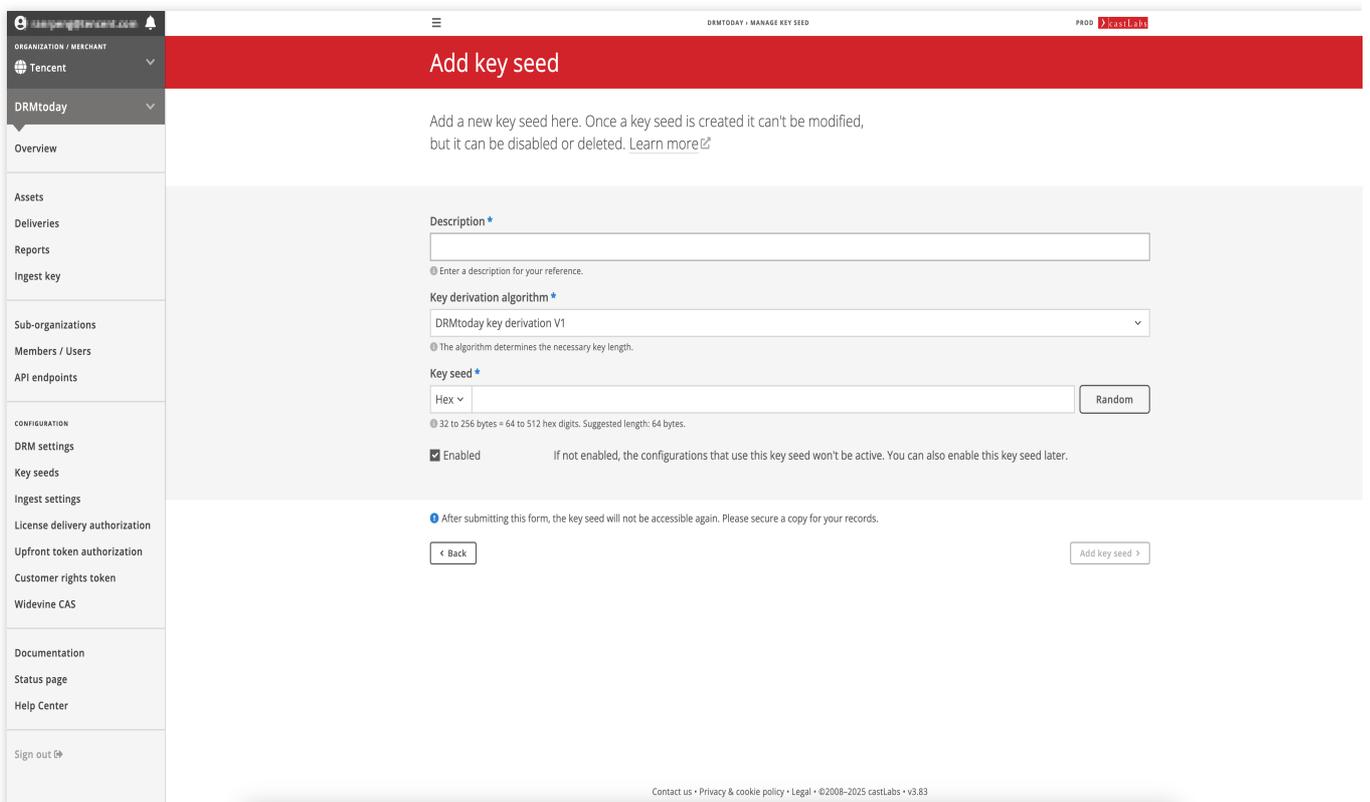


(3) Configure the secret key "seed".

1. Select **Key Seeds** from the left sidebar.



2. Click on **Add seed**, you can generate a random seed by clicking **Random**. Two seeds need to be generated: one for the Key seed and another for the IV seed.

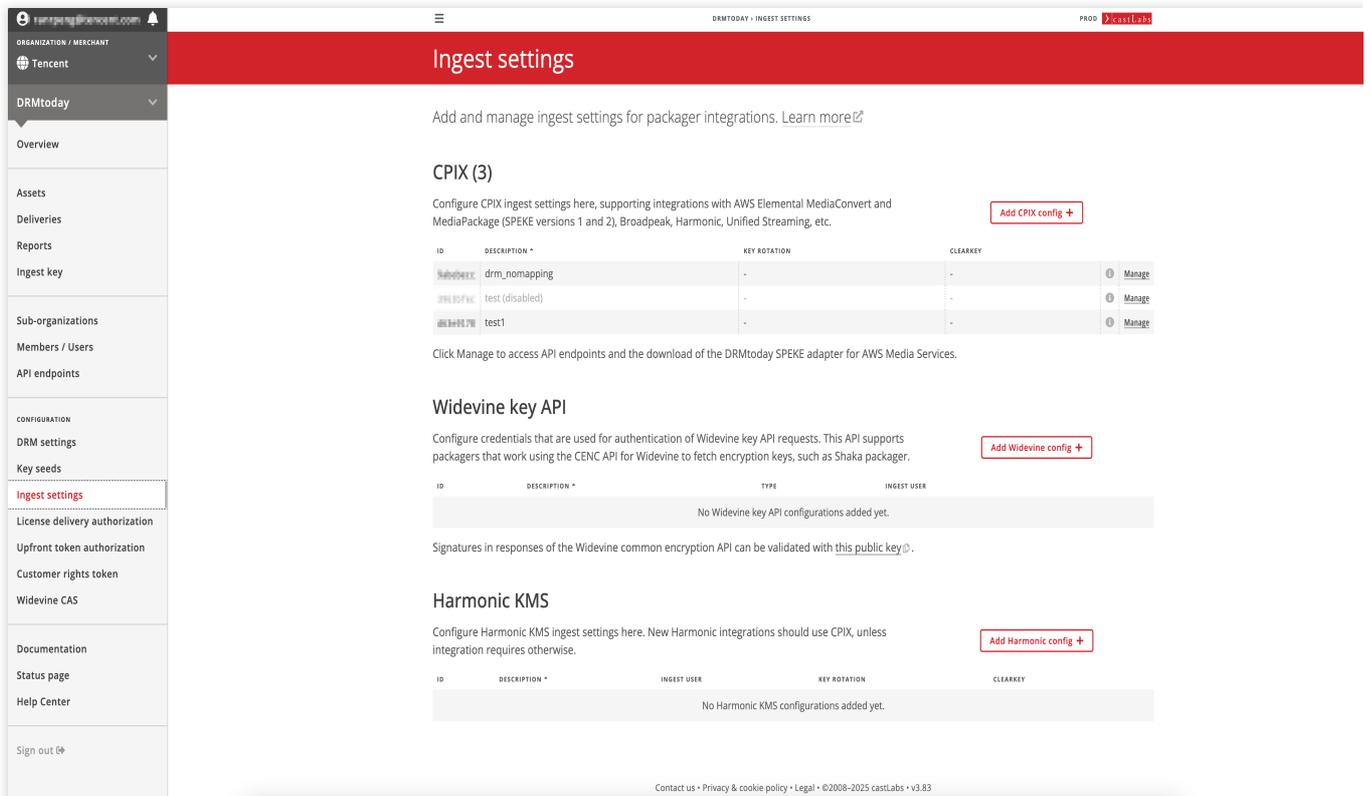


(4) Configuring CPIX

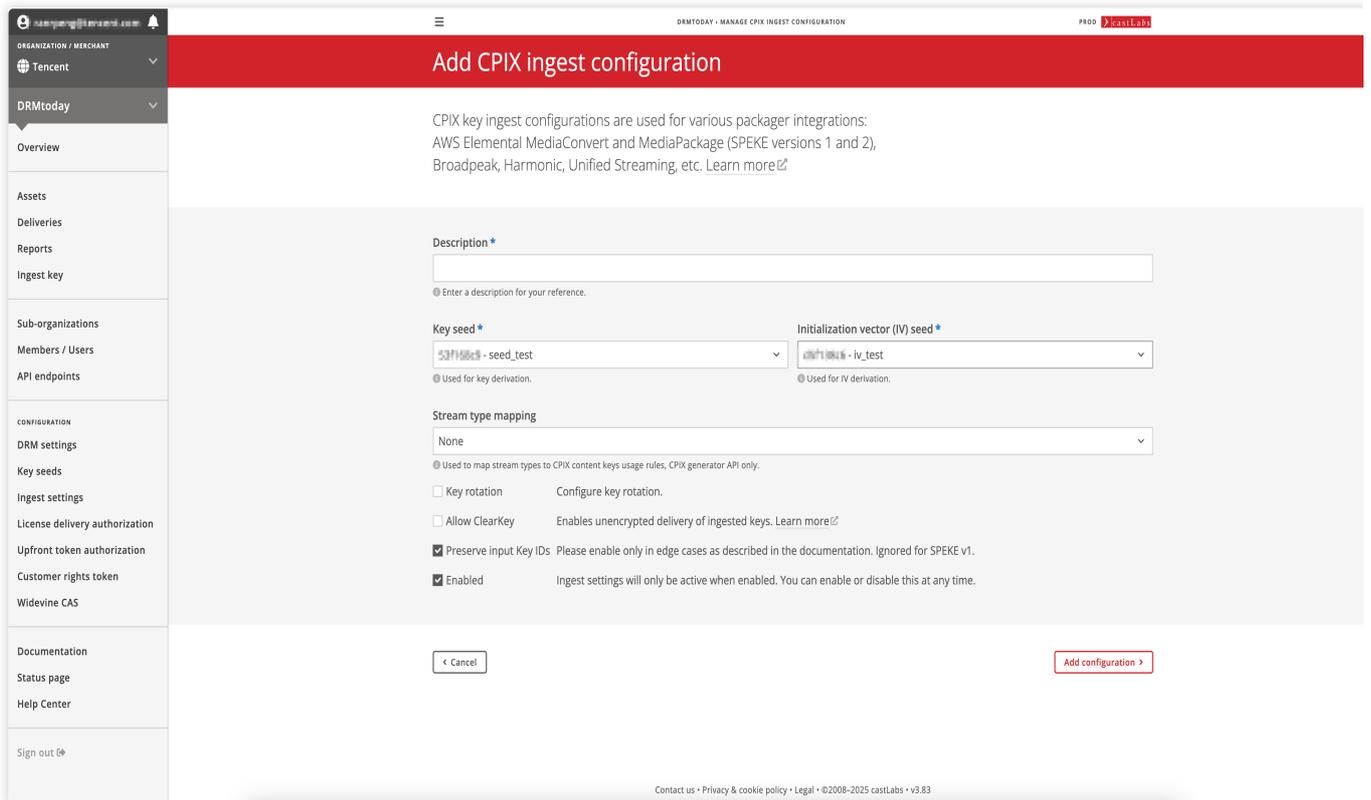
Note:

Due to the media processing service backend interacting with DRM vendors to retrieve key information via the [CPIX protocol](#), it is necessary to configure CPIX.

1. Select **Ingest Settings** from the left sidebar.



2. Click on **Add CPIX config**, where the Key seed and Initialization vector (IV) seed are the seeds configured in the aforementioned step (3). The Stream type mapping and the four options below can be selected according to business needs to determine the appropriate key generation rules.



(5) Configuring Certificate Authentication

Navigate to the **License Delivery Authorization** in the left sidebar, where users can select the appropriate certificate authentication method based on the requirements.

Step Three: Generating the Key Request URL

To retrieve key information, users must set up a key request URL for the media processing service. This URL enables the service to request keys from the DRM vendor. After the DRM vendor authenticates the request, it sends back the keys in CPiX format. The media service uses these keys to decrypt media. For instructions on creating a key request URL, see the [DRMToday documentation](#). A script for generating this URL is provided for reference.

```
#!/bin/bash

# First request to get ticket
TICKET_RESPONSE=$(curl 'https://auth.drmtoday.com/cas/v1/tickets' \\  
-d "username=<API account>&password=<API account password>" \\  
-s -D -)

# Extract location header if status is 201
if echo "$TICKET_RESPONSE" | grep -q "HTTP.*201"; then
    TICKET_URL=$(echo "$TICKET_RESPONSE" | grep -i "Location:" | cut -d' ' -f2 | tr

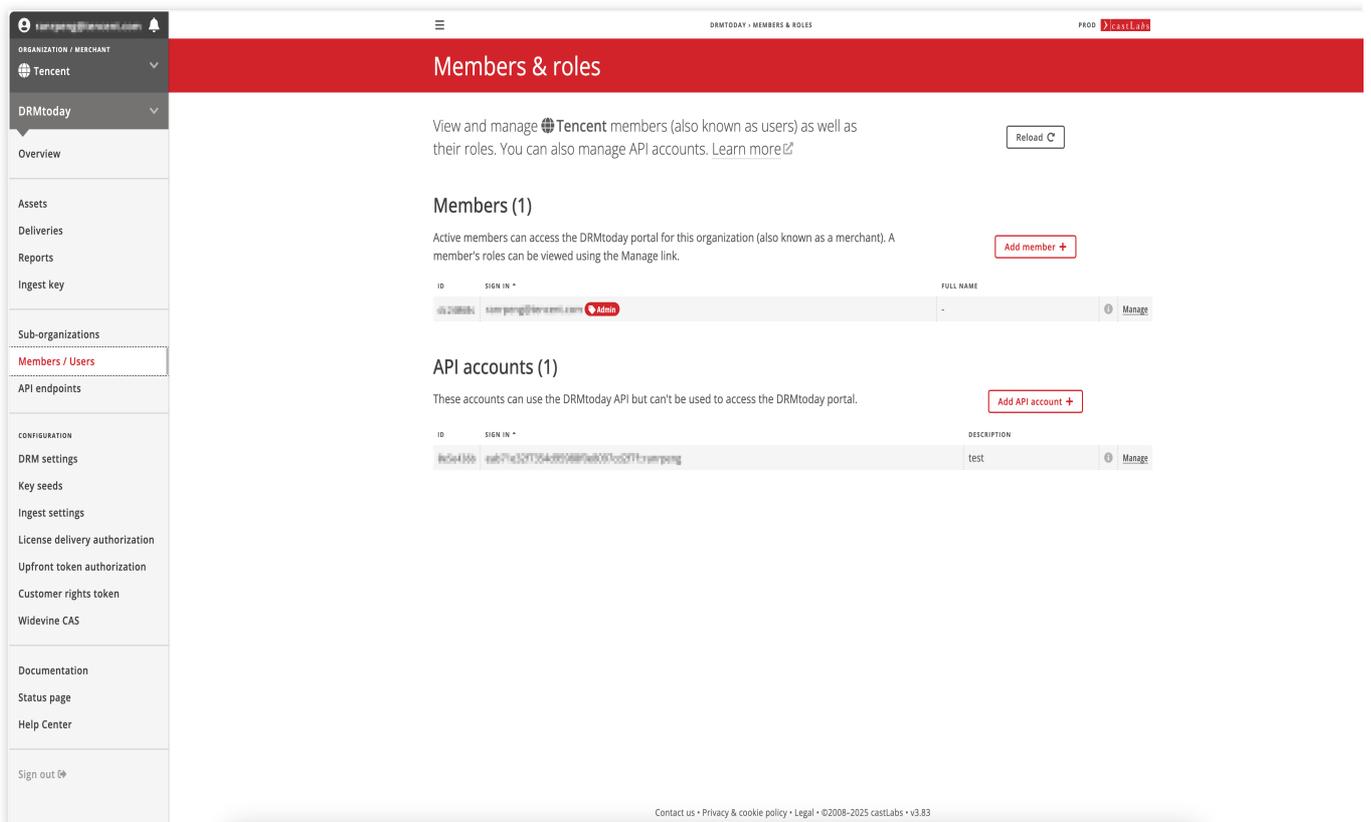
# Second request using the ticket URL
TICKET=$(curl "$TICKET_URL" \\  
-d 'service=https://fe.drmtoday.com/frontend/cpix/v1/<Organization UUID>/inge
else
    echo "Failed to get ticket. Status code was not 201"
    echo "$TICKET_RESPONSE"
    exit 1
fi
```

```
# Concatenate the service URL with the ticket
SERVICE_URL="https://fe.drmtoday.com/frontend/cpix/v1/<Organization UUID>/ingest/<C

echo $$SERVICE_URL
```

(1) API account

Select **Members/Users** from the left sidebar. The API account mentioned in the script refers to the API account configured in Step 2, and the "API account password" corresponds to its password.



(2) Organization UUID

Select **API endpoints** from the sidebar on the left. The Organization UUID is displayed in the top right corner of the page.

DRMToday - API ENDPOINTS

API endpoints

Various API endpoints are available for DRMToday to interact with your system.

All of our endpoints include a [ticket] from the Central Authentication Service (CAS) and either the organization's (also known as a merchant) API name or UUID for identification.

Please visit the documentation links below for details on specific requests such as their response payloads. If you're looking to create or manage API accounts, visit the Members area.

ORGANIZATION

Tencent

ORGANIZATION API NAME

api-11111111-22222222-33333333-44444444

ORGANIZATION UUID

api-11111111-22222222-33333333-44444444

Key management

Learn more about the key management API and package integrations for these endpoints.

OPERATION	METHOD	ENDPOINT
Ingest key	POST	https://fe.drmtoday.com/frontend/api/keys/v3/ingest/multi?ticket=[ticket]&id=[id]
Remove key	POST	https://fe.drmtoday.com/frontend/api/keys/v3/remove/multi?ticket=[ticket]&id=[id]
Query metadata	POST	https://fe.drmtoday.com/frontend/download-api/ingestion/query/v1/keys?ticket=[ticket]&id=[id]
Download metadata	GET	https://fe.drmtoday.com/frontend/download-api/ingestion/query/v1/keys?ticket=[ticket]&id=[id]

CPIX

OPERATION	METHOD	ENDPOINT
Process document	POST	https://fe.drmtoday.com/frontend/cpix/v1/ingest/[config]/ingest/[config]
Generate document	GET	https://fe.drmtoday.com/frontend/cpix/v1/ingest/[config]/ingest/[config]/asset
Harmonic	POST	https://[api-account]:[password]@fe.drmtoday.com/frontend/cpix/v1/ingest/[config]/ingest/[config]

Replace [config] with %2F in [api-account]. See Ingest settings for details on endpoints and other integrations.

Configuration

Learn more about the various [operation] endpoints available through the configuration API.

OPERATION	METHOD	ENDPOINT
Configuration	depend	https://fe.drmtoday.com/frontend/rest/config/v1/[config]/[operation]?ticket=[ticket]

(3) CPIX ID

Select **Ingest Settings** from the left sidebar, where you can view the CPIX information created in Step Two. The ID of the CPIX config is the CPIX ID required in the script.

Ingest settings

Add and manage ingest settings for packager integrations. [Learn more](#)

CPIX (3)

Configure CPIX ingest settings here, supporting integrations with AWS Elemental MediaConvert and MediaPackage (SPEKE versions 1 and 2), Broadpeak, Harmonic, Unified Streaming, etc.

ID	DESCRIPTION	KEY ROTATION	CLEARKEY	
510466cc	drm_nomapping	-	-	Manage
210466cc	test (disabled)	-	-	Manage
010466cc	test1	-	-	Manage

Click Manage to access API endpoints and the download of the DRMToday SPEKE adapter for AWS Media Services.

Widevine key API

Configure credentials that are used for authentication of Widevine key API requests. This API supports packagers that work using the CENC API for Widevine to fetch encryption keys, such as Shaka packager.

ID	DESCRIPTION	TYPE	INGEST USER
No Widevine key API configurations added yet.			

Signatures in responses of the Widevine common encryption API can be validated with [this public key](#).

Harmonic KMS

Configure Harmonic KMS ingest settings here. New Harmonic integrations should use CPIX, unless integration requires otherwise.

ID	DESCRIPTION	INGEST USER	KEY ROTATION	CLEARKEY
No Harmonic KMS configurations added yet.				

Contact us • Privacy and cookie policy • Legal • ©2008-2025 castlabs • v3.83

After setting up the script correctly, you can start a request to get the secret key URL.

Note:

Remember: The URL expires, so it's recommended to regenerate it regularly.

Initiating Encryption Tasks via API

To initiate processing tasks for media files located in URL video links or within COS, please refer to the API documentation [Initiating Media Processing](#).

```
POST / HTTP/1.1
Host: mps.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ProcessMedia

{
  "InputInfo": {
    "Type": "URL",
    "UrlInputInfo": {
      "Url": "https://test-<appid>.cos.ap-nanjing.myqcloud.com/mps_input/test"
    }
  },
  "OutputStorage": {
    "Type": "COS",
    "CosOutputStorage": {
      "Region": "ap-nanjing",
```

```
        "Bucket": "test-<appid>"
    }
},
"OutputDir": "/mps_output/drm/",
"MediaProcessTask": {
    "AdaptiveDynamicStreamingTaskSet": [
        {
            "Definition": <definition id>,
            "DrmInfo": {
                "Type": "widevine",
                "SpekeDrm": {
                    "ResourceId": "test123",
                    "KeyServerUrl": "<DRM key server url>",
                    "Vector": "<IV>",
                    "EncryptionMethod": "cbcs",
                    "EncryptionPreset": "preset0"
                }
            }
        }
    ]
},
"TaskNotifyConfig": {
    "NotifyType": "URL",
    "NotifyUrl": "<notify url>"
}
}
```

Response Example:

```
{
  "Response": {
    "TaskId": "24000035-WorkflowTask-cf405e365e75efb2a7bfdef514cc17dbtt195964",
    "RequestId": "a7ba06b6-6810-4343-b55d-3afcc3dac64c"
  }
}
```

Example Description: TaskId serves as a unique task identifier, which can be utilized for querying and managing tasks.

Type

Encryption types, permissible values include:

simpleaes: AES-128 encryption.

widevine.

fairplay: Supports HLS exclusively, DASH does not support Fairplay encryption.

playready.

SpekeDrm

(1) ResourceId

Resource tagging supports 1-128 characters, including numbers, letters, underscores (_), and hyphens (-). The ResourceId can be perceived as an ID for a set of cryptographic keys, which can be utilized to encrypt multiple distinct media streams. We can view all the ResourceIds we have created on the DRMtoday console.

Flags	Asset ID	Variant ID	Key ID	Stream type	Key rotation ID	Key seed ID	Ingest channel	Region	Ingested
	f15a7e2a3c1b1a1a1a1a1a1a1a1a1a1a		01010101010101010101010101010101	Audio			CPIX	ap-northeast-1	2025-02-14 10:57:24
	f15a7e2a3c1b1a1a1a1a1a1a1a1a1a1a		01010101010101010101010101010101	SD			CPIX	ap-northeast-1	2025-02-14 10:57:24
	f15a7e2a3c1b1a1a1a1a1a1a1a1a1a1a		01010101010101010101010101010101	Audio			CPIX	ap-northeast-1	2025-02-14 10:52:20
	f15a7e2a3c1b1a1a1a1a1a1a1a1a1a1a		01010101010101010101010101010101	SD			CPIX	ap-northeast-1	2025-02-14 10:52:20
	f15a7e2a3c1b1a1a1a1a1a1a1a1a1a1a		01010101010101010101010101010101	Audio			CPIX	ap-northeast-1	2025-02-08 02:21:43
	f15a7e2a3c1b1a1a1a1a1a1a1a1a1a1a		01010101010101010101010101010101	Video			CPIX	ap-northeast-1	2025-02-08 02:21:43
	f15a7e2a3c1b1a1a1a1a1a1a1a1a1a1a		01010101010101010101010101010101	Audio			CPIX	ap-northeast-1	2025-02-07 06:25:14
	f15a7e2a3c1b1a1a1a1a1a1a1a1a1a1a		01010101010101010101010101010101	Video			CPIX	ap-northeast-1	2025-02-07 06:25:14

(2) KeyServerUrl

The key request URL is made in step three of the preparatory phase.

Note:

Different DRM providers have varying substream limits, with Pallycon allowing up to 5 and DRMtoday up to 9.

(3) Vector

Encryption Initialization Vector (32-byte string).

(4) EncryptionMethod

Encryption Method: By default, FairPlay uses cbcs, while PlayReady and Widevine default to cenc.

Please note that there are differences in the encryption methods supported by various DRM standards:

cbcs: Supported by PlayReady, Widevine, and FairPlay.

cenc: Supported by PlayReady and Widevine.

(5) EncryptionPreset

Rules for encrypting substreams, with the default being preset0.

preset0: All substreams are encrypted using the same key.

preset1: Each substream is encrypted using a different key.

Playback Verification

Playback can be referenced through the [DRMtoday Player Official Documentation](#). Below, we illustrate how to play encrypted streams using the [DRMtoday Official Player](#) as an example.

1. Click **Try Your Stream**.

2. Fill in configuration information.

2.1 Firstly, enter the URL of the stream to be played in the "Content URL" field. If it is an HLS stream, select "HLS" for the Type; if it is a DASH stream, choose "MPEG-DASH".

DRM



PRESTOplay works seamlessly with our scalable **DRMtoday** cloud licensing service. If you'd like to test your own protected content just request a **free DRM trial account**.

DRM Environment

DRMtoday PRODUCTION

Merchant

XXXXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX

User ID

XXXXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX

Session ID

XXXXXXXXXX

Auth Token

XXXXXXXXXX

Asset ID

XXXXXXXXXX

Variant ID

Widevine Video Robustness

XXXXXXXXXX

Enter a comma separated list. Possible values are: 'HW_SECURE_ALL', 'HW_SECURE_DECODE', 'HW_SECURE_CRYPT0', 'SW_SECURE_DECODE', 'SW_SECURE_CRYPT0'. Use 'undefined' to explicitly declare that no robustness values should be set. By default, we pass all available levels from highest to lowest security level.

Widevine Audio Robustness

XXXXXXXXXX

Enter a comma separated list. Possible values are: 'HW_SECURE_ALL', 'HW_SECURE_DECODE', 'HW_SECURE_CRYPT0', 'SW_SECURE_DECODE', 'SW_SECURE_CRYPT0'. Use 'undefined' to explicitly declare that no robustness values should be set. By default, we pass all available levels from highest to lowest security level.

Widevine Distinctive Identifier Required

Indicates whether a persistent distinctive identifier is required.

Widevine Persistent State Required

Indicates whether the ability to persist state is required.

Widevine Version

com.widevine.alpha

Try experimental Widevine key systems.

PlayReady Video Robustness

XXXXXXXXXX

Enter a comma separated list. Possible values are: '3000', '2000', or '150'. Use 'undefined' to explicitly declare that no robustness values should be set. By default, we pass all available levels from highest to lowest security level.

PlayReady Audio Robustness

XXXXXXXXXX

Enter a comma separated list. Possible values are: '3000', '2000', or '150'. Use 'undefined' to explicitly declare that no robustness values should be set. By default, we pass all available levels from highest to lowest security level.

nanping@tencent.com

ORGANIZATION / MERCHANT
Tencent

DRMtoday

Overview

Assets

Deliveries

Reports

Ingest key

Sub-organizations

Members / Users

API endpoints

CONFIGURATION

DRM settings

Key seeds

Ingest settings

License delivery authorization

Upfront token authorization

Customer rights token

Widevine CAS

Documentation

Status page

Help Center

Sign out

DRMTODAY - MEMBERS & ROLES

PROD TencentLabs

Members & roles

View and manage Tencent members (also known as users) as well as their roles. You can also manage API accounts. [Learn more](#)

[Reload](#)

Members (1)

Active members can access the DRMtoday portal for this organization (also known as a merchant). A member's roles can be viewed using the Manage link.

[Add member +](#)

ID	SIGN IN	FULL NAME	
ec3466ac	nanping@tencent.com	-	Admin Manage

API accounts (1)

These accounts can use the DRMtoday API but can't be used to access the DRMtoday portal.

[Add API account +](#)

ID	SIGN IN	DESCRIPTION	
96e48db	nanping@tencent.com	test	Manage

Contact us • Privacy & cookie policy • Legal • ©2008-2025 castlabs • v3.83

Other tutorials

Filename Variable

Last updated : 2025-05-13 14:42:24

MPS supports rendering target paths of output files with the following variables:

Variable Name	Description	Usage Instruction
inputName	Input file name.	Applicable for VOD task.
inputFormat	Input file format.	Applicable for VOD task.
number	Output file number. Note: this variable only takes effect on the output .ts files produced under the HLS format.	Applicable for VOD task.
taskId	Task ID.	Applicable for Live task.
rand	Random number variable. In live stream recording tasks, it can be used to customize the output path. This way, when other variable parameters are the same, this random number variable can be used to avoid mutual overlap of multiple recording result files.	Applicable for Live task.
streamId	Stream ID in live streaming task.	Applicable for Live task.
format	Output file format.	Applicable for VOD and Live task.
definition	Parameter template ID.	Applicable for VOD and Live task.

Sample 1

If your transcoding requirements are as follows:

The name of the input file is `AnimalWorldE01.mp4` .

Transcoding templates 100010, 100020, and 100030 are used.

The names of the output files are `AnimalWorldE01_100010.mp4` , `AnimalWorldE01_100020.mp4` , and `AnimalWorldE01_100030.mp4` , respectively.

Then, when using the [ProcessMedia](#) API to initiate transcoding:

You should specify the `InputInfo.CosInputInfo.OutputObjectPath` parameter as

```
{inputName}_{definition}.{format} .
```

Sample 2

If your transcoding requirements are as follows:

The name of the input file is `AnimalWorldE01.mp4` .

Transcoding template 100210 is used.

The name of the output .m3u8 file is `AnimalWorldE01_from_mp4.m3u8` .

The names of the output .ts files are `AnimalWorldE01_from_mp4_0.ts` ,
`AnimalWorldE01_from_mp4_1.ts` , `AnimalWorldE01_from_mp4_2.ts` , and so on.

Then, when using the [ProcessMedia](#) API to initiate transcoding:

You should specify the `InputInfo.CosInputInfo.OutputObjectPath` parameter as
`{inputName}_from_{inputFormat}.{format}` .

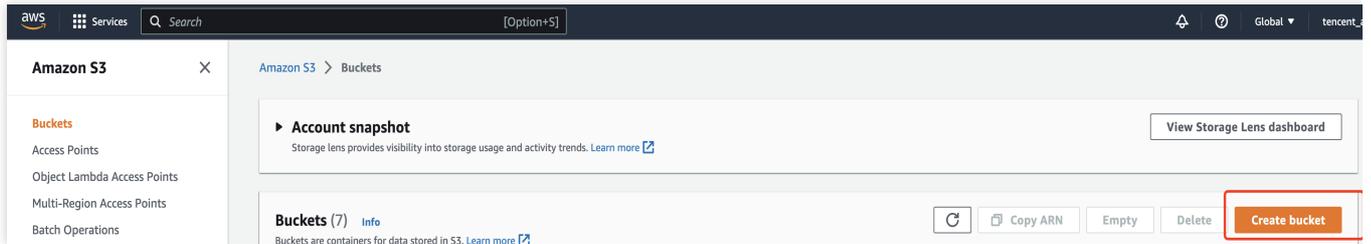
You should specify the `InputInfo.CosInputInfo.SegmentObjectName` parameter as
`{inputName}_from_{inputFormat}_{number}.{format}` .

Using Amazon S3 Buckets with MPS

Last updated : 2025-03-12 17:09:36

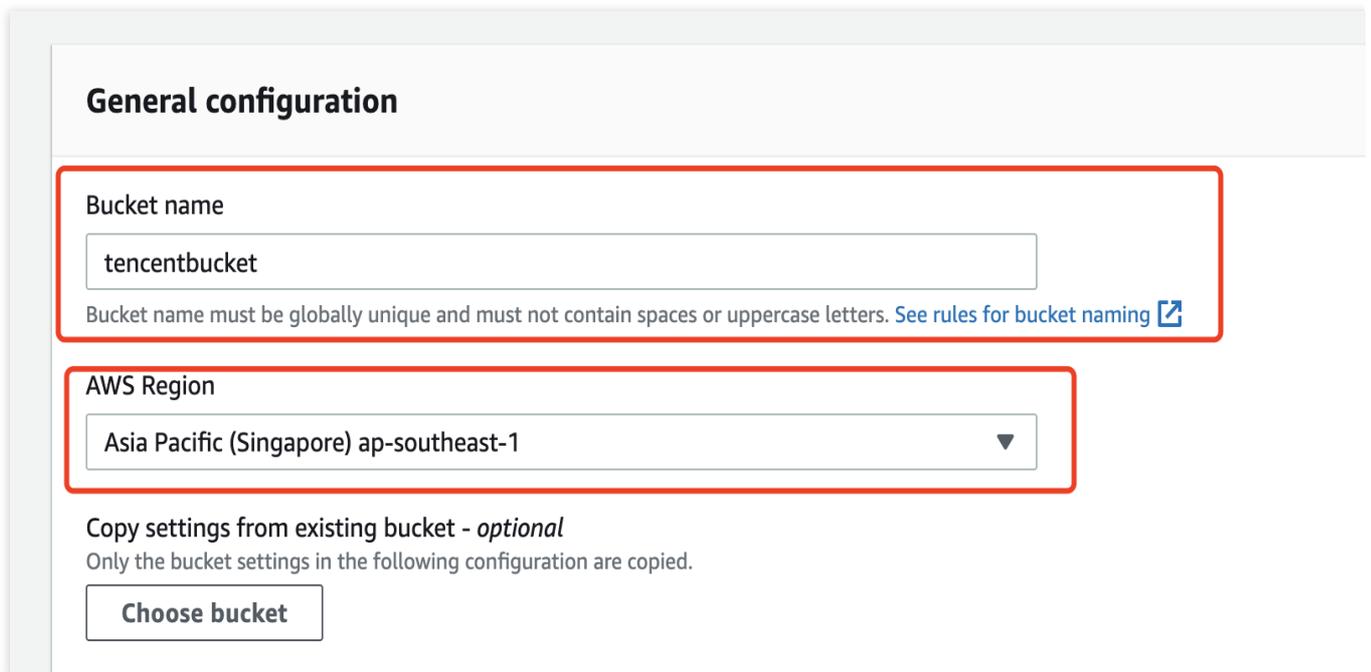
Step 1. Creating an S3 bucket for input/output files

1. Click **Create bucket**.



2. Enter a bucket name and select a region.

Enter a bucket name and select a region for the bucket. As an example, Singapore is selected in the screenshot below.

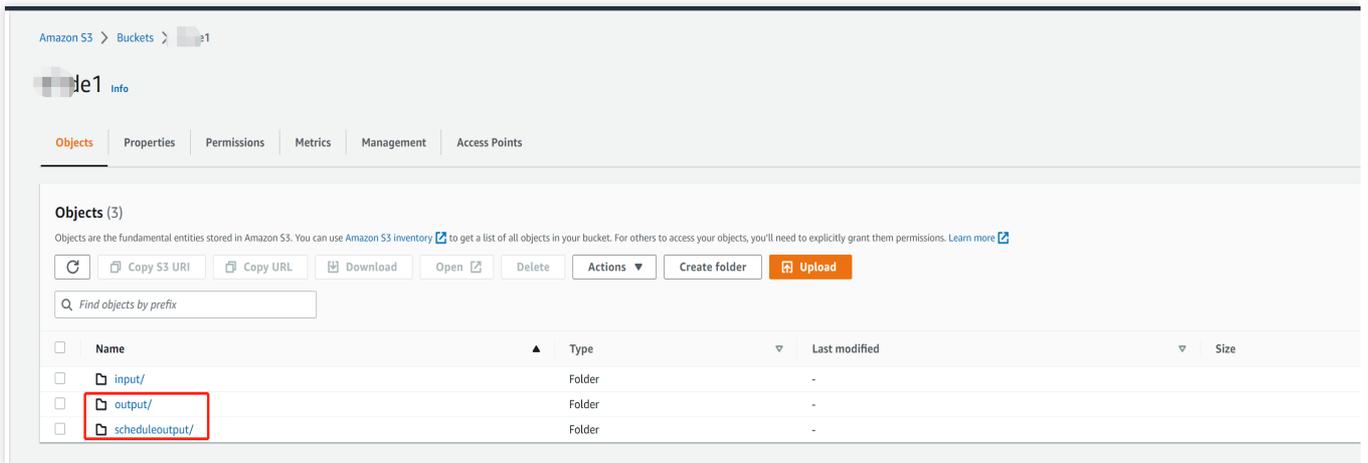
A screenshot of the 'General configuration' form in the AWS console. The form has a title 'General configuration' and two main input sections. The first section is 'Bucket name', which contains a text input field with the value 'tencentbucket'. Below the input field is a note: 'Bucket name must be globally unique and must not contain spaces or uppercase letters. See rules for bucket naming'. The second section is 'AWS Region', which contains a dropdown menu with the selected value 'Asia Pacific (Singapore) ap-southeast-1'. Below the dropdown is a section for 'Copy settings from existing bucket - optional', which includes a note 'Only the bucket settings in the following configuration are copied.' and a 'Choose bucket' button. Both the 'Bucket name' input field and the 'AWS Region' dropdown are highlighted with red rectangular boxes.

3. Click **Create bucket**.

4. Repeat the above steps to create a bucket for transcoding outputs (optional).

Note:

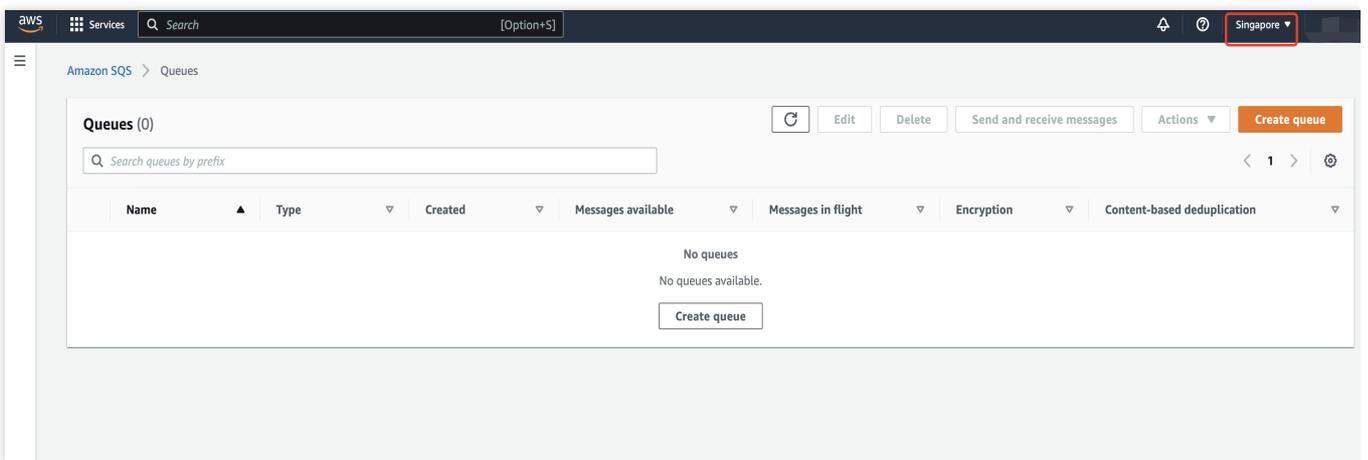
You can also output transcoding files to a new directory of the input bucket.



Step 2. Creating an SQS queue for bucket notifications

1. Select the queue region.

Select Singapore (ap-southeast-1).



Note:

To bind the queue to your bucket, make sure the queue region is the same as the bucket region.

2. Enter a queue name.

Amazon SQS > Queues > Create queue

Create queue

Details

Type
Choose the queue type for your application or cloud infrastructure.

You can't change the queue type after you create a queue.

Standard Info
At-least-once delivery, message ordering isn't preserved

- At-least once delivery
- Best-effort ordering

FIFO Info
First-in-first-out delivery, message ordering is preserved

- First-in-first-out delivery
- Exactly-once processing

Name

tencent_queue

A queue name is case-sensitive and can have up to 80 characters. You can use alphanumeric characters, hyphens (-), and underscores (_).

3. Disable encryption.

▼ Encryption
Amazon SQS provides in-transit encryption by default. To add at-rest encryption to your queue, enable server-side encryption. [Info](#)

Server-side encryption

Disabled

Enabled

4. Modify the access policy.

Select **Advanced**, enter your SQS ARN, S3 bucket ARN, and account ID at the specified locations below (for how to get the information, refer to the end of this document), and paste it under the access policy tab in the AWS console.

```
{
  "Version": "2012-10-17",
  "Id": "__default_policy_ID",
  "Statement": [
    {
      "Sid": "__owner_statement",
      "Effect": "Allow",
      "Principal": {
        "Service": "s3.amazonaws.com"
      },
    },
  ],
}
```

```
"Action": [
  "SQS:SendMessage"
],
"Resource": "Your SQS ARN",
"Condition": {
  "ArnLike": {
    "aws:SourceArn": "Your bucket ARN"
  },
  "StringEquals": {
    "aws:SourceAccount": "Your account ID"
  }
}
}
```

5. Click **Create queue**.

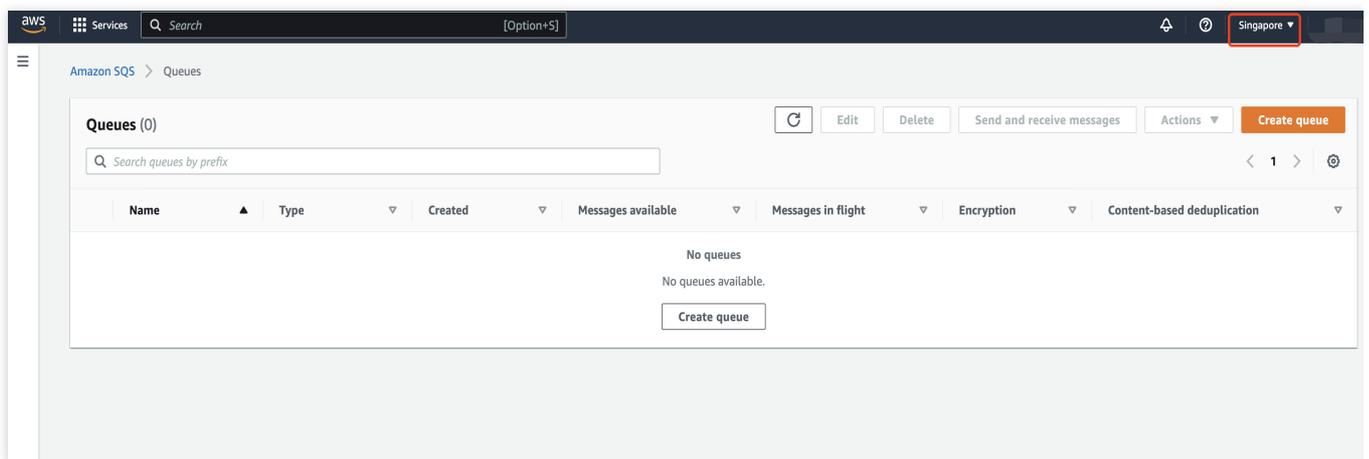
Step 3. Creating an SQS queue for transcoding callbacks

Note:

This is required only if you use AWS SQS callbacks.

1. Select the queue region.

Select Singapore.



Note:

The queue region must be the same as your bucket region.

2. Enter a queue name.

Amazon SQS > Queues > Create queue

Create queue

Details

Type
Choose the queue type for your application or cloud infrastructure.

Standard Info
At-least-once delivery, message ordering isn't preserved

- At-least once delivery
- Best-effort ordering

FIFO Info
First-in-first-out delivery, message ordering is preserved

- First-in-first-out delivery
- Exactly-once processing

You can't change the queue type after you create a queue.

Name
tencent_callback_sqs

A queue name is case-sensitive and can have up to 80 characters. You can use alphanumeric characters, hyphens (-), and underscores (_).

Configuration
Set the maximum message size, visibility to other consumers, and message retention. [Info](#)

Visibility timeout Info
30 Seconds
Should be between 0 seconds and 12 hours.

Message retention period Info
4 Days
Should be between 1 minute and 14 days.

Delivery delay Info
0 Seconds
Should be between 0 seconds and 15 minutes.

Maximum message size Info
256 KB
Should be between 1 KB and 256 KB.

Receive message wait time Info
0 Seconds
Should be between 0 and 20 seconds.

3. Disable encryption.

▼ Encryption
Amazon SQS provides in-transit encryption by default. To add at-rest encryption to your queue, enable server-side encryption. [Info](#)

Server-side encryption

Disabled

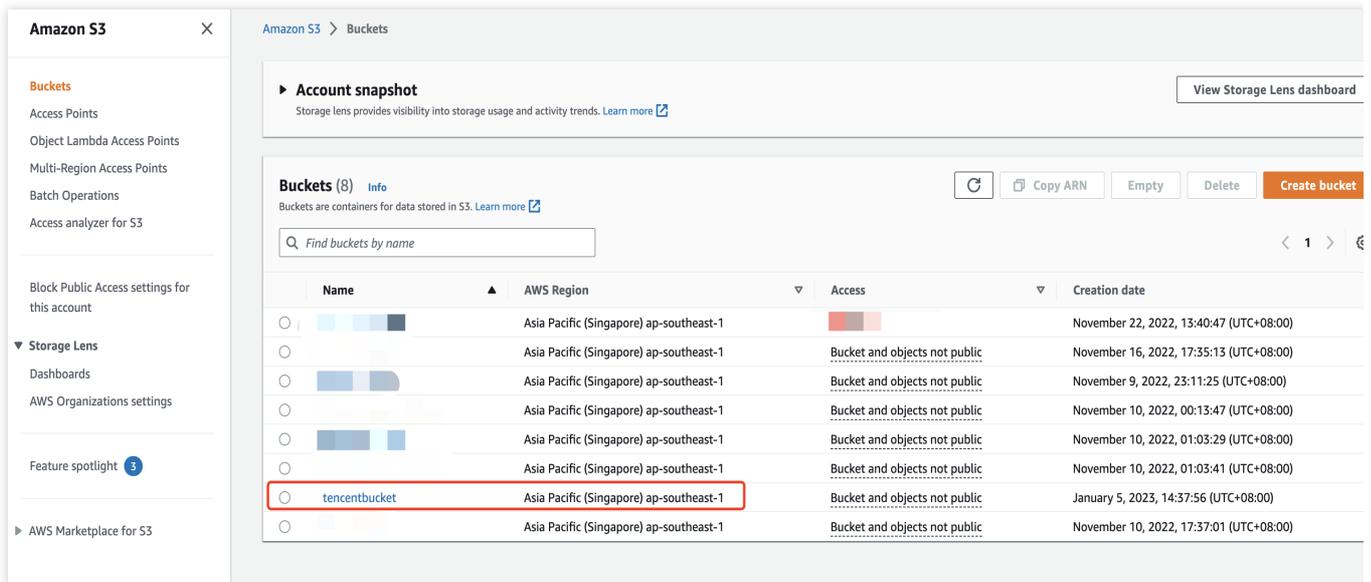
Enabled

4. Click **Create queue**.

Step 4. Binding the input bucket with the SQS queue

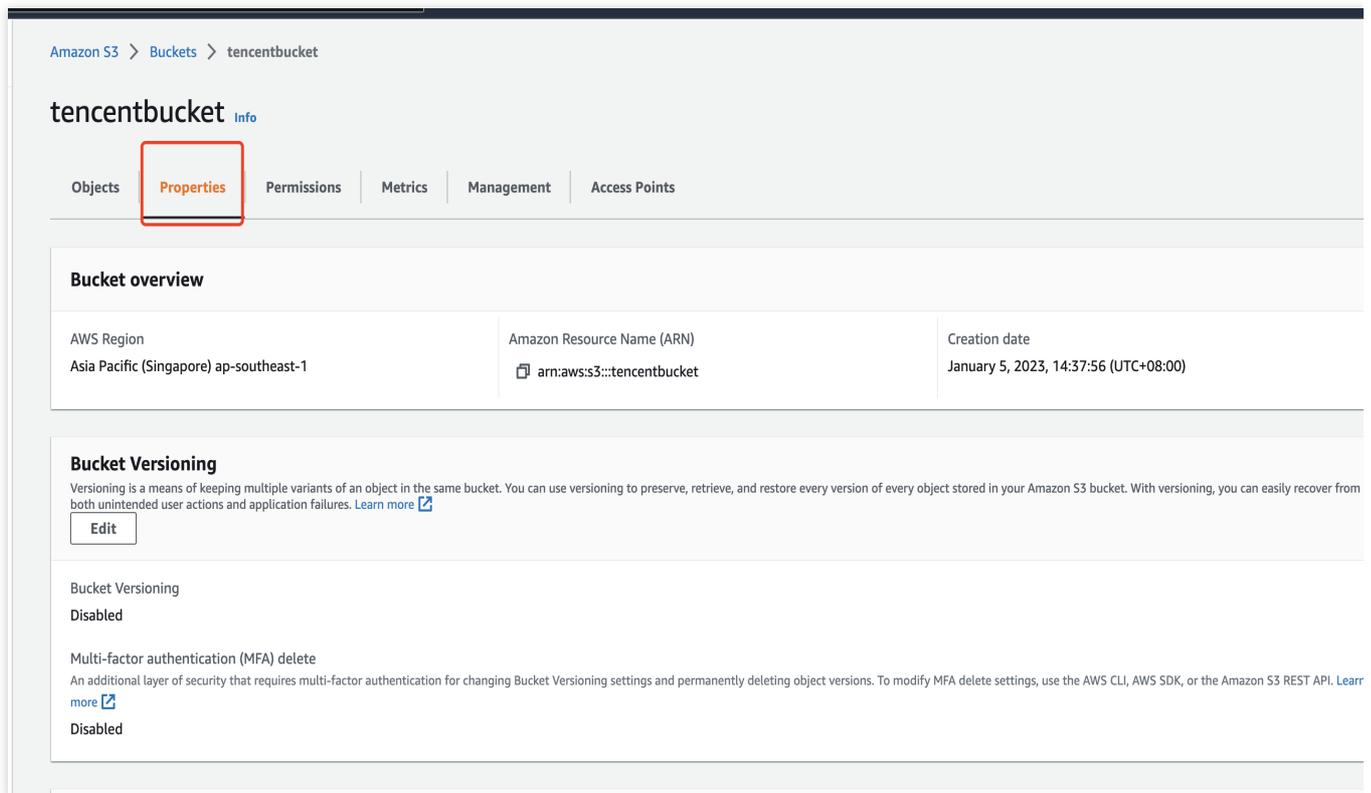
1. Go to the input bucket details page.

Return to the Amazon S3 console. Find the bucket you created and click the bucket name to enter the details page.



2. Bind the bucket with the SQS queue.

2.1 Select **Properties**.



2.2 Scroll down until you find **Event notifications**. Click **Create event notification**.

Event notifications (0)

Send a notification when specific events occur in your bucket. [Learn more](#)

Edit Delete Create event notification

■	Name	Event types	Filters	Destination type	Destination
<p>No event notifications</p> <p>Choose Create event notification to be notified when a specific event occurs.</p> <div style="text-align: center; margin-top: 10px;"> Create event notification </div>					

Amazon EventBridge Edit

For additional capabilities, use Amazon EventBridge to build event-driven applications at scale using S3 event notifications. [Learn more](#) or [see EventBridge pricing](#)

Send notifications to Amazon EventBridge for all events in this bucket

Off

2.3 Enter an event name.

General configuration

Event name

Event name can contain up to 255 characters.

Prefix - optional

Limit the notifications to objects with key starting with specified characters.

Suffix - optional

Limit the notifications to objects with key ending with specified characters.

2.4 Select **All object create events** in **Event types**.

Event types

Specify at least one event for which you want to receive notifications. For each group, you can choose an event type for all events, or you can choose one or more individual events.

Object creation

All object create events
s3:ObjectCreated:*

Put
s3:ObjectCreated:Put

Post
s3:ObjectCreated:Post

Copy
s3:ObjectCreated:Copy

Multipart upload completed
s3:ObjectCreated:CompleteMultipartUpload

Object removal

All object removal events
s3:ObjectRemoved:*

Permanently deleted
s3:ObjectRemoved:Delete

Delete marker created
s3:ObjectRemoved:DeleteMarkerCreated

Object restore

All restore object events
s3:ObjectRestore:*

Restore initiated
s3:ObjectRestore:Post

Restore completed
s3:ObjectRestore:Completed

Restored object expired
s3:ObjectRestore:Delete

Object ACL

Object ACL events
s3:ObjectAcl:Put

2.5 For **Destination**, select **SQS queue**, and select the queue you created for receiving bucket notifications. Click **Save changes**.

Destination

i Before Amazon S3 can publish messages to a destination, you must grant the Amazon S3 principal the necessary permissions to call the relevant API to publish messages to an SNS topic, an SQS queue, or a Lambda function. [Learn more](#)

Destination
Choose a destination to publish the event. [Learn more](#)

Lambda function
Run a Lambda function script based on S3 events.

SNS topic
Fanout messages to systems for parallel processing or directly to people.

SQS queue
Send notifications to an SQS queue to be read by a server.

Specify SQS queue

Choose from your SQS queues

Enter SQS queue ARN

SQS queue

Cancel
Save changes

2.6 Check if your SQS queue have available messages. If **Messages available** has turned from 0 to 1, the binding is successful.

Queues (1)							
Name	Type	Created	Messages available	Messages in flight	Encryption	Content-based deduplication	
tencent_queue	Standard	2023年1月05日 GMT+8 14:54:31	1	0	Disabled	-	

Step 5. Creating an IAM user and grant it permissions

5.1 Create a policy.

1. Go to **Identity and Access Management**, click **Policies**, and then click **Create policy**.

Identity and Access Management (IAM)

Search IAM

Dashboard

- Access management
 - User groups
 - Users
 - Roles
 - Policies**
 - Identity providers
 - Account settings
- Access reports
 - Access analyzer
 - Archive rules
 - Analizers
 - Settings
 - Credential report
 - Organization activity
 - Service control policies (SCPs)

Related consoles
IAM Identity Center New

IAM > Policies

Policies (1033) [Info](#)

A policy is an object in AWS that defines permissions.

Filter policies by property or policy name and press enter.

1 2 3 4 5 6 7 ... 52

Policy name	Type	Used as	Description
AWSLambdaBasicExecutionRole-97aac158-b88c-4833-8c93-f49b2c0a1951	Customer managed	None	
AWSLambdaBasicExecutionRole-f3d617e0-6617-4395-b4ab-1842a6136b...	Customer managed	None	
AWSLambdaEdgeExecutionRole-fc574814-f9db-4f79-aabc-2b7c3a57dd7e	Customer managed	Permissions policy ...	
CloudFrontRealtimeLogConfigRole-stream1_aryzap	Customer managed	Permissions policy ...	
CloudFrontRealtimeLogConfigRole-stream_aryzap	Customer managed	Permissions policy ...	
KinesisFirehoseServicePolicy-KDS-S3-swQOW-ap-southeast-1	Customer managed	Permissions policy ...	
KinesisFirehoseServicePolicy-KDS-S3-Yg9JB-ap-southeast-1	Customer managed	Permissions policy ...	
tencent_policy	Customer managed	None	
AWSDirectConnectReadOnlyAccess	AWS managed	None	Provides read only access to AWS Direct Connect via the AW...
AmazonGlacierReadOnlyAccess	AWS managed	None	Provides read only access to Amazon Glacier via the AWS Ma...
AWSMarketplaceFullAccess	AWS managed	None	Provides the ability to subscribe and unsubscribe to AWS Mar...
ClientVPNServiceRolePolicy	AWS managed	None	Policy to enable AWS Client VPN to manage your Client VPN ...
AWSSSODirectoryAdministrator	AWS managed	None	Administrator access for SSO Directory
AWSIoT1ClickReadOnlyAccess	AWS managed	None	Provides read only access to AWS IoT 1-Click.
AutoScalingConsoleReadOnlyAccess	AWS managed	None	Provides read-only access to Auto Scaling via the AWS Mana...

2. Choose the JSON tab, enter your SQS ARN and bucket ARN in the JSON policy below, paste it under the JSON tab, and click **Next** (twice).

Policy for Amazon SQS callbacks

Policy for HTTP callbacks

```

1- {
2-   "Version": "2012-10-17",
3-   "Statement": [
4-     {
5-       "Sid": "VisualEditor0",
6-       "Effect": "Allow",
7-       "Action": [
8-         "sqs:DeleteMessage",
9-         "s3:GetObject",
10-        "sqs:GetQueueUrl",
11-        "sqs:ReceiveMessage",
12-        "s3:GetObjectAttributes",
13-        "sqs:GetQueueAttributes",
14-        "sqs:ListQueueTags"
15-      ],
16-      "Resource": [
17-        "arn:aws:sqs:us-east-1:123456789012:my-queue",
18-        "arn:aws:s3:::my-bucket/*"
19-      ]
20-    },
21-    {
22-      "Sid": "VisualEditor1",
23-      "Effect": "Allow",
24-      "Action": [
25-        "s3:PutObject",
26-        "sqs:GetQueueUrl",
27-        "sqs:SendMessage"
28-      ],
29-      "Resource": [
30-        "arn:aws:s3:::my-bucket/*",
31-        "arn:aws:sqs:us-east-1:123456789012:my-queue"
32-      ]
33-    }
34-  ]
35- }

```

Security: 0 Errors: 0 Warnings: 0 Suggestions: 0

```

{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "VisualEditor0",
      "Effect": "Allow",
      "Action": [
        "sqs:DeleteMessage",
        "s3:GetObject",
        "sqs:GetQueueUrl",
        "sqs:ReceiveMessage",
        "s3:GetObjectAttributes",
        "sqs:GetQueueAttributes",
        "sqs:ListQueueTags"
      ],
      "Resource": [
        "The ARN of the SQS queue for bucket notifications",
        "The input bucket ARN + /*"
      ]
    }
  ]
}

```

```

    ]
  },
  {
    "Sid": "VisualEditor1",
    "Effect": "Allow",
    "Action": [
      "s3:PutObject",
      "sqs:GetQueueUrl",
      "sqs:SendMessage"
    ],
    "Resource": [
      "The ARN of the SQS queue for transcoding callbacks",
      "The output bucket ARN + /*"
    ]
  }
]
}

```

```

1- {
2-   "Version": "2012-10-17",
3-   "Statement": [
4-     {
5-       "Sid": "VisualEditor0",
6-       "Effect": "Allow",
7-       "Action": [
8-         "sqs:DeleteMessage",
9-         "s3:GetObject",
10-        "sqs:GetQueueUrl",
11-        "sqs:ReceiveMessage",
12-        "s3:GetObjectAttributes",
13-        "sqs:GetQueueAttributes",
14-        "sqs:ListQueueTags"
15-      ],
16-      "Resource": [
17-        "The ARN of the SQS queue for transcoding callbacks",
18-        "The output bucket ARN + /*"
19-      ]
20-    },
21-    {
22-      "Sid": "VisualEditor1",
23-      "Effect": "Allow",
24-      "Action": [
25-        "s3:PutObject",
26-        "sqs:GetQueueUrl",
27-        "sqs:SendMessage"
28-      ],
29-      "Resource": [
30-        "The ARN of the SQS queue for transcoding callbacks",
31-        "The output bucket ARN + /*"
32-      ]
33-    }
34-  ]
35- }

```

Security: 0 Errors: 0 Warnings: 0 Suggestions: 0

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "VisualEditor0",
      "Effect": "Allow",
      "Action": [
        "sqs:DeleteMessage",
        "s3:GetObject",
        "sqs:GetQueueUrl",
        "sqs:ReceiveMessage",
        "s3:GetObjectAttributes",
        "sqs:GetQueueAttributes",
        "sqs:ListQueueTags"
      ],
      "Resource": [
        "The ARN of the SQS queue for bucket notifications",
        "The input bucket ARN + /*"
      ]
    },
    {
      "Sid": "VisualEditor1",
      "Effect": "Allow",
      "Action": [
        "s3:PutObject"
      ],
      "Resource": [
        "The output bucket ARN + /*"
      ]
    }
  ]
}
```

Note:

In `Resources` of the JSON document, make sure you attach `/*` to the bucket ARN. For example, if your bucket ARN is `arn:aws:s3:::tencentbucket`, enter `arn:aws:s3:::tencentbucket/*`.

3. Enter a policy name and click **Create policy**.

Review policy

Name*

Use alphanumeric and '+,=,@,-' characters. Maximum 128 characters.

Description

Maximum 1000 characters. Use alphanumeric and '+,=,@,-' characters.

Summary

Service	Access level	Resource	Request condition
Allow (2 of 357 services) Show remaining 355			
S3	Limited: Read	BucketName string like tencentbucket, ObjectPath string like All	None
SQS	Limited: Read	QueueName string like tencent_queue	None

Tags

Key	Value
No tags associated with the resource.	

* Required

Cancel Previous Create policy

5.2 Create an IAM user.

1. Go to the IAM page, click **Users**, and then click **Add users**.

Identity and Access Management (IAM)

Introducing the new Users list experience
We've redesigned the Users list experience to make it easier to use. [Let us know what you think.](#)

IAM > Users

Users (2) [Info](#)

An IAM user is an identity with long-term credentials that is used to interact with AWS in an account.

	User name	Groups	Last activity	MFA	Password age	Active key age
<input type="checkbox"/>				None	None	43 days ago
<input type="checkbox"/>				None	None	17 days ago

Refresh Delete Add user

2. Enter a user name and click **Next** in the bottom right.

Specify user details

User details

User name

The user name can have up to 64 characters. Valid characters: A-Z, a-z, 0-9, and +, -, @, _ (hyphen)

Provide user access to the AWS Management Console - optional
If you're providing console access to a person, it's a best practice to manage their access in IAM Identity Center.

[If you are creating programmatic access through access keys or service-specific credentials for AWS CodeCommit or Amazon Keyspaces, you can generate them after you create this IAM user. Learn more](#)

Cancel

Click **Attach existing policies directly**, type in the search box the name of the policy you just created, and select the policy.

Click **Next** and then click **Create user**.

3. Click the name of the user you created.

The screenshot shows the AWS IAM console interface. A green banner at the top indicates 'User created successfully'. Below this, the 'Users' page is displayed with a table of users. The user 'tencent_test_user1' is highlighted with a red box and a red arrow.

User name	Groups	Last activity	MFA	Password age	Active key age
[redacted]	None	5 days ago	None	None	107 days ago
[redacted]	None	8 minutes ago	None	None	80 days ago
[redacted]	None	52 days ago	None	None	63 days ago
tencent_test_user1	None	Never	None	None	-

4. Click **Security credentials > Access keys > Create access key**.

IAM > Users > tf1-sqsnotify-test

tf1-sqsnotify-test

Summary

ARN arn:aws:iam::436808682493:user:tf1-sqsnotify-test	Console access Disabled	Access key 1 Not enabled
Created March 10, 2023, 10:46 (UTC+08:00)	Last console sign-in -	Access key 2 Not enabled

Permissions | Groups | Tags | **Security credentials** | Access Advisor

Console sign-in Enable console ac

Console sign-in link
https://436808682493.signin.aws.amazon.com/console

Console password
Not enabled

Multi-factor authentication (MFA) (0) Remove Resync Assign MFA de

Use MFA to increase the security of your AWS environment. Signing in with MFA requires an authentication code from an MFA device. Each user can have a maximum of 8 MFA devices assigned. [Learn more](#)

Device type	Identifier	Created on
No MFA devices. Assign an MFA device to improve the security of your AWS environment.		

[Assign MFA device](#)

Access keys (0) Create access

Use access keys to send programmatic calls to AWS from the AWS CLI, AWS Tools for PowerShell, AWS SDKs, or direct AWS API calls. You can have a maximum of two access keys (active or inactive) at a time. [Learn more](#)

No access keys

As a best practice, avoid using long-term credentials like access keys. Instead, use tools which provide short term credentials. [Learn more](#)

[Create access key](#)

5. Select **Other** and click **Next**. Note the access key ID and secret access key.

Access key best practices & alternatives

Avoid using long-term credentials like access keys to improve your security. Consider the following use cases and alternatives.

- Command Line Interface (CLI)**
You plan to use this access key to enable the AWS CLI to access your AWS account.
- Local code**
You plan to use this access key to enable application code in a local development environment to access your AWS account.
- Application running on an AWS compute service**
You plan to use this access key to enable application code running on an AWS compute service like Amazon EC2, Amazon ECS, or AWS Lambda to access your AWS account.
- Third-party service**
You plan to use this access key to enable access for a third-party application or service that monitors or manages your AWS resources.
- Application running outside AWS**
You plan to use this access key to enable an application running on an on-premises host, or to use a local AWS client or third-party AWS plugin.
- Other**
Your use case is not listed here.

It's okay to use an access key for this use case, but follow the best practices:

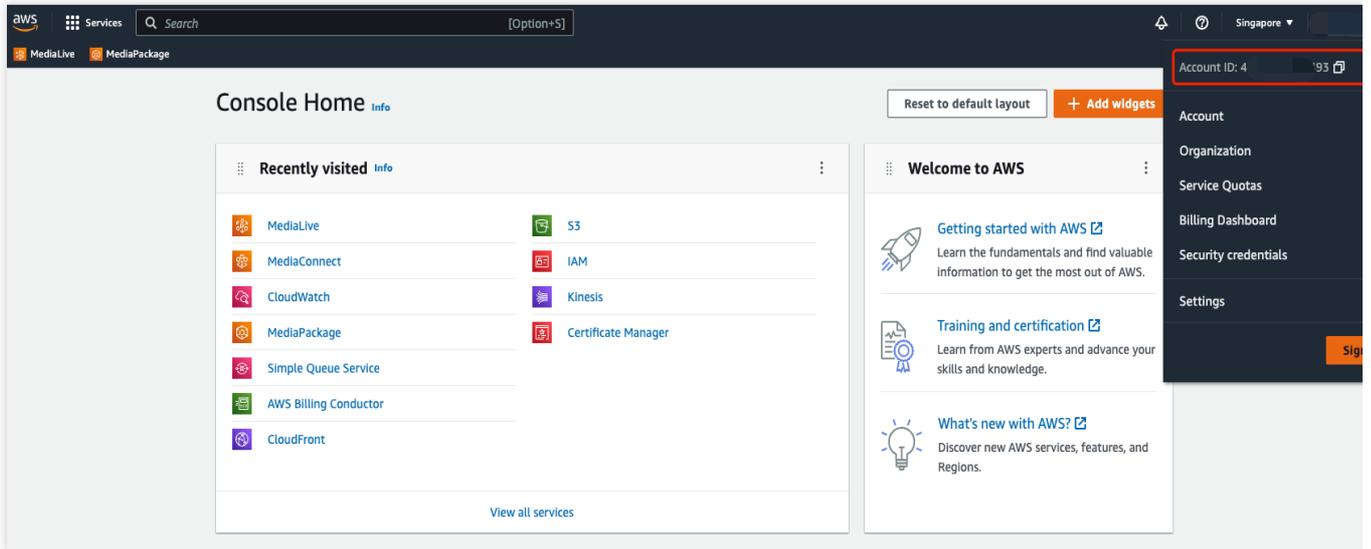
- Never store your access key in plain text, in a code repository, or in code.
- Disable or delete access keys when no longer needed.
- Enable least-privilege permissions.
- Rotate access keys regularly.

For more details about managing access keys, see the [Best practices for managing AWS access keys](#).

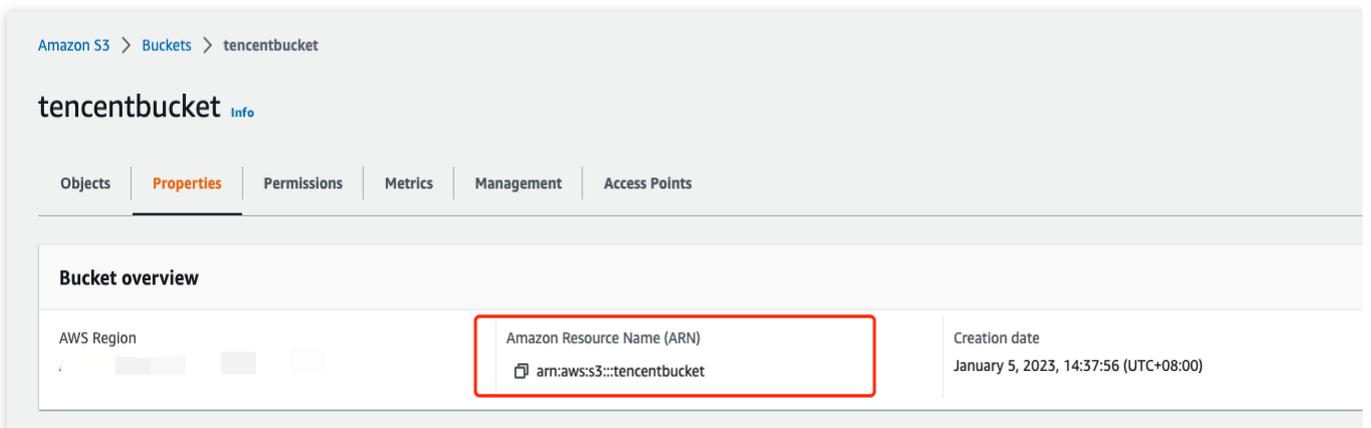
Cancel Next

Appendix

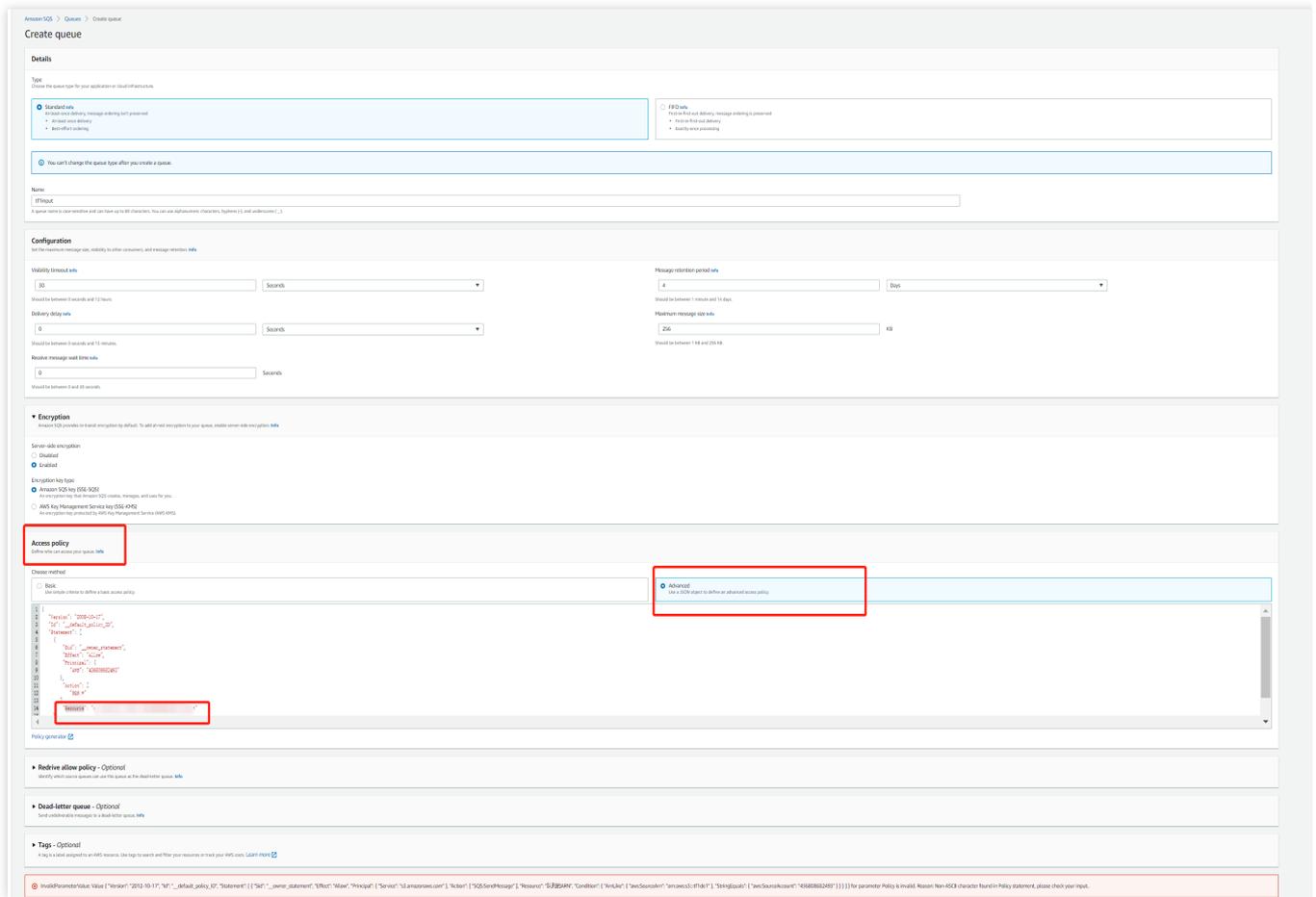
You can view your account ID by clicking your user name in the top right corner of the console home page.



To view the ARN of an S3 bucket, go to the **Buckets** page and click **Properties**.



To find the ARN of your SQS queue, on the **Create queue** page, find **Access policy**, click **Advanced**, and **Resource** indicates your queue ARN.



If you don't know what to enter for the region field in the Tencent Cloud console, go to the [Amazon S3 Buckets page](#), find your bucket, the latter half of **AWS Region** (remove the spaces) is what you should provide to Tencent Cloud. According to the screenshot below, the region you should enter for the `tencentbucket` bucket is `ap-southeast-1`.

Amazon S3 > Buckets

Account snapshot

Storage lens provides visibility into storage usage and activity trends. [Learn more](#)

[View Storage Lens dashboard](#)

Buckets (10) [Info](#)

Buckets are containers for data stored in S3. [Learn more](#)



Copy ARN

Empty

Delete

Create bucket

Find buckets by name

< 1 >

Name	AWS Region	Access	Creation date
[redacted]	Asia Pacific (Singapore) ap-southeast-1	Bucket and objects not public	February 23, 2023, 14:42:50 (UTC+08:00)
[redacted]	Asia Pacific (Singapore) ap-southeast-1	Public	November 22, 2022, 13:40:47 (UTC+08:00)
[redacted]	EU (Paris) eu-west-3	Bucket and objects not public	March 7, 2023, 21:37:06 (UTC+08:00)
[redacted]	Asia Pacific (Singapore) ap-southeast-1	Bucket and objects not public	November 9, 2022, 23:11:25 (UTC+08:00)
[redacted]	Asia Pacific (Singapore) ap-southeast-1	Bucket and objects not public	November 10, 2022, 00:13:47 (UTC+08:00)
[redacted]	Asia Pacific (Singapore) ap-southeast-1	Bucket and objects not public	November 10, 2022, 01:03:29 (UTC+08:00)
[redacted]	Asia Pacific (Singapore) ap-southeast-1	Bucket and objects not public	November 10, 2022, 01:03:41 (UTC+08:00)
tencentbucket	Asia Pacific (Singapore) ap-southeast-1	Bucket and objects not public	January 5, 2023, 14:37:56 (UTC+08:00)
[redacted]	EU (Paris) eu-west-3	Bucket and objects not public	March 10, 2023, 10:06:36 (UTC+08:00)
[redacted]	Asia Pacific (Singapore) ap-southeast-1	Bucket and objects not public	November 10, 2022, 17:37:01 (UTC+08:00)

MPS Task Callback Notification

Last updated : 2022-06-06 11:10:54

After a video is processed by MPS, it's a standard practice to send a notification about the completion of the video processing task. MPS has a template in SCF which you can use to enable this feature.

Overview

The example in this document uses MPS and SCF. MPS executes video processing tasks, and SCF handles callback messages.

Directions

Step 1. Create a function

1. Log in to the [SCF console](#), and click [Function Service](#) on the left sidebar.
2. At the top of the **Function Service** page, select **Beijing** and click **Create** to enter the function creating page.
3. Set the following parameters:

Function name: enter a name, e.g., `MPSAnalysis` .

Runtime: task callback templates support only Nodejs 8.9 at the moment.

Create Method: select **Function Template**.

Fuzzy search: enter "MPS Webhook template" and search.

Note:

Click **Learn More** in the template to view details in the **Template Details** window, which can be downloaded.

4. Click **Next** to go to the function configuration page.
5. Keep the default configuration and click **Finish** to complete the creation.

Step 2. Configure an MPS trigger

1. In the [SCF console](#), click [Function Service](#) on the left sidebar, and click the function created to go to the details page.
2. Click **Trigger Management** > **Create a Trigger**. A trigger creation window pops up. Select **MPS trigger** for the trigger method.

The information of the main parameters is as follows. Keep the default settings for other parameters.

Event Type: an MPS trigger pushes events at the account level. Two types of trigger events are supported now:

Workflow Task (`WorkflowTask`) and Video Edit Task (`EditMediaTask`).

>?

```
>- A service role exception message will appear when you create an MPS trigger for the first time. Click **SCF_QcsRole** and **MPS_QcsRole** as prompted to grant the necessary permissions.  
>- An MPS trigger uses events generated at the service level as event sources, regardless of attributes such as region and resources. Each event type can be bound to only one function for each account. If you need multiple functions to handle a task, please see [Node.js SDK] (https://intl.cloud.tencent.com/document/product/583/32747).
```

3. Click **Submit** to complete the configuration.

Step 3. Test the function

1. Log in to the [MPS console](#) and start a video processing workflow.

2. Go to the [SCF console](#) to view the execution result.

Select the **Log Query** tab on the function details page to view the printed log information.

3. Log in to the [COS console](#) to view the data dumping and processing result.

Note:

You can write your own data processing methods as needed.

MPS Task Callback Backup to COS

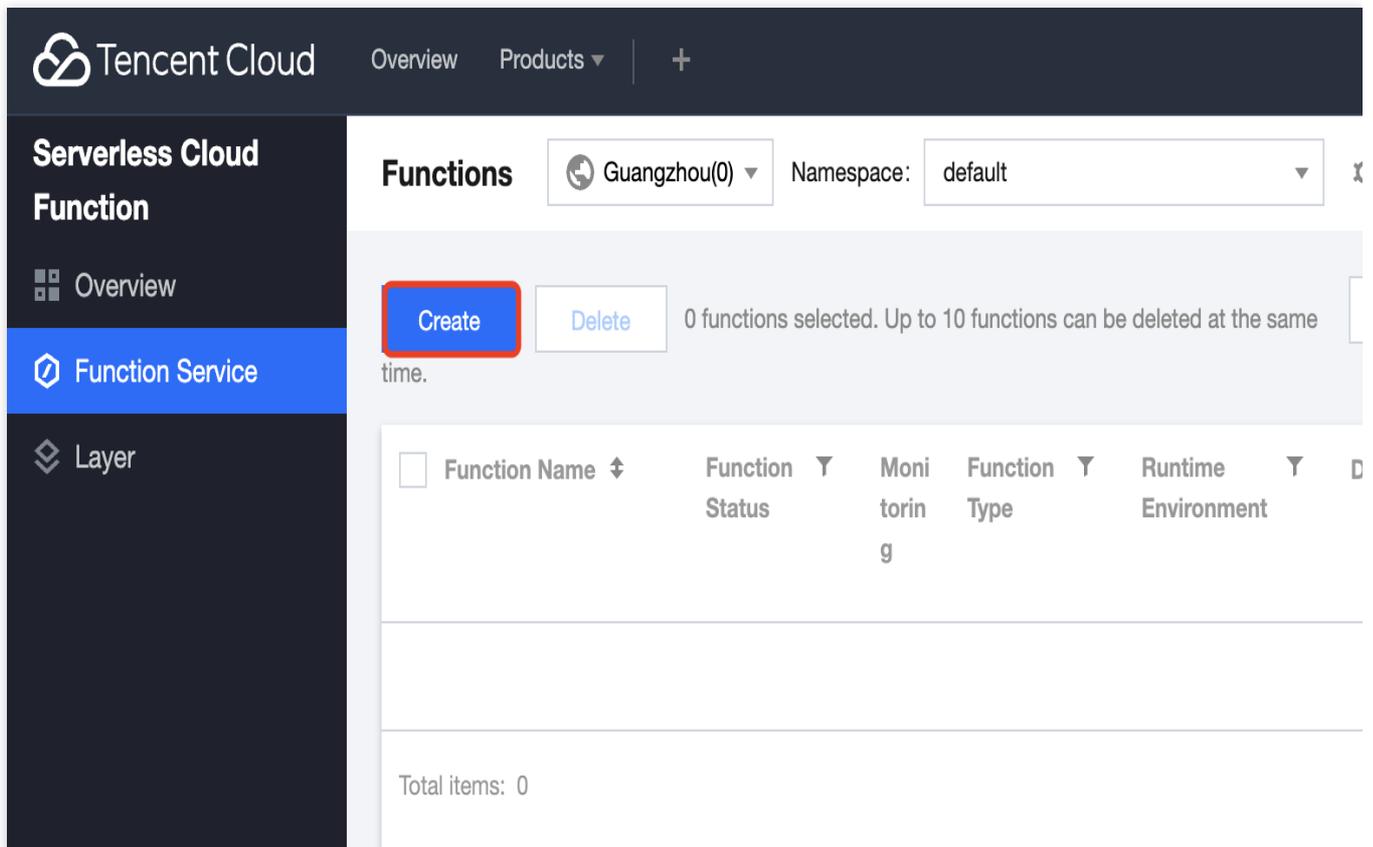
Last updated : 2022-01-18 16:19:44

Backing up callbacks of MPS tasks to COS via SCF is a standard practice. MPS has a template in SCF which you can use to enable the feature. MPS executes video processing tasks; SCF handles callback messages, and COS provides permanent terminal storage.

Directions

Step 1. Create a function

1. Log in to the [SCF console](#), and click [Function Service](#) on the left sidebar.



2. At the top of the **Function Service** page, select **Beijing** and click **Create** to enter the function creating page.

3. Set the following parameters:

Create Method: select **Template**.

Fuzzy search: search **CLSSFCOS**.

←
Create

Create Method

Template

Use demo template to create a function or application

Custom

Create a custom function using HelloWoird demo

Fuzzy search

Q
共2个

MPS_SCF_COS Learn More

Category Function

Description The SCF will write each message to txt by each line....

Tag Python2.7 MPS COS

Author TC Tencent Cloud

Deploy 7,880次

MPSWebhookD... Learn More

Category Function

Description Use cloud functions to push MPS information.

Tag Nodejs8.9 MPS
Webhook

Author TC Tencent Cloud

Deploy 7,966次

Next

Cancel

Note:

You can click **Learn More** in a template to view its details or download the template.

4. Click **Next**.

← Create

Basic Configurations

Function name *

It supports 2 to 60 characters, including letters, numbers, underscores and hyphens. It must start with a letter and end with a number or letter.

Region *

Description *

Up to 1000 letters, digits, spaces, commas, and periods.

Function Codes Runtime: Python2.7 Execution Method: index.main_handler

Advanced Configuration ! Function invocation logs are published to the SCF-specific topic of CLS, which will use the free tier of CLS. See [CLS Billing Details](#)

Trigger Configurations

Create a Trigger Custom

5. Keep the default configuration and click **Complete** to complete the creation.

Step 2. Configure an MPS trigger

1. In the **SCF console**, click **Function Service** on the left sidebar, and click the function created to go to the details page.

2. Click **Trigger Management > Create a Trigger**. A trigger creation window pops up. Select **MPS trigger** for the trigger method.

The main parameter information is as follows. Use the default values for the remaining configuration items.

Event Type: an MPS trigger pushes events at the account level. Two types of trigger events are supported now:

Workflow Task (`WorkflowTask`) and Video Edit Task (`EditMediaTask`).

Note:

A service role error message will appear when you create an MPS trigger for the first time. Click **SCF_QcsRole** and **MPS_QcsRole** to grant the necessary permissions as prompted.

An MPS trigger uses events generated at the service level as event sources, regardless of attributes such as region and resources. Each event type can be bound to only one function for each account. If you need multiple functions to handle a task, please see [Node.js SDK](#).

3. Click **Submit** to complete the configuration.

Step 3. Test the function

1. Start an MPS video processing workflow in the [MPS console](#).

2. Go to the [SCF console](#) to view the execution result.

Select the **Log Query** tab on the function details page to view the printed log information.

3. Log in to the [COS console](#) to view the data dumping and processing result.

Note:

You can write your own data processing methods as needed.