

Media Processing Service Getting Started Product Documentation





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Getting Started

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This document helps you quickly understand and integrate the Media Processing Service (MPS). The main steps to use the MPS are as follows:

Prerequisites

Sign-up and Login

1. Sign up for a Tencent Cloud account.

2. Log in to the Tencent Cloud website, and select **Cloud Products** > **Video Services** > MPS to enter the MPS console and activate the service for free.



COS Authorization

Currently, MPS supports three types of input file sources: Tencent Cloud Object Storage (COS), AWS S3, URL.

If you wish to use COS, you must complete COS authorization, create a service role, and allow MPS to perform read and write operations such as downloading, transcoding, and uploading on files in your COS bucket.

If you wish to use AWS S3, you can skip COS authorization, but shall complete Using Amazon S3 Buckets with MPS. To use a URL as the input source, you need to authorize COS as the output source.



Tencent Cloud Object Storage ((COS) Authorization	
To facilitate accessing your files stored in the cloud and s Object Storage (COS) authorization.	storing the processed ones in the cloud, please complete Tencent Cloud	
Access your media files	Store in the cloud	
Tencent COS Pending authoriza	ation Tencent COS Pending authorization	
AWS S3	AWS S3	
Input	→ 🛟 Media Processing Service → 🧧 Output	
	a input and output, you can alvia COS outbouration. How to integrate AMC S2 with MDS F8	

Note

If you do not complete the authorization, you will not be able to perform COS-related operations in the MPS console, or enable the Event Notification feature.

Operation Steps

MPS can process your VOD files or live streams.

VOD file processing: Audio and video transcoding, enhancement, intelligent identification & analysis, quality inspection and other processing tasks can be performed on files uploaded to Tencent COS buckets. Currently only transcoding is available for files in AWS S3 buckets.

Live stream processing: Real-time recording, intelligent identification & analysis, quality inspection and other processing tasks can be performed on live streams.

VOD File Processing

Step 1: Initiate a Task

Currently, you can initiate a VOD file processing task by three methods:

Quickly creating a task in the console: Manually select files in the console and initiate a processing task.

Automatically triggering a task: After files are uploaded to COS/AWS S3 buckets, a processing task will be

automatically initiated, with no need to manually create a task in the console.

Initiating a task via an API: A task is initiated by calling the API. It is applicable to batch processing of uploaded files.

Method 1: Quickly Creating a Task in the Console



Go to the Console Task Creation page, and click Create VOD Processing Task.

Quickly Create Task on the Console Select VOD files or input live	stream for quick processing. This feature is suitable for initiating single tasks or testing template effects.
	autorn for quick proceeding. The reaction o contacto for initiating single tasks of testing template energies
Process VOD Files	Process Live Streams
Supports processing of files stored in Tencent Cloud	Input of live stream addresses for processing
he processing features include audio/video	The processing feature includes live recording. Stay tuned for more features.
ranscoding, audio/video enhancement, intelligent	
uditing, intelligent analysis, intelligent identification,	
oromonos, matormans, otor	

Fill in the following information on the Quickly Create VOD File Processing Task page:

	ut File									
nput File Source	Tencent Cloud Object Storage (COS)	URL AWS S3								
Select Input File *	Select files from COS.		Select							
2 Process Inp	ut Files									
Create Orchestra	ion Select Existing Orchestration	Through the orchestration, MF	S feature nodes of	an be combined,	such as enha	ncing the vide	o before trans	scoding to forr	m an automat	ic process
l Ir	put +	Audio/Video 💉 🗙 — 🔶		Audio/Video 🖌 🎤	× (+)		Output			
3 Specify Out Dutput Save Path *	ions () () put Path Select a folder path from COS. To specify the output path of a feature no	de separately, vou can click the fe	Select ature node in ster	2 and configure	it in More Sett	inas > Custon	nize Output Pi	ath.	· · · · · · · · · · · · · · · · · · ·	ave the o
3 Specify Out	ions () () put Path Select a folder path from COS. To specify the output path of a feature no	de separately, you can click the fe	Select ature node in step	2 and configure	it in More Sett	ings > Custon	nize Output Pr	ath.	· · · · · · · · · · · · · · · · · · ·	ave the c

1. Specify an input file

You can choose an audio or video file from a COS or AWS S3 bucket, or provide a file download URL.



Note:

If you choose COS or URL input, you shall complete the Prerequisites - COS Authorization step mentioned above. If you choose AWS S3 as the input, you do not need to complete COS authorization, but shall refer to the Using Amazon S3 Buckets with MPS document, to create an AWS sub-account, S3 input and output buckets, SQS, etc.

2. Scheme Processing Workflow

With a scheme, you can combine various features to form an automatic processing workflow. For example, by combining the enhancement and transcoding features, you can first enhance the image quality of the input file and then perform transcoding to reduce the bitrate.

Click **Add Feature Node**, to edit the parameters in the opened drawer floating layer. You can create templates to save parameters for the convenience of reuse.

Select a template: Use template parameters preset in the system or saved previously.

Custom: Custom parameters.

← Create VOD Processing Task	Audio/Video Transcoding Settings Billing Modes [2]
1 Specify Input File	Select template Custom
Input File Source O Tencent Cloud Object Storage (COS) URL	File Type O Audio/Video Transcoding O Audio transcoding Save as Template
Select Input File • Select files from COS.	Transcoding Type O General Transcoding TSC transcoding Remux Video to Adaptive Bitrate Stream
2 Process Input Files	Container format MP4
Create Orchestration Select Existing Orchestration Thre	Configuration items VIdeo Parameters Audio Parameters If the container format is MP4, FLV or HLS, video parameters are required.
	Video Parameters
Input Aud	Encoding standard H.264 •
	Average Bitrate O Keep the original Custom
	Resolution Ckeep the original Scale Custom
Enable event notifications()	Frame rate O Keep the original Custom
Specify Output Path	
	More settings
Output Save Path * Select a toker path from COS. To specify the output path of a feature node sept.	Customize Transcoding Output Path
Advanced Settings	
Associate Resource Select associated resource	Output bucket Use the output bucket selected in this task.
After the resource is associated, the costs for this	Output Path Use the default variables for file names and paths. File Name Variable Description 🗳 .
Cresto	Save settings Cancel

3. Specify the output path

Specify the default save path for the processed output file.

If you need to set a separate output path for a certain feature node in the scheme, e.g., when you add three features, namely transcoding, enhancement, and screencapturing in the scheme, and you expect the output files of screencapturing to be saved in different paths, you can click on the screencapturing node in Step 2, and configure it in **More Settings** > **Custom Screencapturing Output Path**. You can also adjust the naming method of the output files for different features. For details, see the description of Filename Variable.

Method 2: Automatically Triggering a Task

1. Go to the Scheme Management > VOD Scheme page, and click Create VOD Scheme.

2. Configure the trigger bucket and directory, output bucket and directory, specific task flow, etc. For configuration details, refer to VOD Scheme Configuration Description.

Trigger type	AWS Tencent Cloud COS
Scheme name *	TEST
	Max 128 characters; supports Chinese characters, letters, digits, underscores, and hyphens.
Trigger bucket *	Tokyo vunatest-1313953107 v
Trigger directory	/input/
	Starts and ends with "/". If you leave this empty, the orchestration will be applied to all directories of the bucket.
Output bucket *	yunatest-1313953107 💌
Output directory	/output/
	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 actions. More will be supported in the future.
Actions *	
	Input → ▲ Audio/Video ∧ × → ▲ Audio/Video ∧ × → ■ Output
	Intelligent An 🖍 🗙

3. By default, auto-trigger is not enabled for the scheme. Go back to the **Scheme Management > VOD Scheme** page and click **Enable** to enable the auto-trigger feature.

VOD Orchestration	Through the orchestration, MPS feature not	des can be combined, such as enhancing the	video before transcoding to form an automatic	processing flow.
(i) Create a VOD orches	tration and enable it. Uploading a new file i	n the associated bucket will automatically init	iate the processing task.	
Create VOD orchestration				
Scheme name/ID	Scheme type	Trigger bucket	Trigger directory	Creation tim
10101	Preset			Aug 04, 2023
10100	Preset			Aug 04, 2023
30826	Custom	ap-tokyo	/input/	Jun 04, 2024
30800	Custom	ap-singapore	/mps/	Jun 03, 2024
30799	Custom	ap-singapore	/mps/	Jun 03, 2024
30798	Custom	ap-singapore	/mps/	Jun 03, 2024
23773	Custom	ap-singapore	/	Aug 29, 2023
Total items: 7				

4. Upload a video file that needs processing to the trigger bucket configured in the scheme. The newly uploaded video will then be automatically processed according to the tasks configured in the scheme, with no need to manually create a task in the console.

Note

After auto-trigger is enabled for the scheme, it will only take effect in video files newly uploaded to the trigger bucket. Files previously stored in the trigger bucket will not be processed automatically.

Method 3: Initiating a task via an API

Refer to Proactively Initiate Transcoding, and initiate tasks through an API ProcessMedia. The following new features have not been launched on the console yet, but can be experienced through the API:

Media Quality Inspection: Supports video file format diagnosis, video image content detection (shaking, blur, low light, overexposure, black edge, white edge, black screen, white screen, image glitch, noise, mosaic, QR code, etc.), and no-reference scoring.

Step 2: Manage Tasks

1. By entering the VOD Task Management page, you can see a list of all tasks you have initiated.

2. You can filter tasks to be processed by task status, Task ID, etc. You can also click **View details** to view subtask information, click the Restart button to restart tasks queuing up, play the source video, and perform other operations.



VOD Proces	sing Tasks					
i This pa	ge only shows tasks in the p	ast seven days				
Create task						
Task ID			Status T	Task type ▼	Creation time ↓	En
▼ 2600		28a380btt7	Completed	Audio/Video Enhancement	Jun 04, 2024 14:39:26 (UTC+08:00)	Jur
Subtask No.	Subtask status T	Subtask type T	Template Type	T Start time 🕈	End time \$ Output	
1	Successful	Audio/Video Enhancem	-	Jun 04, 2024 14:39:26 (Jun 04, 2024 14:40:15 (c	
▶ 260(704201tt7	Completed	Audio/Video Enhancement	Jun 04, 2024 14:36:56 (UTC+08:00)	Jur
▶ 260		a5772ett7	Completed	Audio/Video Enhancement	Jun 04, 2024 14:35:27 (UTC+08:00)	Jur

3. By expanding the subtask list, you can view subtask information, play/view subtask files, download subtask output files, view subtask details, and perform other operations.



VOD Processi	ng Tasks					Details	
(i) This page						Basic information	
G						Subtask No.	1
						Subtask status	Succe
Create task						Start time	Jun 04
Task ID			Status T	Task type T	Creation time	End time	Jun 04
-				Audio/Video Enhancement	Jun 04, 2024	Template information	
						Template Type	-
Cubicali Ma					Ford House A	Template parameters	▼ Vie
Subtask No.					End time ‡	Input information	
1		Audio/Video Enhancem		Jun 04, 2024 14:39:26 (Jun 04, 2024 14:40	URL	https:/
						File size	4.17 N
						Bitrate	654.28
				Audio/Video Enhancement	Jun 04, 2024	Frame rate	24 fps
						File duration	00:00:
•				Audio/Video Enhancement	Jun 04, 2024	Output information	n
						Bucket	
						Bucket Location	Singa
 Banada Banada 					Jun 04, 2024	File path	/mps_
						File size	4.29 N
				Audio/Video Transcoding, Screenshot	, Jun 04, 2024	Bitrate	675.0
						Frame rate	24 fps

Live Stream Processing

Step 1: Initiate a Task

Currently, you can initiate a live stream processing task by two methods:

Quickly creating a task in the console: Manually configure and initiate a processing task in the console.

Initiating a task via an API: A task is initiated by calling an API.

Method 1: Quickly Creating a Task in the Console

Go to the Console Task Creation page, and click Create Live Processing Task.



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

-	ut File				
Live stream address	http://www.abc.com/ab	oc.m3u8			
2 Process Ing	out Files				
Create Orchestra	tion Select Existing O	Drchestration			
下 Ing	out	Live recordin 🖍 >	<	Output	
			_ · · · · · · [-	
Enable event notifica	tions(i)				
Specify Out	put Path				
	[ap-singapore]	/mps_output/	Select		
Output Save Path *					
Output Save Path *					

When creating a live stream recording task, ensure that the live stream address is correctly entered. If the live stream fails to be pulled the first time, the pulling operation will be retried three times. If the operation still fails, a message of failure will be returned for the recording task.

Method 2: Initiating a Task via an API

Initiate a single live stream processing task via the API ProcessLiveStream. It supports the following features: Smart Moderation: Supports recognition of pornographic content in images and sounds, and detection of sensitive information.

Intelligent Identification: Supports recognition of faces, objects, text, and speech. Speech recognition also supports intelligent translation and real-time subtitle conversion. It includes features such as game tagging.

Intelligent Analysis: Supports real-time news segmentation and other features.

Quality Inspection: Supports live stream format diagnosis, video image content detection (shaking, blur, low light, overexposure, black and white edges, black and white screens, image glitch, noise, mosaic, QR code, etc.), no-reference scoring, and other features.

Live Stream Recording.

Step 2: Manage Tasks

Go to the Live Stream Task Management page, where you can see a list of all the live stream processing tasks you have initiated. You can view task details, terminate tasks, and perform other operations.

 You can on the second se	create a live processing tas only shows tasks in the p	sk to record live content. <u>Learn m</u> e aast seven days	ore 🖸			
Create task						
Task ID			Status T	Task type ▼	Creation time \$	
,		7329dde22	Completed	Live recording	Jun 04, 2024 10:50:04 (U	TC+08:00)
Subtask No.	Subtask status T	Subtask type T	Template Type T	Start time \$	End time 🗘 🛛 🗘	Dutput
1	Successful	Live recording	Live recording	Jun 04, 2024 10:50:08 (Jun 04, 2024 11:18:10 (
		je1839a82a69d7a59	Completed	Live recording	Jun 04, 2024 10:47:23 (U	TC+08:00)