

# Alibaba Cloud

## ApsaraVideo VOD User Guide

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# Document conventions

Style	Description	Example
 <b>Danger</b>	A danger notice indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	 <b>Danger:</b> Resetting will result in the loss of user configuration data.
 <b>Warning</b>	A warning notice indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	 <b>Warning:</b> Restarting will cause business interruption. About 10 minutes are required to restart an instance.
 <b>Notice</b>	A caution notice indicates warning information, supplementary instructions, and other content that the user must understand.	 <b>Notice:</b> If the weight is set to 0, the server no longer receives new requests.
 <b>Note</b>	A note indicates supplemental instructions, best practices, tips, and other content.	 <b>Note:</b> You can use Ctrl + A to select all files.
>	Closing angle brackets are used to indicate a multi-level menu cascade.	Click <b>Settings</b> > <b>Network</b> > <b>Set network type</b> .
<b>Bold</b>	Bold formatting is used for buttons, menus, page names, and other UI elements.	Click <b>OK</b> .
<code>Courier font</code>	Courier font is used for commands	Run the <code>cd /d C:/window</code> command to enter the Windows system folder.
<i>Italic</i>	Italic formatting is used for parameters and variables.	<code>bae log list --instanceid</code> <i>Instance_ID</i>
[ ] or [a b]	This format is used for an optional value, where only one item can be selected.	<code>ipconfig [-all -t]</code>
{ } or {a b}	This format is used for a required value, where only one item can be selected.	<code>switch {active stand}</code>

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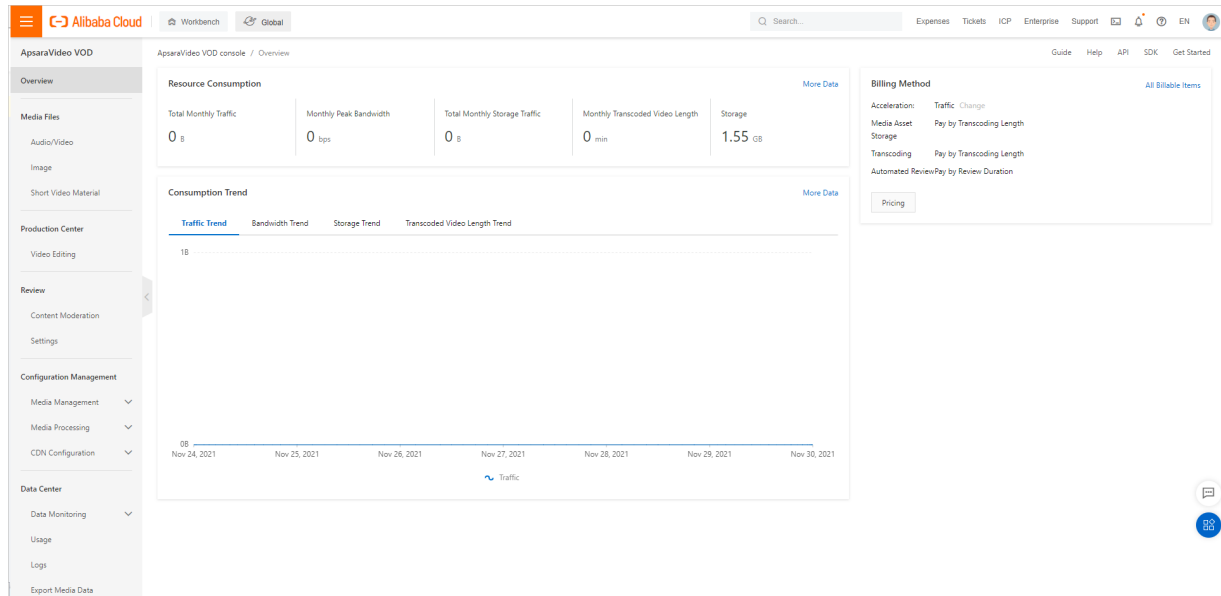
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# 1. Console overview

You can upload, manage, and transcode media files, and edit and review videos in the ApsaraVideo VOD console. You can also accelerate the delivery of resources and monitor resources based on monitoring metrics. This topic describes basic information about the ApsaraVideo VOD console.

## Overview page

Log on to the [ApsaraVideo VOD console](#). The **Overview** page appears. The **Overview** page displays resource usage of your account.



The Overview page consists of the following sections:

- **Resource Consumption:** displays the overview of resource usage.  
The resource usage metrics of the current calendar month includes Total Monthly Traffic, Monthly Peak Bandwidth, Total Monthly Storage Traffic, and Monthly Transcoded Video Length. The Storage metric indicates the cumulative usage of the current bucket.
- **Consumption Trend:** displays the trend of resource usage over the last seven days in charts for you to monitor business status.  
The trend charts display information about Traffic Trend, Bandwidth Trend, Storage Trend, and Transcoded Video Length Trend.
- **Billing Method:** displays the billing method that you are using. In this section, you can click **Change** to change the billing method.

## Features

In the [ApsaraVideo VOD console](#), you can select features in the left-side navigation pane to configure the features and view relevant data.

Feature	Description
<a href="#">Media Files</a>	You can manage the video files that you upload. You can preview videos, view video status, enable or disable offline download, and configure categories and tags.

Feature	Description
<a href="#">Production Center</a>	A video editing tool. You can use the tool to edit and generate videos. You can merge or crop videos and edit images or texts.
<a href="#">Review</a>	You can perform intelligent review or manual review to check whether videos, covers, titles, or comments contain illicit content.
<a href="#">Configuration Management</a>	You can configure and manage transcoding templates, watermark templates, snapshot templates, animation templates, video categories, and workflows. You can configure storage paths in multiple regions and manage access permissions on each storage path. You can also configure a callback to obtain video status at the earliest opportunity.
<a href="#">CDN Configuration</a>	You can manage accelerated domain names. For example, you can add or delete domain names and modify basic information and configurations of domain names. You can also refresh and prefetch resources and configure offline download settings.
<a href="#">Data Center</a>	You can query usage data, such as traffic, bandwidth, or storage data, by time. You can also query and download the access logs of a domain name.
<a href="#">Billing Information</a>	You can view billing details and resource plan information.
<a href="#">DRM Certificates</a>	You can manage digital rights management (DRM) certificates, issue DRM licenses, encrypt videos based on DRM, and decrypt and play DRM-encrypted videos.

## 2. Production center

### 2.1. Use online editing

This topic describes the features of online editing and how to use online editing in the ApsaraVideo VOD console.


#### Usage notes

To enable Online editing, [submit a ticket](#).

#### Online editing environment

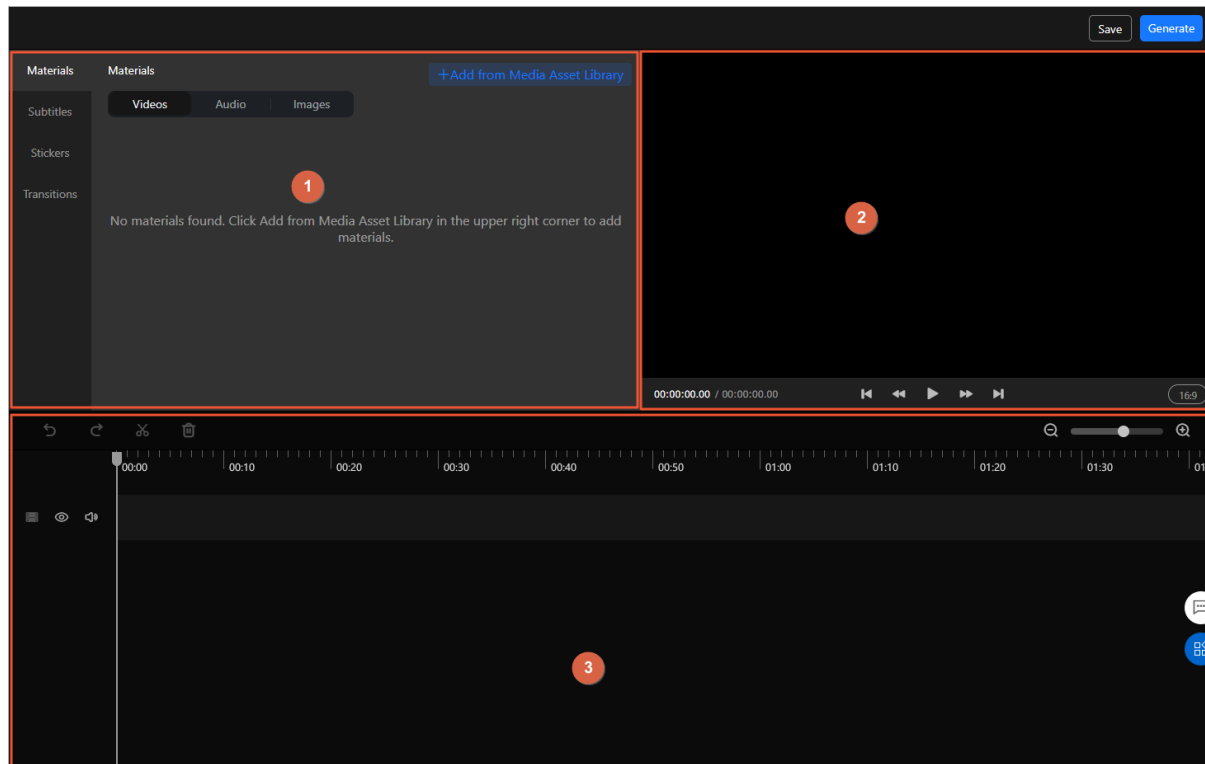
To use online editing, you must use Google Chrome. The following table describes the formats of media assets that you can edit by using online editing.

Type	Format
Video	MP4
Image	PNG and JPG
Audio	MP3

 **Note** If you want to edit media assets of other formats, transcode the media assets to a format that is supported by online editing. For more information, see [Configure transcoding template groups](#).

#### Online editing GUI

The following figure shows the graphical user interface (GUI) of online editing.



- Asset area (1 in the preceding figure)
- Video preview area (2 in the preceding figure)
- Track editing area (3 in the preceding figure)

## Features

### Basic editing

Feature	Description
Split a single video track into clips and merge multiple clips.	You can split a single video track into clips and merge multiple clips. For example, you can split a single video track with the starting part, ending part, or middle part retained, and merge the clips based on your requirements.
Add text or images on a single video track.	You can add banner text, images, static watermarks, or animated watermarks to a single video track. In addition, you can add such content to the entire video track, to specified areas of the video track, or in specified intervals along the timeline of the video track.
Blur specified parts of a single video track.	You can blur specified parts of a single video track.
Crop an image of a single video track or add black borders.	You can crop an image of a single video track or add black borders.
Extract audio from a single video track and mute or adjust the volume of the video track.	You can extract audio from a single video track and mute or adjust the volume of the video track. You can mute the entire video track or a specified part of the video track.



Feature	Description
Split a single audio track into clips and merge multiple clips.	You can split a single audio track into clips and merge multiple clips.
Mute or adjust the volume of a single audio track.	You can mute or adjust the volume of a single audio track. You can mute the entire audio track or a specified part of the audio track.
Add an independent subtitle file to a video.	You can add an independent subtitle file to a video. Subtitle files in the .ass and .srt formats are supported.

### Advanced editing

Feature	Description
Mix multiple audio or video tracks.	You can mix multiple audio tracks, multiple video tracks, or multiple audio and video tracks. This feature applies to dubbing and picture-in-picture (PiP) scenarios.
Add special effects.	The following effects are supported: fade-in and fade-out, translation, and zoom in or zoom out.
Convert images into a video.	After multiple images are uploaded, you can convert the images into a video.

## Asset area

The following editing features, including **Materials**, **Subtitles**, **Stickers**, and **Transitions**, are available in the asset area.

### Editing features and basic operations

- **Materials**

The assets in the Materials area are from the media asset library of the ApsaraVideo VOD console. The assets in the media asset library are not affected when you add assets to the Materials area or remove assets from the Materials area. However, if you delete assets from the media asset library, the assets are also deleted from the Materials area. For more information about how to manage the media asset library, see [Manage media assets](#).

### Add assets

In the **Materials** area, click **Videos**, **Audio**, or **Images**, and then click **Add from Media Asset Library** in the upper-right corner of the Materials area. In the Add Media File panel, select the asset that you want to add, and then click **OK**. If you have a large number of assets, you can select **By Name** or **By Editing Time** to search for the assets that you want to add. If the existing assets do not meet your requirements, you can click **Upload Media Files** to add assets. For more information, see [Upload media files by using the ApsaraVideo VOD console](#).

After the asset is added to the Materials area, move the pointer over the asset and click the **+** icon. Then, the asset is added to the track editing area.

- **Subtitles**

Online editing supports only text subtitles.

### Add subtitles

Move the pointer over the sample subtitle and click the + icon. Then, the subtitle is added to the track editing area.

- **Stickers**

The following types of stickers are available in online editing: **Bubbles**, **Life**, **Emojis**, **Atmosphere**, and **Cute**.

### Add stickers

Move the pointer over the sticker that you want to add and click the + icon. Then, the sticker is added to the track editing area.

- **Transitions**

The following types of transitions, including **Zoom In II**, **Grid**, **Left-to-Right Wipe I**, **Clockwise Scan I**, and **Fade** are available in online editing.

### Add transitions

Drag the required transition between two video clips on a single video track.

## Video preview area

In the video preview area, you can play, fast forward, and rewind the video.

You can preview the video, stickers, and subtitles and adjust the positions or sizes of these assets in real time.

## Track editing area

The following editing features are available in the track editing area: **undo**, **redo**, **split**, **delete**, **display**, and **volume setting**.

The following table describes the short cut keys that you can use to speed up your video editing.

Shortcut key	Feature
Space	Pause or preview a video.
Ctrl+C	Copy a clip.
Ctrl+V	Paste a clip.
← or →	Rewind or forward a video. If you hold the → key, the video is fast forwarded.
Ctrl++ or Ctrl+-	Zoom in or zoom out the timeline of a video.
Home	Seek to the beginning of a video.
End	Seek to the end of a video.
Ctrl+S	Save the edit.
Ctrl+Z	Undo an operation.

Shortcut key	Feature
Ctrl+Shift+Z	Redo an operation.
<ul style="list-style-type: none"> <li>macOS: Delete</li> <li>Windows: Backspace</li> </ul>	Delete an asset.

### Usage notes on the track editing area

- The track editing area provides the following tracks from top to bottom: tracks for adding subtitles, stickers, filters, and effects, tracks for adding videos and images, and tracks for adding audio.
- At least one video track must be present in the track editing area.
- A track that contains assets cannot be deleted.
- If an asset is added to the track editing area, you cannot remove the asset from the Materials area.
- When you add an asset, the asset is added next to the pointer in the corresponding track.
- You can double-click an asset in the corresponding track to edit the asset.
- When you click the split icon, only the asset in the track that you click is split.
- You can use the split feature to split an asset in the corresponding track at the position of the pointer.
- If a track contains Asset A and Asset B, and you drag Asset A to cover a part or all of Asset B, the covered part or all of Asset B disappears and is replaced with Asset A.

### Edit the asset in a track

#### • Subtitle track

Click the subtitle in a subtitle track. In the asset editing area, you can modify the values of the **Content**, **Font**, **Font Color**, and **Style** fields. You can adjust the position of the subtitle in the video and view the results in the video preview area.

When you click the split icon, the subtitle is split into two subtitles with the same settings. The duration of the original subtitle is split at the position of the pointer.

#### • Sticker track

Click the sticker in a sticker track. In the asset editing area, you can adjust the position of the sticker in the video and view the results in the video preview area.

When you click the split icon, the sticker is split into two stickers with the same settings. The duration of the original sticker is split at the position of the pointer.

#### • Video track

Click the video in a video track. In the asset editing area, you can add an effect to the video and view the results in the video preview area.

The following effects, including **Mosaic**, **TV Snow**, **TV Flicker**, and **2x Split Screen**, are available in online editing.

When you click the split icon, the video is split into two clips at the position of the pointer.

#### • Audio track

Click the audio in an audio track. In the asset editing area, you can adjust the audio volume.

When you click the split icon, the audio is split into two clips at the position of the pointer.

- **Image track**

Click the image in an image track. In the asset editing area, you can adjust the position of the image in the video and view the results in the video preview area.

When you click the split icon, the image is split into two images with the same settings. The duration of the original image is split at the position of the pointer.

## Procedure

1. Log on to the [ApsaraVideo VOD console](#).
2. In the left-side navigation pane, click **Production Center**.
3. Click **Video Editing**. The Video Editor page appears.
4. Click **Edit New Video**.
5. Click **Materials** and add the asset that you want to edit.  
Add subtitles, stickers, and effects as required.
6. Edit the added assets in the track editing area.
7. After you complete the editing, click **Generate** in the upper-right corner of the page.

### Notice

- Video Resolution: the resolution of the generated video. If you set this parameter to Same as Video Source, the resolution of the generated video is the same as that of the source video.
- Transcoding Template: You can use the transcoding template to upload the generated video to the media asset library of the ApsaraVideo VOD console. For more information about how to transcode a video, see [Configure transcoding template groups](#).

8. Generate a video.  
Enter a value for the **Name** field, set other required fields, and click **OK**.

# 3. Media file review

## 3.1. Review videos

ApsaraVideo VOD provides the automated review and manual review features for you to review uploaded files. Before you publish videos, you can review the videos to ensure that the video content is compliant. You can bring inappropriate videos offline before they are published. This avoids or minimizes the adverse effects of these videos.

### Terms

- **Automated review:** You can configure automated review templates on the Review Settings page. For more information, see [Configure review settings](#). The automated review feature is supported only in the China (Shanghai), China (Beijing) and Singapore regions. To use the automated review feature in the Singapore region, you must [submit a ticket](#).
- **Manual review:** Manual reviews are performed by personnel. These reviews have a higher priority than automated reviews.

### Procedure

1. Log on to the [ApsaraVideo VOD console](#).
2. In the left-side navigation pane, choose **Review > Content Moderation**.
3. On the To Be Reviewed page, select the video that you want to review.

You can filter videos by upload date. For example, you can select **All** or **Custom Time**. You can also filter videos by video name or video ID.

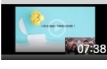



4. Start a review.

## i. Start an automated review.

- Click **Automated Review** in the Actions column of an unreviewed video. The video is reviewed based on the default review template. If you have configured no review templates, the preset template is used. For information about how to configure a review template, see [Configure review settings](#).
- Click **Re-review** in the Actions column of a video that failed to pass a review. The video is reviewed based on the default review template. If you have configured no review templates, the preset template is used. For information about how to configure a review template, see [Configure review settings](#).

**To Be Reviewed**

Automated review charges you a fee based on the video duration. For more information, see [Automated review and Pricing](#).

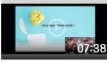



ALL	Video Title	Please enter a video name	Machine Review Status	Review Template	Machine Review Result	Violation	Human Review Status	Final Review Result	Operations
<input type="checkbox"/>			✓ Successful review	Preset Template ID: VOD-0003-000001	Suspected	Terrorism	Unreviewed	--	<a href="#">Details</a>   <a href="#">Re-review</a>   <a href="#">Human review</a>
<input type="checkbox"/>			✓ Successful review	Preset Template ID: VOD-0003-000001	Normal	normal	Unreviewed	--	<a href="#">Details</a>   <a href="#">Re-review</a>   <a href="#">Human review</a>
<input type="checkbox"/>			✓ Successful review	Preset Template ID: VOD-0003-000001	Normal	normal	Unreviewed	--	<a href="#">Details</a>   <a href="#">Re-review</a>   <a href="#">Human review</a>
<input type="checkbox"/>			Off	--	--	--	Unreviewed	--	<a href="#">Details</a>   <a href="#">Automated Review</a>

ii. Wait until the automated review is complete.

- **Under Review** is displayed in the Machine Review Status column of the video that is being reviewed for the first time.
- **Re-review** is displayed in the Machine Review Status column of the video that is being reviewed again.

**To Be Reviewed**

Automated review charges you a fee based on the video duration. For more information, see [Automated review and Pricing](#).

ALL	Video Title	Please enter a video name							
Video			Machine Review Status	Review Template	Machine Review Result	Violation	Human Review Status	Final Review Result	Operations
<input type="checkbox"/>	 07:38		Re-review	Preset Template ID: VOD-0003-000001	--	Terrorism	Unreviewed	--	Details   Re-review   Human review
<input type="checkbox"/>	 00:16		Successful review	Preset Template ID: VOD-0003-000001	Normal	normal	Unreviewed	--	Details   Re-review   Human review
<input type="checkbox"/>	 00:16		Successful review	Preset Template ID: VOD-0003-000001	Normal	normal	Unreviewed	--	Details   Re-review   Human review
<input type="checkbox"/>	 00:16		Under Review	Preset Template ID: VOD-0003-000001	--	--	Unreviewed	--	Details   Re-review   Human review

Passed Blocked

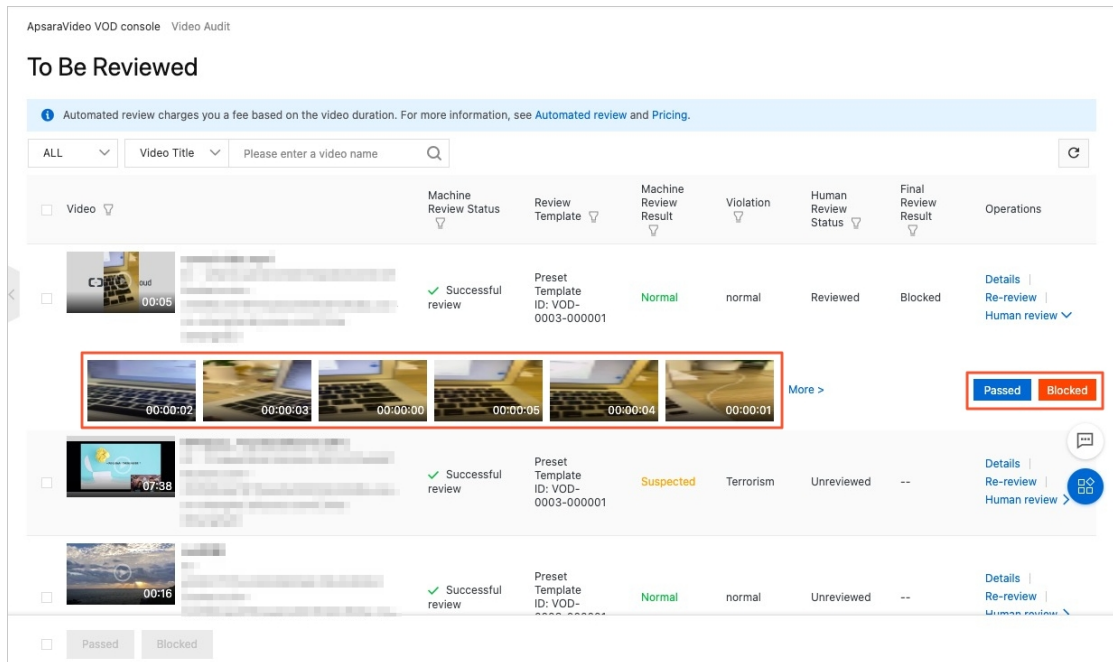
iii. View the review status after the automated review is complete.

If **Successful review** is displayed in the Machine Review Status column, the automated review is complete.

## i. Start a manual review.

To perform a manual review, use one of the following methods:

- Click **Human review** in the Actions column of a video. View the video snapshots that appear and click **Passed** or **Blocked** as needed.
- Click **Details** in the Actions column of a video. On the Video review details page, preview the video and click **Passed** or **Blocked** as needed. You can also view the automated review results and manual review results on the Video review details page.
- On the To Be Reviewed page, select one or more videos and click **Passed** or **Blocked** at the bottom of the page to manually review the selected videos at a time.



## ii. View the review status after the manual review is complete.

If **Reviewed** is displayed in the Human Review Status column and **Passed** or **Blocked** is displayed in the Final Review Result column, the review is complete.

## 3.2. Configure review settings

ApsaraVideo VOD allows you to configure review settings. You can configure intelligent review templates based on your business requirements and use the intelligent review templates to review videos in a convenient manner.

### Procedure

- 1.
2. Log on to the ApsaraVideo VOD console. In the left-side navigation pane, choose **Review > Settings**.
3. On the Review Settings page, click the **Review Configuration** tab. In the **Process** section, click **Modify**. In the Review Process dialog box, select a review process and click **OK**.

You can select **Review After Publish** or **Review Before Publish**. The default review process is Review After Publish.

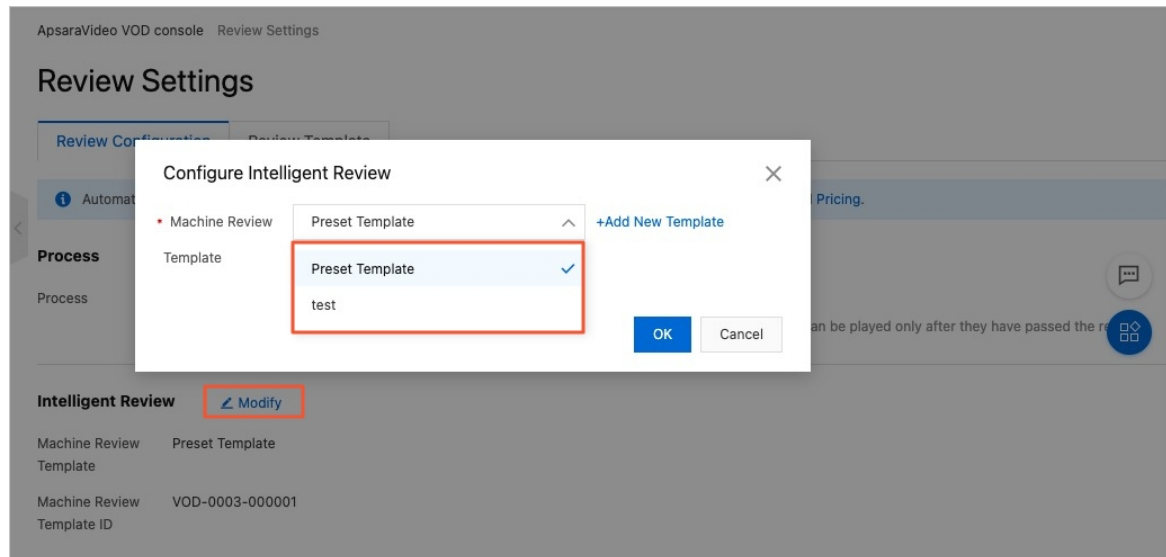
- **Review After Publish:** After a video is transcoded, the video is marked as **Normal** and can be



played. You need to perform Human review for the video in Content Moderation. If you **block** the video, the video cannot be played.

- **Review Before Publish:** After a video is transcoded, the video is marked as **Reviewing** and cannot be played. You can play the video only after the video passes the review.
4. On the **Review Configuration** tab, click **Modify** in the **Intelligent Review** section. In the Configure Intelligent Review dialog box, select a machine review template, and click **OK**.

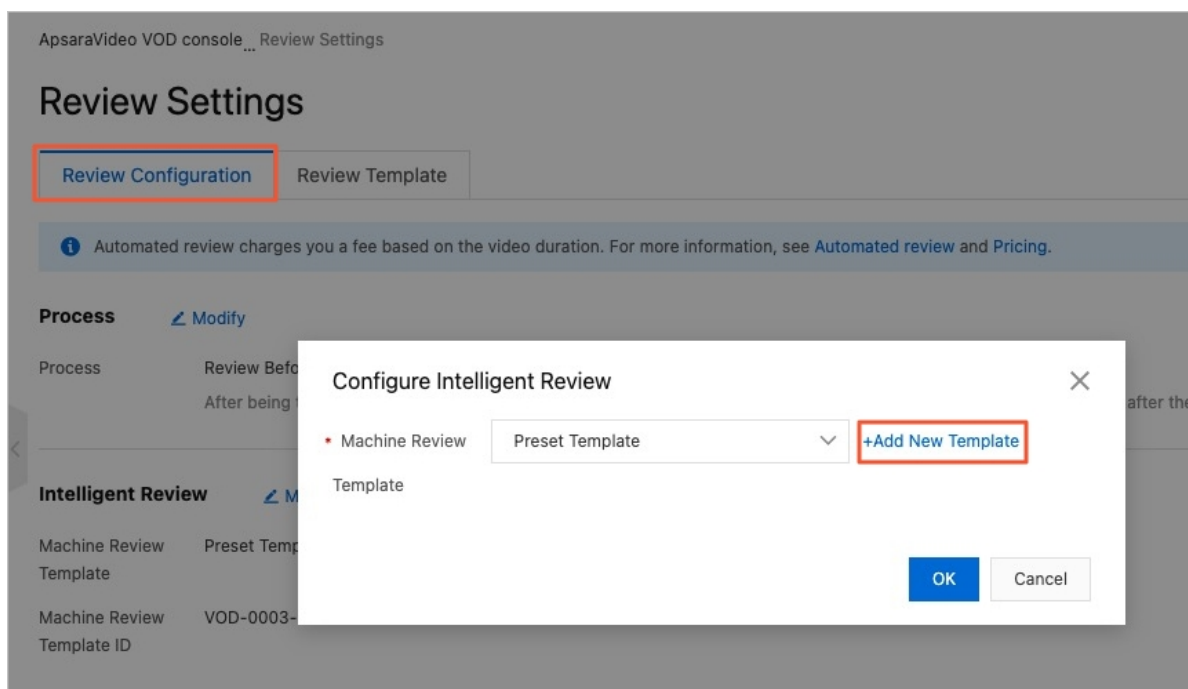
You can add a machine review template on the **Add Intelligent Review Template** page.



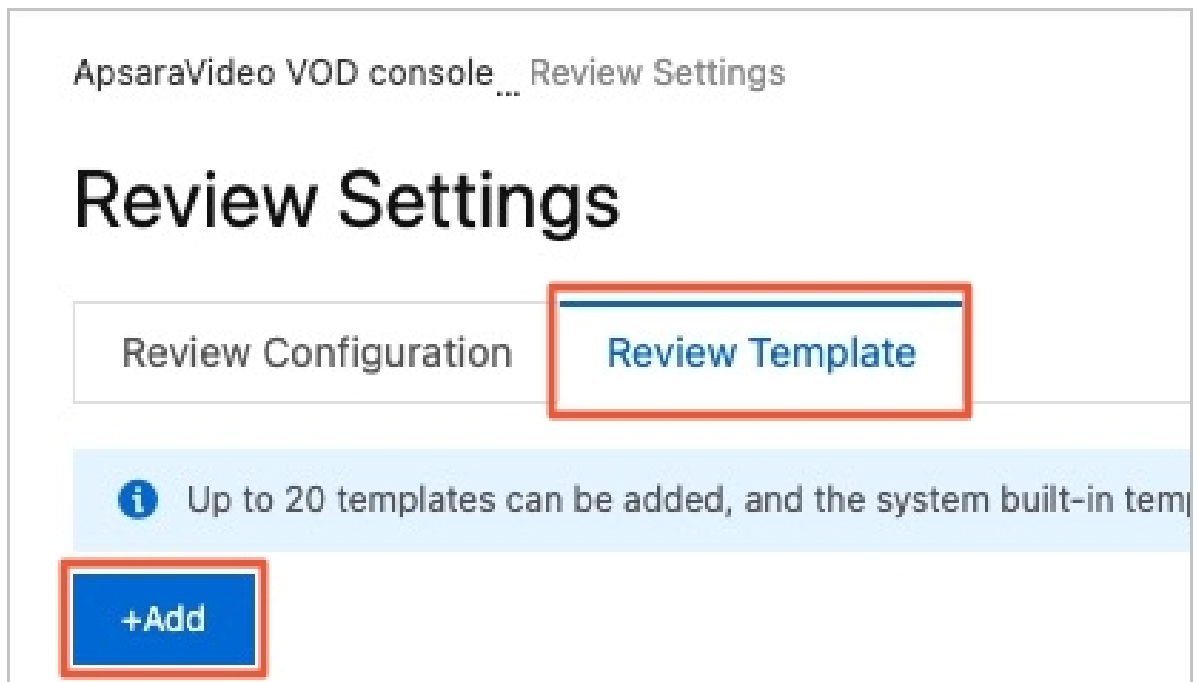
## Add an intelligent review template

You can use one of the following methods to go to the **Add Intelligent Review Template** page.

- On the **Review Configuration** tab, click **Modify** in the **Intelligent Review** section. In the Configure Intelligent Review dialog box, click **Add New Template** to go to the **Add Intelligent Review Template** page.




- On the **Review Template** tab, click **Add** to go to the **Add Intelligent Review Template** page.



The following table describes the parameters on the **Add Intelligent Review Template** page.

Parameter	Description
Template Name	Specify the name of your template.
Review Type	<p>The review types include Illicit Content Identification, Violence, Ad Detection, Logo Detection, Undesirable Content Detection, and Audio Anti-spam.</p> <ul style="list-style-type: none"> <li>Illicit Content Identification can be categorized into porn, suggestive, and normal.</li> <li>Violence can be categorized into blood and gore, explosion, peculiar costumes, peculiar logos, weapons, politics, fights, protests, parades, car accidents, flags, landmarks, and others.</li> <li>Ad Detection can be categorized into politics, porn, abuse, terrorism, illicit content, junk content, spam, illegal ads, QR code, mini program code, other ads, and normal.</li> <li>Logo Detection can be categorized into trademarks, controlled logos, and normal.</li> <li>Undesirable Content Detection can be categorized into picture-in-picture (PiP), smoking, live streaming while driving, no image content such as black screen or white screen, and normal.</li> <li>Audio Anti-spam can be categorized into junk information, ads, politics, terrorism, abuse, porn, spam, violation, custom keywords, and normal. For example, if custom keywords are detected in an audio, the audio is blocked.</li> </ul> <p><b>Note</b> The intelligent review feature in the Singapore (Singapore) region supports only the review types of Illicit Content Identification, Violence, and Undesirable Content Detection.</p>

Parameter	Description
Review Scope	<p>The review scope includes Cover, Name, and Video.</p> <div>  <b>Notice</b> <ul style="list-style-type: none"> <li>A maximum of five video thumbnails can be reviewed.</li> <li>The size of a video title or bullet comment cannot exceed 128 bytes.</li> <li>The duration of a video cannot exceed six hours.</li> </ul> </div>
Review Content	Only Image can be reviewed.
Auto Block	If you turn on Auto Block, videos whose Machine Review Result is Violation are automatically blocked and cannot be played. The Machine Review Result is returned based on the intelligent review template that you configure. The Auto Block feature may result in high risks. If you want to enable this feature, proceed with caution.

ApsaraVideo VOD console...Review Settings / Add Review Template

← Add Intelligent Review Template

\* Template Name

Enter a template name

\* Review Type

☒ Illicit Content Identification

☒ Violence

☐ Ad Detection

☐ Logo Detection

☐ Undesirable Content Detection

☐ Audio Anti-spam

\* Review Scope

☐ Cover

☐ Name

☒ Video

\* Review Content

☒ Image

Modification is not supported

Auto Block

☐

Once activated, the video that contains illicit contents will be automatically blocked.

# 4.Data center

## 4.1. Data monitoring

ApsaraVideo VOD provides the data monitoring feature. You can use this feature to monitor resources and real-time bandwidth and traffic.

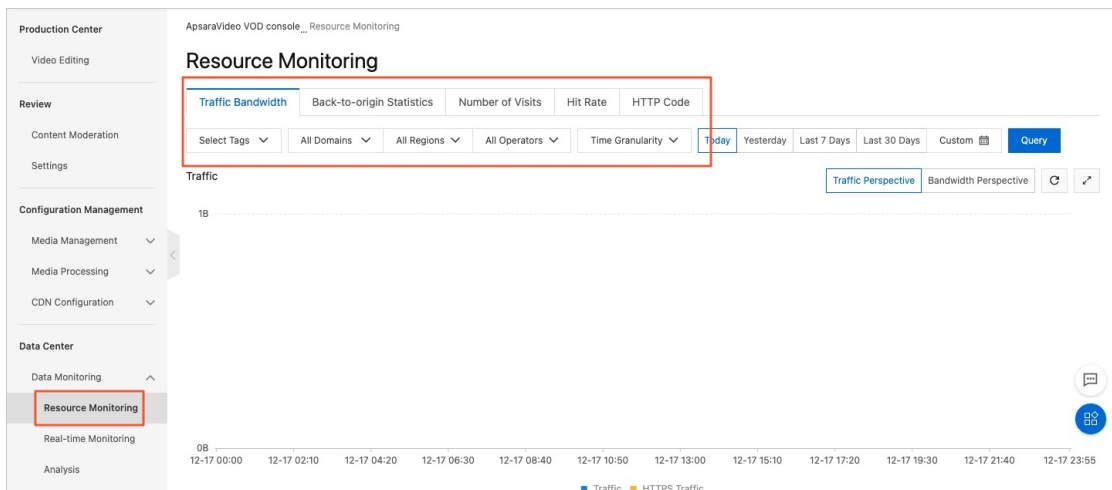
### Context

Data monitoring supports resource monitoring and real-time monitoring.

### Procedure

1. Log on to the [ApsaraVideo VOD console](#).
2. In the left-side navigation pane, find **Data Center**.

- i. Choose **Data Monitoring > Resource Monitoring** to go to the Resource Monitoring page.



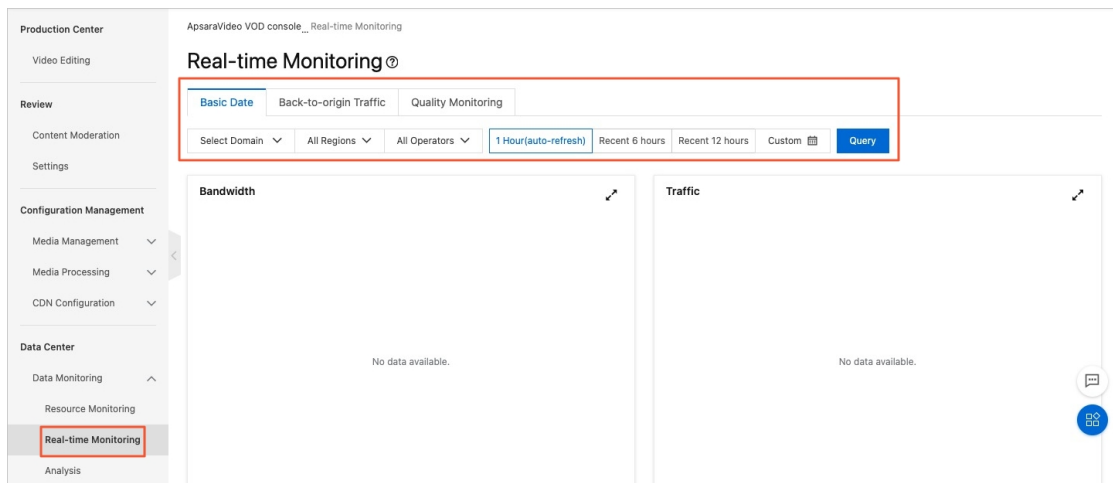
You can view the details about the following metrics by domain, region, Internet service provider (ISP), time granularity, and time period. The time granularity can be 5 minutes or 1 hour. The time period can be today, yesterday, last seven days, last 30 days, or a custom period.

Item	Metric
Traffic Bandwidth	Bandwidth and traffic
Back-to-origin Statistics	Back-to-origin bandwidth and back-to-origin traffic
Number of Visits	The number of requests and the number of queries per second (QPS)
Hit Rate	N/A
HTTP Code	5xx codes, 4xx codes, 3xx codes, and 2xx codes

The data that is shown in the line chart of resource monitoring slightly differs from the billing data. For example, a 30-day line chart of resource statistics is plotted at 14,400-second intervals. The billing data is plotted at 300-second intervals. The line chart does not take all points into account and can be used to show the bandwidth trend. The billing data is more fine-grained and can be used to calculate the actual bandwidth usage.

**Note** You cannot select a specified region or ISP for the hit ratio.

- ii. Choose **Data Monitoring > Real-time Monitoring** to go to the Real-time Monitoring page.



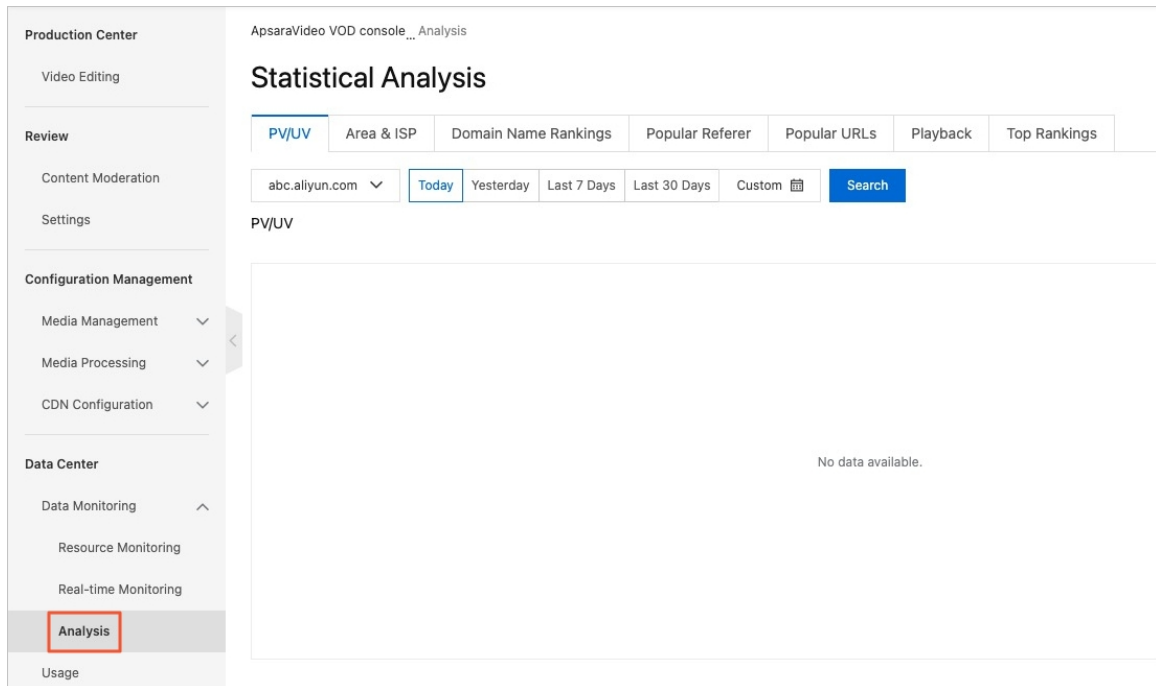
You can view the details about the following metrics by domain, region, ISP, and time period. The time period can be the last hour, the last 6 hours, the last 12 hours, or a custom time period.

Item	Metric
Basic Date	Bandwidth, traffic, the number of requests, and QPS
Back-to-origin Traffic	Back-to-origin traffic and back-to-origin bandwidth
Quality Monitoring	Request hit ratio, byte hit ratio, 5xx codes, 4xx codes, 3xx codes, and 2xx codes

## 4.2. Statistics

Based on the data that is collected by ApsaraVideo Player from clients, ApsaraVideo VOD can provide statistics on playback behaviors and popular resources, which can facilitate your operations.


1. Log on to the [ApsaraVideo VOD console](#).
2. In the left-side navigation pane, find **Data Center**. Choose **Data Monitoring > Analysis** to go to the Statistical Analysis page.
3. On the tab of the item that you want to view, select the required metrics and click **Search**.



The following table describes the items, metrics, and periods of statistics.

Statistical item	Statistical metric	Statistical period
PV/UV	The number of page views (PVs), the number of unique visitors (UVs), user distribution by region, and the proportions of Internet service providers (ISPs)	Today, yesterday, last 7 days, last 30 days, and a custom time period that is within the last 90 days
Area & ISP	Ranking, region, total traffic, traffic proportion, the number of visits, visit proportion, and response time	Today, yesterday, last 7 days, last 30 days, and a custom time period that is within the last 90 days
Domain Name Rankings	The visit ranking of the domain names for CDN	Today, yesterday, last 7 days, last 30 days, and a custom time period that is within the last 90 days
Popular Referer	Traffic, traffic proportion, the number of visits, and visit proportion	Yesterday and a custom time period that is within the last 90 days
Popular URLs	Traffic, traffic proportion, the number of visits, and visit proportion	Yesterday and a custom time period that is within the last 90 days
Playback	The number of UVs, the number of video views (VVs), the number of playbacks per capita, playback duration per capita, and the durations of single playbacks	Today, yesterday, last 7 days, last 30 days, and a custom time period that is within the last 90 days

Statistical item	Statistical metric	Statistical period
Top Rankings	The ApsaraVideo VOD console displays the data of the 100 most-played videos. You can use the API to query the data of the 1,000 most-played videos.	Yesterday and a custom time period

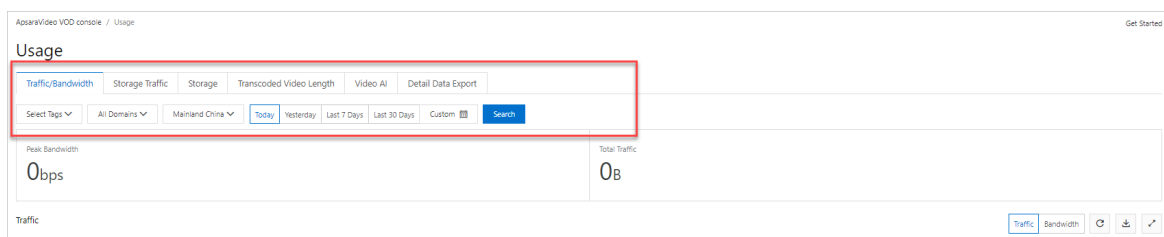
 **Note** Playback data is collected and shown 2 to 6 hours after the data is generated.

## 4.3. Resource usage

ApsaraVideo VOD provides usage statistics on the resources you use, such as the traffic, bandwidth, storage, and transcoded output length. This helps you monitor your resource usage. You can also export the details of resource usage.

### Procedure

1. Log on to the [ApsaraVideo VOD console](#).
2. In the left-side navigation pane, find **Data Center**.
3. Click **Usage** to go to the Usage page.
4. Click the tab of the resource that you want to view.



Tab	Description	Region
Traffic/Bandwidth	You can query the traffic and peak bandwidth of a specific domain name.	Chinese mainland, Asia Pacific 1, Asia Pacific 2, Asia Pacific 3, North America, South America, Europe, Middle East /Africa
Storage Traffic	You can query the cumulative traffic that is generated for your account when source video files are downloaded from storage regions without using Alibaba Cloud CDN.	China (Shanghai), China (Beijing), Singapore (Singapore), Germany (Frankfurt), Japan (Tokyo), Indonesia (Jakarta), India (Mumbai), and China (Shenzhen)
Storage	You can query the usage and changes of the storage space in your account.	China (Shanghai), China (Beijing), Singapore (Singapore), Germany (Frankfurt), Japan (Tokyo), Indonesia (Jakarta), India (Mumbai), and China (Shenzhen)

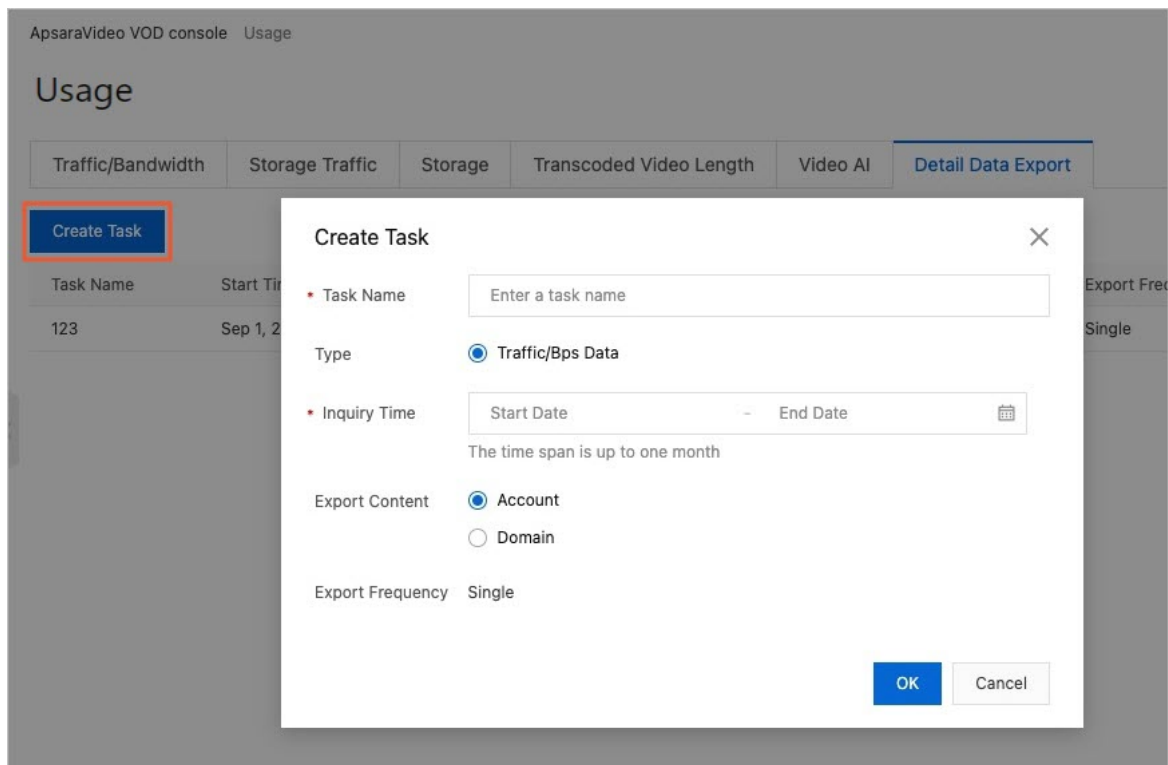


Tab	Description	Region
Transcoded Video Length	You can query the output resolution and length of the transcoded videos.	China (Shanghai), China (Beijing), Singapore (Singapore), Germany (Frankfurt), Japan (Tokyo), Indonesia (Jakarta), India (Mumbai), and China (Shenzhen)
Video AI	You can query the length of videos that are processed by using the automated review feature or the media fingerprint feature.	China (Shanghai), China (Beijing), Singapore (Singapore), Germany (Frankfurt), Japan (Tokyo), Indonesia (Jakarta), India (Mumbai), and China (Shenzhen)


## What's next

You can export traffic and bandwidth data to your local machine to perform detailed data query and data analysis.


1. On the **Detail Data Export** tab, click **Create Task**.



2. Enter a task name and select the inquiry time.

 **Notice** The maximum time span is one month. Otherwise, data cannot be exported.

3. Select **Account** or **Domain** as the export content.

 **Note** You can select up to 100 domain names.

4. Click **OK** to export data.

- Click **Download** after the status becomes **Success** to download the traffic and bandwidth data to your local machine.

ApsaraVideo VOD console / Usage

Usage

Traffic/Bandwidth Storage Traffic Storage Transcoded Video Length Video AI Detail Data Export

Create Task

Task Name	Start Time	End Time	Task Create Time	Export Frequency	Status	Manage
	Nov 4, 2021 12:00 AM	Nov 5, 2021 12:00 AM	Nov 30, 2021 3:52 PM	Single	Success	<a href="#">Download</a>
	Jan 13, 2021 12:00 AM	Jan 16, 2021 12:00 AM	Jan 18, 2021 5:20 PM	Single	Success	<a href="#">Download</a>
123	Sep 1, 2020 12:00 AM	Sep 30, 2020 12:00 AM	Nov 5, 2020 8:30 PM	Single	Success	<a href="#">Download</a>

## 4.4. Export media assets

ApsaraVideo VOD allows you to export the uploaded media assets such as videos and images in CSV files and download the files for resource migration or operational data analysis.

### Limits

- You can export media assets only in the China (Shanghai) and China (Beijing) regions.
- In a single export task, you can export a maximum of 100,000 audio or video files, 20,000 images, or 20,000 media assets of other types.
- You can create a maximum of 100 tasks each day, and the data must be exported in CSV files.

### Usage notes

The exported files occupy storage space. You are charged for the occupied storage space. To prevent the fees for the occupied storage space, delete the exported files after they are downloaded.

### Procedure

- Log on to the [ApsaraVideo VOD console](#).
- In the left-side navigation pane of the ApsaraVideo VOD console, choose **Data Center > Export Media Data**.
- On the Export Media Data page, click **Create Export Task**. In the dialog box that appears, set the parameters described in the following table and click **OK**.

Create Export Task

Limits: Each task can export up to 100,000 video/audio files, or 20,000 images or other types of media files.

\* Task Name

Enter a task name.

Media Type

☒ Video
☐ Audio
☐ Image
☐ Video/Audio
☐ Attached Media

Time Range

All ▼

Media Name

Enter a media name.

OK

Cancel


Parameter	Description
Task Name	The name of the task.
Media Type	<p>The type of the media assets that you want to export. Valid values: Video, Audio, Image, Video/Audio, and Attached Media.</p> <div> <b>Note</b> In a single export task, you can export a maximum of 100,000 audio or video files, 20,000 images, or 20,000 media assets of other types. </div>
Time Range	<p>The period during which the media assets that you want to export are stored in ApsaraVideo VOD. Valid values:</p> <ul style="list-style-type: none"> <li>◦ All: exports all media assets of the specified type.</li> <li>◦ Custom: exports media assets of the specified type that are stored in ApsaraVideo VOD during the specified period.</li> </ul>
Media Name	<p>The keyword that is used to match the media assets whose names contain this keyword. For example, if you set this parameter to <b>animation</b>, the task exports the specified type of media assets whose names contain this keyword and are stored in ApsaraVideo VOD during the specified period.</p>

- Click **OK** to export the media assets. The status of the task is **Processing**.
- The amount of waiting time varies based on the type, specified storage period, and the number of media assets. After the status of the task changes to **Complete**, click **Download** to download

the media assets in the CSV file to your local machine.


## What's next

During the export, you can also cancel the task. After the export task is complete, you can delete the task.

 **Note** The exported files occupy storage space. You are charged for the occupied storage space. To prevent the fees for the occupied storage space, delete the exported files after they are downloaded.



ApsaraVideo VOD console / Export Media Data

### Export Media Data

 **Help Information**

1. Limits: Each export task can export up to 100 thousand video/audio files, or 20 thousand images or other types of media files.  
2. You can create up to 100 export tasks each day. Media files are exported as CSV files. The exported files consume storage space and incur fees. To save storage space, delete these files if you no longer need them.

[Create Export Task](#)

Task Name	Media Type ▾	Creation Time	End Time	Status ▾	Actions
test	Video	Dec 15, 2021 10:54 AM	Dec 15, 2021 10:54 AM	✓Complete	<a href="#">Download</a>   <a href="#">Cancel</a>   <a href="#">Delete</a>
	Video	Dec 7, 2021 5:04 PM	Dec 7, 2021 5:04 PM	✓Complete	<a href="#">Download</a>   <a href="#">Cancel</a>   <a href="#">Delete</a>
	Video	Sep 14, 2021 9:57 PM	Sep 14, 2021 9:57 PM	✓Complete	<a href="#">Download</a>   <a href="#">Cancel</a>   <a href="#">Delete</a>

## Related information

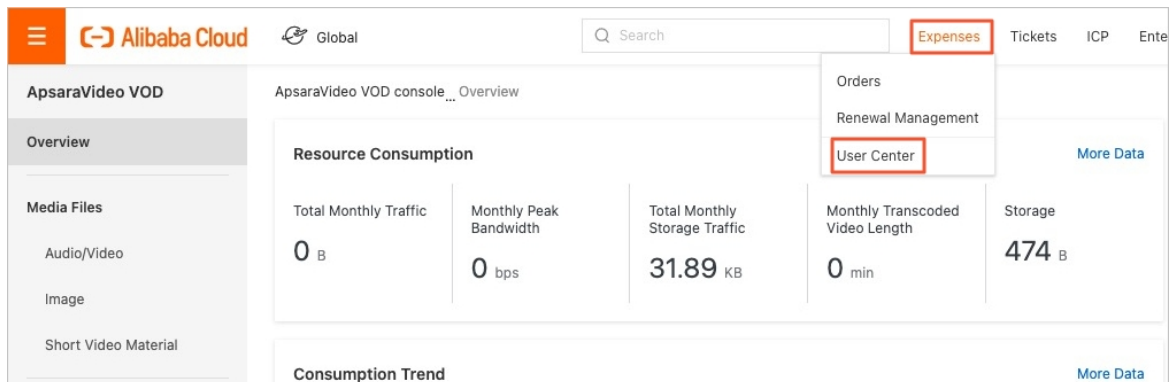
- [Migrate resources to ApsaraVideo VOD](#)

# 5. Billing information

## 5.1. View billing details

You can view the billing details of ApsaraVideo VOD in the console, such as data transfer fees, storage fees, and transcoding fees.

1. Log on to the [ApsaraVideo VOD console](#).
2. In the top navigation bar of the ApsaraVideo VOD console, choose **Expenses > User Center**.



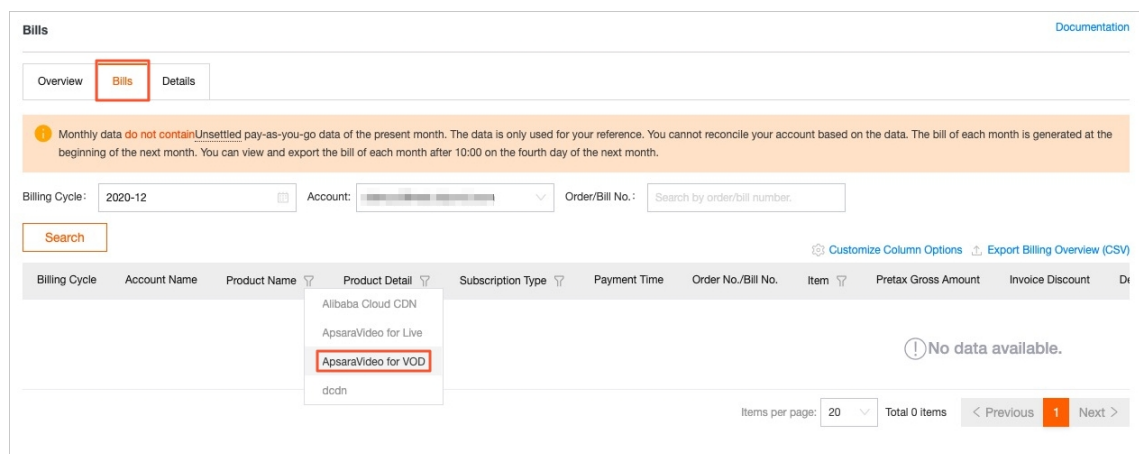
3. In the left-side navigation pane, choose **Spending Summary > Spending Summary**.

- o Click the **Bills** tab.

To find the required bills, you can specify the billing cycle, enter an order number or a bill number, and then click **Search**.

You can select **ApsaraVideo for VOD** from the **Product Name** drop-down list to filter bills.

You can also specify the subscription type and the bill type to further filter bills.



- o Click the **Details** tab.

To find the required bills, you can specify the billing cycle, enter an instance name or an instance ID, and then click **Search**.

You can set the **Statistic Item** and **Statistic Period** parameters to filter bills.

You can select **ApsaraVideo for VOD** from the **Product Name** drop-down list to filter bills.

You can also specify the cost center and subscription type to further filter bills.

**Note** The billing details are updated one day after you are billed.

#### 4. Customize columns and export a billing file in the comma-separated values (CSV) format.

To customize columns, click **Customize Column Options**, select the required items, and then click **OK**.

To export a billing file in the CSV format, click **Export Billing Overview (CSV)**, select All Content or Current List, enter the captcha, and then click **OK**.

## 5.2. View the details of resource plans

You can view the details of your resource plans of ApsaraVideo VOD in the console, such as the status, effective date, and expiration date of resource plans.

### Validity period

- The validity period of every resource plan in an ApsaraVideo VOD package is one year.
- The validity period of each resource plan is separately calculated. The validity periods of multiple resource plans cannot be accumulated.
- After a resource plan is purchased or expires, the remaining traffic resources in the resource plan cannot be unsubscribed or refunded.
- When a resource plan is about to expire, the system sends text messages, emails, or internal messages to remind you to use the remaining resources before expiration.

### Deduction method

An ApsaraVideo VOD package contains multiple resource plans, such as transcoding plans, storage plans, and data transfer plans. Within the validity period, resources in a resource plan can be deducted. Resources in a resource plan that will first expire are deducted first. When resources in all resource plans are deducted, the billing method is automatically changed to pay-as-you-go.

1. Log on to the [ApsaraVideo VOD console](#).
2. In the top navigation bar of the ApsaraVideo VOD console, choose **Expenses > User Center**.
3. In the left-side navigation pane of **User Center**, choose **Resource Packages > Overview**.
  - On the **Instances** tab.

To find the required resource plan, you can specify the effective date, enter the name of a resource plan, and then click **Search**.

You can select **ApsaraVideo for VOD** from the **Product Name** drop-down list to filter resource plans. You can also specify the resource plan status, resource type, and instance type to further filter resource plans.

- Click the **Details** tab.

To find the required resource plan, you can specify the deduction time, enter the ID of a instance or the ID of a deducted instance, and then click **Search**.

You can select **vod\_intl** from the **Deduct Article Name** drop-down list to filter resource plans. You can also specify the article name to further filter resource plans.

**Manage Reserved Instances**

You can query only valid resource plans and resource plans that have expired within less than 1 year.  
In most cases, the current deduction information can be queried 6 hours later due to the latency issue for cloud services.  
Only 50,000 records can be displayed on the current page. To view all the results of a query, export the results to a file.

Resource Type: ☐ SCU ☐ ECS Reserved Instance ☒ Resource Packages

Instances Details

Start Time: Start Date End Date Account: Instance Name: Deducted Instance ID: Search

Deduct Article Name: vod\_intl Clear

Customize Column Options Export

User Name	Product Name	Article Name	Resource Package Name	Instance Name	Resource Type	Deduct Time	Before Deduct Capacity	Deducted Capacity	Post Deduct Capacity
ApsaraVideo for VOD	vod_storage_bag_intl	FPT_vod_storage_bag	0	vod	Total Constant	Jan 16, 2022, 07:01:08	100,000 GB	474,000 Byte	99,999 GB
ApsaraVideo for VOD	vod_storage_bag_intl	FPT_vod_storage_bag	0	vod	Total Constant	Jan 16, 2022, 07:01:08	99,999 GB	474,000 Byte	99,999 GB

**Note** You can query only valid resource plans and resource plans that have expired within less than 1 year.

#### 4. Set customize columns, and export the details of resource plans.

To customize columns, click **Customize Column Options**, select the required items, and then click **OK**.

**Manage Reserved Instances**

You can query only valid resource plans and resource plans that have expired within less than 1 year.  
In most cases, the current deduction information can be queried 6 hours later due to the latency issue for cloud services.  
Only 50,000 records can be displayed on the current page. To view all the results of a query, export the results to a file.

Resource Type: ☐ SCU ☐ ECS Reserved Instance ☒ Resource Packages

Instances Details

Start Time: Start Date End Date Account: Instance Name: Deducted Instance ID: Search

Deduct Article Name: vod\_intl Clear

Customize Column Options

Customize Column Options

☒ User Name  
☒ Instance Name  
☒ Deducted Capacity  
☒ Deduct Instance ID  
☒ Start Time

☒ Product Name  
☒ Resource Type  
☒ Post Deduct Capacity  
☒ Deducted Billing Item  
☒ End Time

☒ Article Name  
☒ Deduct Time  
☒ Deduct User Name  
☒ Measure Deducted  
☒ End Time

☒ Resource Package Name  
☒ Before Deduct Capacity  
☒ Deduct Article Name  
☒ Deduct coefficient

OK Cancel

Customize Column Options Export

User Name	Product Name	Article Name	Resource Package Name	Instance Name	Resource Type	Deduct Time	Before Deduct Capacity	Deducted Capacity	Post Deduct Capacity
ApsaraVideo for VOD	vod_storage_bag_intl	FPT_vod_storage_bag	0	vod	Total Constant	Jan 16, 2022, 07:01:08	100,000 GB	474,000 Byte	99,999 GB
ApsaraVideo for VOD	vod_storage_bag_intl	FPT_vod_storage_bag	0	vod	Total Constant	Jan 16, 2022, 07:01:08	99,999 GB	474,000 Byte	99,999 GB
ApsaraVideo for VOD	vod_storage_bag_intl	FPT_vod_storage_bag	0	vod	Total Constant	Jan 16, 2022, 07:01:08	99,999 GB	474,000 Byte	99,999 GB
ApsaraVideo for VOD	vod_storage_bag_intl	FPT_vod_storage_bag	0	vod	Total Constant	Jan 16, 2022, 07:01:08	99,999 GB	1,553 GB	98,445 GB
ApsaraVideo for VOD	vod_storage_bag_intl	FPT_vod_storage_bag	0	vod	Total Constant	Jan 16, 2022, 06:06:02	100,000 GB	474,000 Byte	99,999 GB

To export the details of instances, click **Export**, enter the captcha, and then click **OK**. You can download the exported file on the **Export Record** page.

< Back Export Record Refresh

Exported files will be saved on Alibaba Cloud for 3 days.

File Name	Type	Status	Created At	Actions
5979782596081697-20220520151047_ft_resource	RESOURCE OVERVIEW	Pending Download	2022-05-20 15:10:47	-
5979782596081697-20220520150922_ft_deduct_detail	RESOURCE DEDUCT DETAIL	Exported	2022-05-20 15:09:23	Download

**Note** It may take a while to export the details of resource plans. Please wait. Exported files are stored on Alibaba Cloud for up to three days before they are automatically deleted.




# 6.DRM Management

## 6.1. Introduction

ApsaraVideo VOD supports mainstream digital rights management (DRM) encryption technologies in the industry. You can add and manage DRM certificates and enable DRM encryption in the ApsaraVideo VOD console to protect the security of your copyrighted video content.

### Limits

DRM encryption technology	Mobile client	Supported browser
Widevine	Android	Chrome, Firefox 47 and later, Microsoft Edge, and Opera
FairPlay	iOS	Safari

 **Note** You can enable DRM encryption only in the ApsaraVideo VOD console. For more information, see [Enable DRM encryption](#).

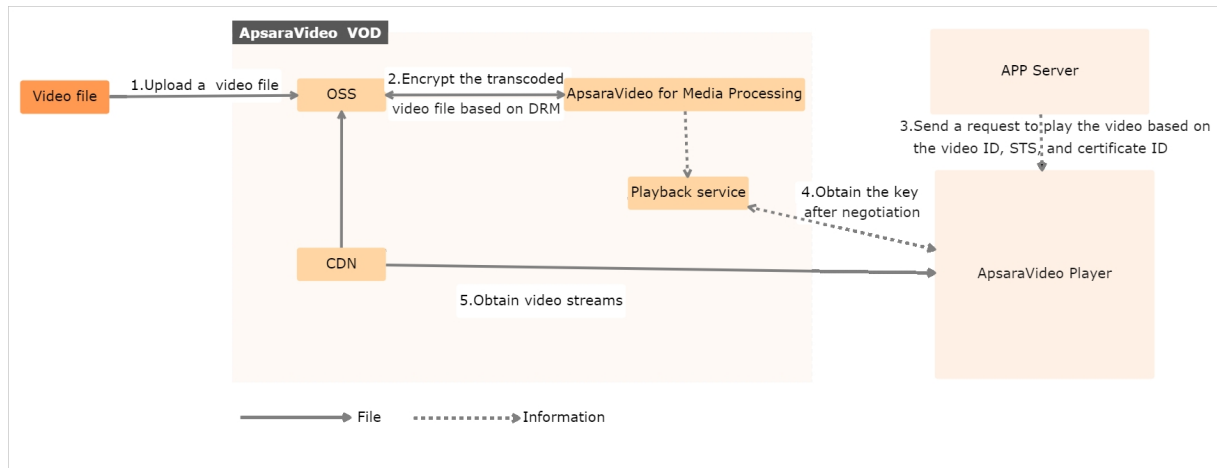
### Features

- DRM encryption: ApsaraVideo VOD supports Widevine and FairPlay DRM encryption.
- Certificate management: You can add and manage FairPlay Streaming certificates in the ApsaraVideo VOD console.
- DRM-based playback: You can use ApsaraVideo Player to decrypt and play DRM-encrypted videos.

### Benefits

- Comprehensive features: ApsaraVideo VOD allows you to manage DRM certificates, issue DRM licenses, encrypt videos based on DRM, and decrypt and play DRM-encrypted videos. You can use the features without the need to understand the architecture and implementation of DRM.
- Cost efficiency: ApsaraVideo VOD generates only one output file that supports Widevine and FairPlay DRM encryption in each transcoding task. This reduces the transcoding and storage costs. Your use of DRM encryption is charged in the pay-as-you-go billing method without minimum fees.
- High security, stability, and concurrency: ApsaraVideo VOD ensures secure storage of your copyrighted video content by using refined permission management and system security settings. In addition, the distributed service architecture meets high-concurrency requirements of your business.

### Architecture diagram



## Billing

DRM encryption is implemented based on transcoding. The fee for using DRM encryption is included in the transcoding fee. You are charged an extra fee each time when a device requests a license to play a DRM-encrypted video. The following table describes the billing rule.

Region	Pricing
Mainland China	USD 0.0012 per request
Singapore, Japan (Tokyo), Germany (Frankfurt), India (Mumbai), and Indonesia (Jakarta)	USD 0.0015 per request

## 6.2. Enable DRM encryption

This topic describes how to enable digital rights management (DRM) encryption in the ApsaraVideo VOD console, including how to upload a certificate, configure settings in the console, and configure ApsaraVideo Player.

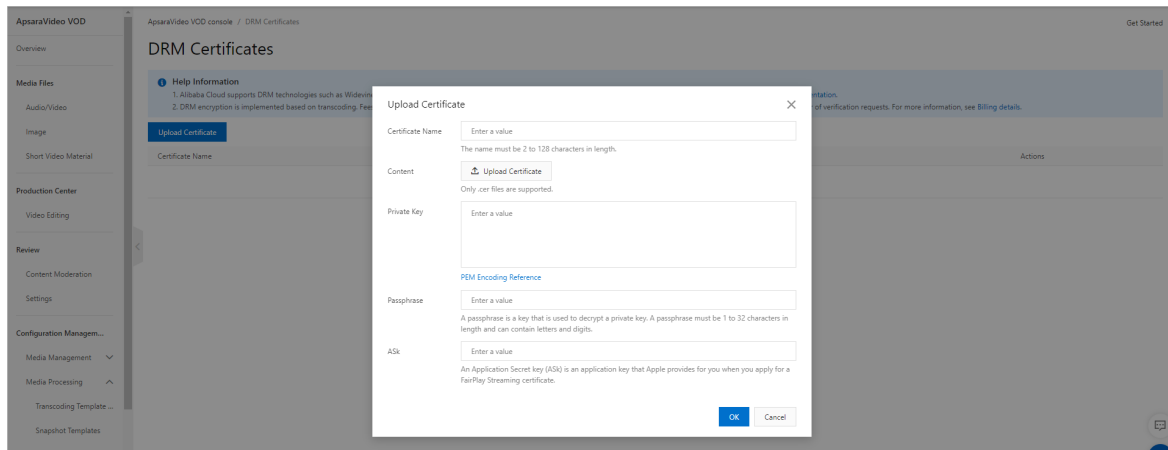
### Limits

You can enable DRM encryption only by using the ApsaraVideo VOD console.

### Upload a certificate

**Note** If you develop applications that run on iOS or Android, you must upload a FairPlay Streaming certificate to the ApsaraVideo VOD console.

1. Apply for a FairPlay Streaming certificate from Apple. For more information, see [Apply for a FairPlay Streaming certificate](#).
- 2.
- 3.
4. Choose **Media Processing** > **DRM Certificates** to go to the DRM Certificates page.
5. Click **Upload Certificate**.



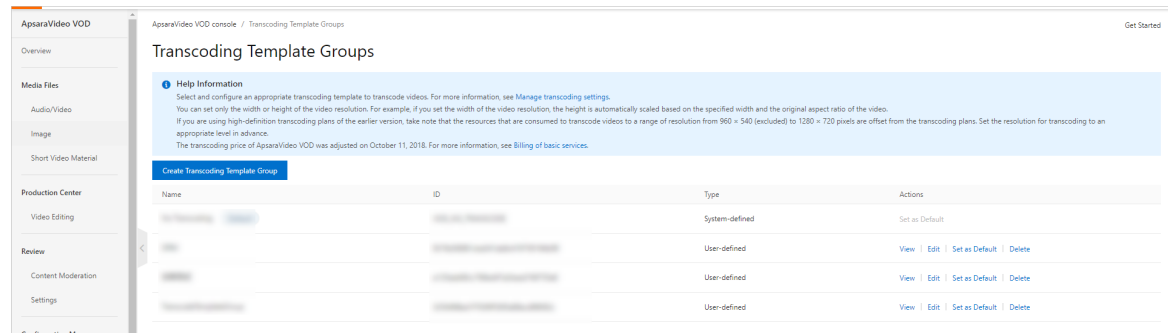
Set the parameters that are described in the following table.

Parameter	Description
<b>Certificate Name</b>	The name of the certificate. The name must be 2 to 128 characters in length.
<b>Content</b>	The FairPlay Streaming certificate. Only .cer files are supported.
<b>Private Key</b>	The password-protected private key created when you apply for the FairPlay Streaming certificate.
<b>Passphrase</b>	The key that is used to decrypt the private key. A passphrase must be 1 to 32 characters in length and can contain letters and digits.
<b>ASK</b>	The Application Secret key (ASK). The ASK is provided by Apple for you when you apply for the FairPlay Streaming certificate. An ASK must be 1 to 32 characters in length and can contain letters and digits.

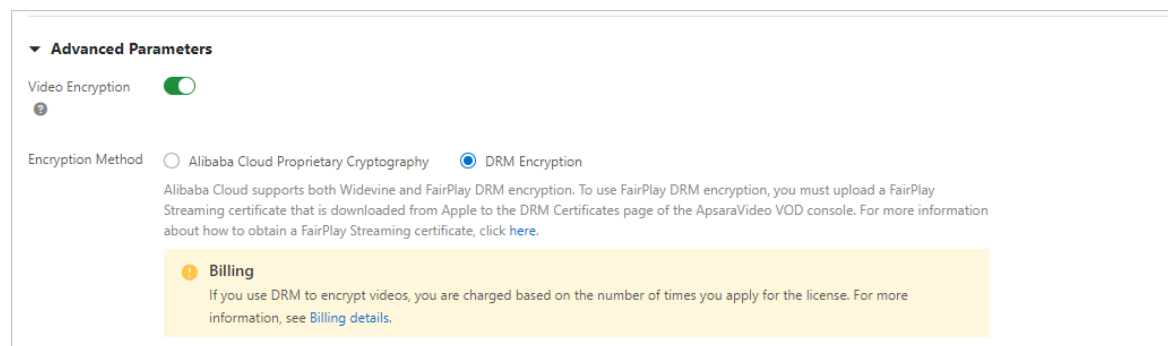
6. Click OK.

## Enable DRM encryption in the ApsaraVideo VOD console

- 1.
- 2.
3. Choose **Media Processing > Transcoding Template Groups**.
4. Click **Create Transcoding Template Group**.

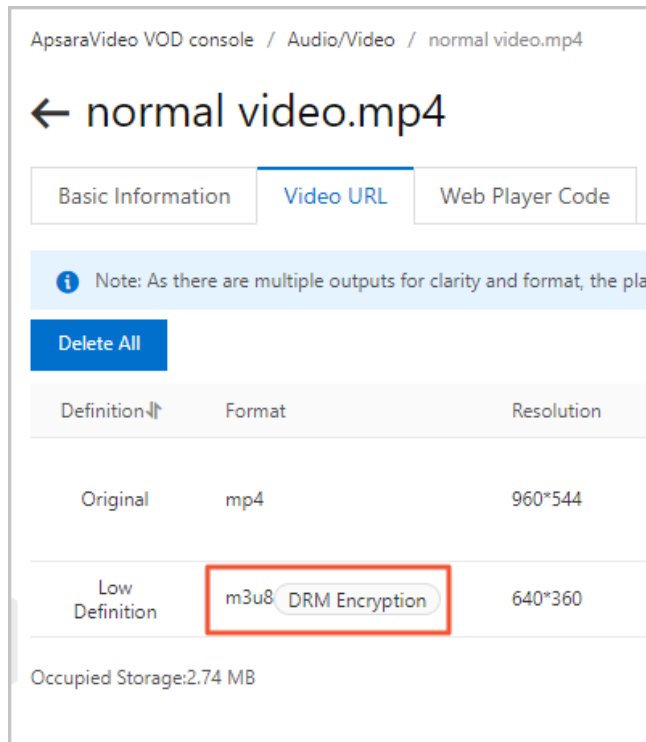


- On the **Create Transcoding Template Group** page, click **Add Template** below **Normal Transcoding Template**.
- In the **Basic Parameters** section, select **hls** from the **Encapsulation Format** drop-down list.
- Click the **Show** icon on the left of **Advanced Parameters**. Turn on **Video Encryption** and select **DRM Encryption** for the **Encryption Method** parameter.



## View videos transcoded by using DRM encryption-enabled templates

When you upload a video by using the ApsaraVideo VOD console, API, or upload SDK, use a template for which DRM encryption is enabled to transcode the video. After the video is transcoded, choose **Media Files > Audio/Video** in the console. Find the transcoded video and click **Manage** in the **Actions** column. On the management page of the video, click the **Video URL** tab to view the information about the video. The **DRM Encryption** label is displayed in the **Format** column if the video is transcoded by using a DRM encryption-enabled template.



## Play a DRM-encrypted video

To play DRM-encrypted videos, you must use ApsaraVideo Player to facilitate your development. Before you use ApsaraVideo Player to play DRM-encrypted videos, you must configure the following settings:

- The version of ApsaraVideo Player must be V5.2.1 or later. You can use FairPlay DRM encryption for iOS and Widevine DRM encryption for Android.
- If you use ApsaraVideo Player for iOS, you must call the `setFairPlayCertID` method of `AliPlayerGlobalSettings` to specify the ID of your FairPlay Streaming certificate. This method needs to be called only once. To obtain the ID of your FairPlay Streaming certificate, log on to the ApsaraVideo VOD console. Choose **Configuration Management > Media Processing > DRM Certificates**. Then, find your certificate ID on the DRM Certificates page.
- If you use ApsaraVideo Player for Android, we recommend that you use `SurfaceView` to play videos with high security levels.

**Note** Mobile and web clients are supported. When you play a video with a high security level, you cannot rotate the video, mirror the video, or take snapshots from the video.


## 6.3. Apply for a FairPlay Streaming certificate

This topic describes how to apply to Apple for a FairPlay Streaming certificate.

### Prerequisites

- ApsaraVideo VOD is activated.
- A partnership agreement is reached with content providers.

- An **Apple Developer** account is created and you are an Account Holder.

 **Notice** ApsaraVideo VOD requires you to upload the certificate file and Application Secret key (ASK) that you obtain from Apple. Keep them confidential.

1. Log on to the website of **Apple FairPlay Streaming** with your Apple Developer account.
2. Click **Request FPS Deployment Package**. On the page that appears, submit the required information.
3. Download the *FPS\_Deployment\_Package.zip* deployment package.
4. Decompress *FPS\_Deployment\_Package.zip*. Follow instructions in the extracted documentation to create a password-protected private key file and a Certificate Signing Request (CSR) file.
5. Follow instructions in the extracted documentation to upload the CSR file to Apple. Then, an ASK is returned. Keep the ASK confidential.
6. Wait until a FairPlay Streaming certificate is created. Then, download the certificate.