

**Video on Demand**

# Troubleshooting

**Issue**            01  
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# 1 Failed to Transcode a Media File

## Symptom

When you use a transcoding template to transcode an uploaded file, the transcoding fails. You can view the transcoding failure message on the VOD console and perform further check based on the failure cause:

- [Check Whether Your Account Is in Arrears](#)
- [Check the Input File](#)
- [Check the Transcoding Template](#)
- [Check Whether the OBS Bucket Is Encrypted](#)

## Check Whether Your Account Is in Arrears

1. Log in to [Billing Center](#).
2. On the **Overview** page, view the available credit.

If your account is in arrears, click **Top Up** to top up your account, or [buy a traffic package](#).

3. On the **Resource Packages** page, check whether the transcoding package has balance.

Package Name/ID	Package Type	Region	Applicable Pr...	Status	Remaining/Total	Effective Time	Expiration Time	Order No.	Operation
Duration Of Standard Transcoding 00001-000001-0-0	Standard Transcoding	All	All	In effect	video_duration (4000 08MINUTE) / 5000000	Nov 26, 2021 11:34:32	Nov 26, 2022 23:59:59 GMT	CS2112611340FEWE	Buy Again

### NOTE

If your account is in arrears but the transcoding package has not been used up, the transcoding template may not match your purchased transcoding package. In this case, the fee needs to be deducted from your account balance. You are advised to write off the arrears and then use the transcoding template that has the same specifications as the purchased package for transcoding.

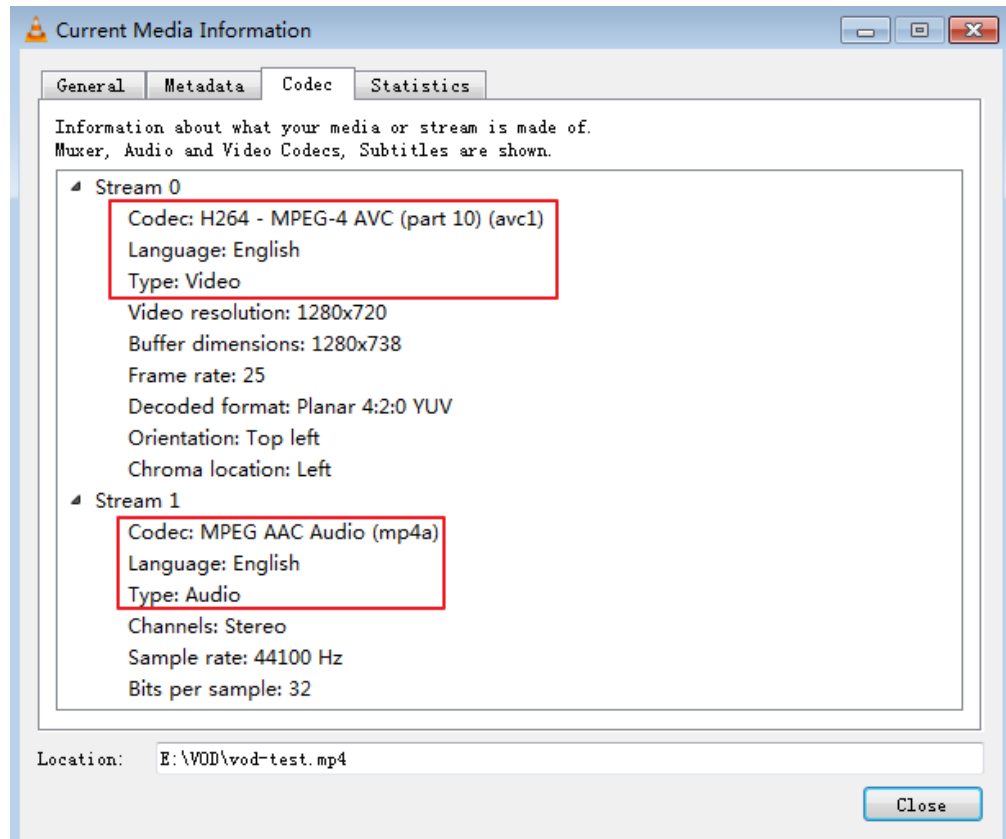
4. Log in to the VOD console again. In the navigation pane, choose **Audio and Video Management**, select the media file, and transcode it again.

## Check the Input File

1. [Download the VLC player](#) to your local PC and install it.
2. Play the input file using the VLC player.

- If the file fails to be played, the file is damaged or encrypted. If such a file is uploaded to VOD, the transcoding will fail.
  - If the playback is successful, go to the next step.
3. On the menu bar of the VLC player, choose **Tools > Codec Information** to view the codec of the input file. See [Figure 1-1](#).

**Figure 1-1** Viewing codec information



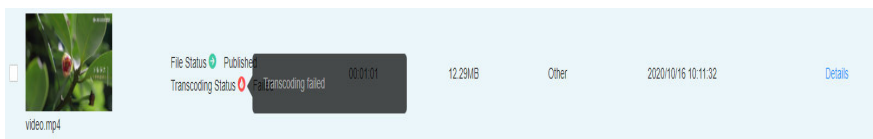
4. Check whether VOD supports the formats of the input file.
- VOD supports the following formats:
- File formats: MP4, TS, MOV, FLV, MPG, MXF, WMV, ADTS, AVI, MKV, and MPEG
  - Video codecs: H.264, H.265, MPEG-2, MPEG-4, MJPEG, WMV1/2/3, and Prores 422
  - Audio codecs: AAC, AC3, EAC3, HE-AAC, MP2, MP3, PCM (s161e, s16be, s241e, s24be, DVD), and WMA

## Check the Transcoding Template

If the input file is an audio file but a video transcoding template is used, the transcoding will fail. Select an audio transcoding template and transcode the file again. For details about how to configure a transcoding template, see [Transcoding Settings](#).

**NOTE**

The preset transcoding template of VOD is not applicable to audio files. You are advised to use a custom audio transcoding template.



## Check Whether the OBS Bucket Is Encrypted

If the source file is hosted from an OBS bucket to VOD and the output file is stored in a tenant bucket, the transcoded file storage may fail because default encryption has been enabled for the OBS bucket. Log in to the OBS console, choose **Overview** > **Basic Configurations**, and disable default encryption.

**Figure 1-2** Disabling default encryption



If the problem persists, you are advised to [submit a service ticket](#) to reach technical support.

# 2 Failed to Play a Media File

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## Symptom

After a media file is uploaded to VOD, normally you can play it via the console, a web player, or a mobile player. If it fails to be played, it is possible that the local network is inaccessible, VOD acceleration does not take effect, or file format is not supported. Perform the following steps to locate the fault.

### NOTE

If the video cannot be previewed on the console after being uploaded, the uploaded video may not have been parsed completely. Wait for 2 to 3 minutes, refresh the page, and try again.

- [Check the Local Network](#)
- [Check Whether Your Account Is in Arrears](#)
- [Check the Domain Status](#)
- [Check CNAME Resolution](#)
- [Check the HTTPS Certificate of the Domain Name](#)
- [Check Whether URL Validation Is Invalid](#)
- [Check the Player](#)
- [Check the Input File](#)

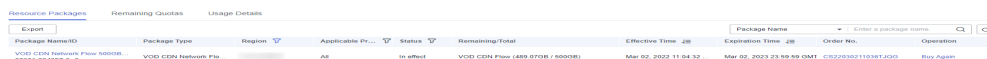
## Check the Local Network

[Perform an online bandwidth test](#) to check whether the local network is normal. If it is not, you are advised to play the file in a new network environment.

## Check Whether Your Account Is in Arrears

If your account is in arrears and the traffic package has been used up, then the media file cannot be played. Perform the following steps to check whether your account is in arrears and the traffic package has been used up:

1. Log in to [Billing Center](#).
2. On the **Overview** page, view the available credit.
3. On the **Resource Packages** page, check whether the CDN traffic package has balance.

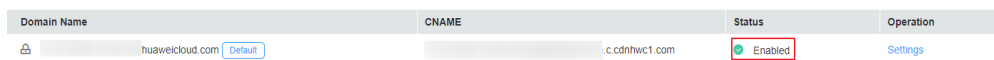


4. If your account is in arrears and the CDN traffic package does not have balance, click **Top Up** to top up your account, or [buy a traffic package](#).
5. Log in to the VOD console again and check whether the file can be played.

## Check the Domain Status

If the default domain name is not in the **Enabled** status, audio and video playback will fail. Perform the following steps to check whether the default domain name is enabled:

1. Log in to the VOD console.
2. In the navigation pane, choose **Domain Name Management**. On the displayed page, check whether the status of the default domain name is **Enabled**.



- If the status is **Disabled**, click **Enable** in the **Operation** column.
- If the status is **Configuring**, it might be that the domain name has not taken effect, the domain name has expired, or your site has pornographic or gambling-related content. [Submit a service ticket](#) to have technical support help you.

## Check the HTTPS Certificate of the Domain Name

- As the VOD streaming URL uses HTTPS by default, you need to enable HTTPS secure acceleration if you use your own domain name for playback. For details, see [Configuring an HTTPS Certificate](#).



**Figure 2-1** Configuring an HTTPS certificate for your own domain name

\* HTTPS Acceleration  [How to Configure HTTPS Acceleration?](#)

\* Certificate Name

\* Certificate Body

\* Private Key

\* Forcible Redirection to HTTPS  ?

\* HTTP2.0:  ?

- If the HTTPS certificate of your own domain name has expired, the corresponding HTTPS streaming URL will become invalid. You are advised to apply for a new certificate and upload it to the VOD console. For details, see [Configuring an HTTPS Certificate](#).

## Check Whether URL Validation Is Invalid

If you have configured [URL validation](#), check whether the URL validation of the media file that cannot be played has expired. If yes, generate a new streaming URL for playback.

## Check the Player

Different players support different media formats. Check whether the player supports the formats of your media file.

1. Log in to the VOD console.
2. In the navigation pane, choose **Audio and Video Management**.
3. Click **Details** in the row containing the media file. On the displayed page, click the **Playback** tab, and view the file format and codec.

Basic Information	Playback	Subtitle and Thumbnail Info	Code Example		
Quality	Format	Codec	Resolution	Bitrate	Size
Raw file	MP4	H.264	640*360	587Kbps	10.96MB
Total Index ⓘ	HLS	H.264	--	--	
LD	HLS	H.264	480*270	298Kbps	5.79MB

4. Check whether the player supports the formats of your media file.  
The media formats supported by common players are listed as follows:
  - Console player: MP4, FLV, HLS, DASH, MP3, and ADTS and H.264 codec
  - Web player: MP4, M3U8, MPD, and FLV and H.264 codec
  - Mobile player: MP4, M3U8, FLV, MP3, and H.264, H.265, MPEG4, and MJPEG codecs
5. Switch to another player if the player does not support the format of your media file.

### Check CNAME Resolution

By default, VOD acceleration is enabled. If the CNAME record of your domain name does not take effect, the domain name cannot be resolved and the playback fails.

Perform the following steps to check whether CNAME resolution is normal:

1. Log in to the VOD console.
2. In the navigation pane, choose **Domain Name Management**. On the **Domain Name Management** page, obtain the default accelerated domain name.

You can add multiple domain names on the VOD console. However, VOD acceleration is only enabled for the default domain name.

Domain Name	CNAME	Status	Operation
huaweicloud.com <span>Default</span>	com.cdnhwc1.com	Enabled	<a href="#">Settings</a>

3. Start the **cmd** program in Windows, and use **nslookup** to query the domain name.

```
C:\Users\>nslookup -qt=cname .com
Server: anycast-dns.huawei.com
Address: 10.10.10.10

Non-authoritative answer:
videoinfo-push.hwcloudlive.com canonical name = c.cdnhwc3.com
```

4. If the queried domain name is not displayed in the command output, CNAME resolution fails.
  - If the domain name allocated by VOD is used for distribution, **submit a service ticket** to reach technical support.

- If your own domain name is used for distribution, [configure CNAME records](#) and then play the media file again.

## Check the Input File

You are advised to transcode the input file by referring to [Audio and Video Management](#), obtain the streaming URL, and then play the transcoded file.

### NOTE

You will be billed for transcoding. For details, see [Transcoding Settings](#).

If the problem persists, you are advised to [submit a service ticket](#) to reach technical support.

# 3 Video Freezes While Being Played

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## Symptom

A media file freezes when being played on the console or using a player. It is possible that:

- The input file is corrupt.
- The network bandwidth is insufficient. As a result, audio and video are not downloaded completely.
- The decoding performance of the playback device is poor. As a result, audio and video cannot be decoded or rendered promptly.
- The media file has not been pre-loaded so the user needs to obtain the file from the VOD origin server upon the first access.

You can play the input file on your local PC. If the input file can be played, perform the following operations to rectify the fault.

## Pre-loading Media Files

Pre-load the media file on the VOD console or by calling APIs to distribute the media file to CDN nodes. In this way, the cache can be directly hit upon the first access, which prevents frame freezing during the first playback.

## Change Hardware Configurations of the Playback Device

If the playback device has too low hardware configurations, the encoding and decoding speeds will become slow. As a result, freeze occurs. You can change hardware configurations of the playback device and play it again.

## Change the Network Environment

If the network environment on the player side is poor, data may fail to be downloaded promptly. As a result, freeze occurs.

**Perform an online bandwidth test.** If the downlink bandwidth is insufficient, you are advised to switch the network environment. In the mean time, check whether downloading occupies high bandwidth. It is recommended that you do not perform any operations (such as downloading) that will occupy a large amount of bandwidth while playing.

## Select Hard Decoding

Decoding HD videos requires higher decoding performance. If the decoding performance of the playback device is not good enough, the decoding speed may be slower than the video playback speed. In this case, use hard decoding to avoid video freezes.

## Set the Buffer Size

To stop the video from freezing, you can enable the player to buffer some data before decoding and playback. However, if the player buffers too much audio and video data, the time to first frame (TTFF) will increase. Increase the buffer size of the player so that the player can download sufficient data each time before playing the content. However, this will also prolong the TTFF. Therefore, when setting the buffer size, you need to consider freeze and TTFF based on your needs to achieve a balance.

## Select a Suitable Resolution

Playback of UHD, 2K, or 4K videos has high requirements on the downlink network and playback devices. If too high resolution videos are played on mobile devices, you cannot even notice the difference with other lower resolution videos. Therefore, when the video freezes, switch to a lower resolution so that content can load faster. In this way, video freezes can be avoided.