

Live

Troubleshooting

Issue 01
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1 Failed to Add a Domain Name

Symptom

When you add an ingest domain name or streaming domain name, an error message is displayed, indicating that the domain name fails to be added.

Possible Causes

- Cause 1: Your account is in arrears, and the system displays a message indicating that the domain name fails to be added and the user is in the deleted state.
- Cause 2: The domain name already exists. The message "Failed to add the domain name. The domain name already exists." is displayed.
- Cause 3: The domain name has not been licensed. A message is displayed, indicating that the domain name fails to be added because the ICP number does not exist.
- Cause 4: The domain name already exists. A message is displayed, indicating that the domain name fails to be added and data fails to be synchronized to CDN.

Solution for Cause 1

1. Log in to [Billing Center](#).
2. On the **Overview** page, view the available quota.
3. Click **Top Up** if your account has any outstanding amount.
4. Log in to the Live console and add the domain name again.

Solution for Cause 2

Check whether the domain name has been added to other regions or Live accounts. Live does not support duplicate domain names. You are advised to use a new domain name.

Solution for Cause 3

If you add an ingest domain name and streaming domain name in the CN North-Beijing4 region, the domain names to be added must be licensed before they can be used for pushing and playing live streams on the Live console.

All websites with their own domain names that operate inside the Chinese mainland are required to obtain a license. You are advised to have the domain name licensed in the Huawei Cloud ICP License Center. Once you obtain the ICP license, log in to the Live console to add the domain name again.

Solution for Cause 4

You submitted to delete the domain name but add it again before it is completely deleted. In this case, [submit a service ticket](#) to contact technical support. Once your problem is solved, you can log in to the Live console to add the domain name again.

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

2 Failed to Push a Live Stream

Symptom

You configured an ingest URL to push a live stream, but stream pushing fails.

You are advised to perform the following operations to locate the cause and rectify the fault:

- [Check the Network on the Streaming End](#)
- [Check the Domain Status](#)
- [Check Whether the CNAME Has Taken Effect](#)
- [Check Whether the Ingest URL Is Correct](#)
- [Check Whether the Ingest URL Has Been Occupied](#)
- [Check Whether the Live Stream Has Been Disabled](#)

Check the Network on the Streaming End

You can perform an online bandwidth test to check whether the network on the streaming end is normal. If it is not, you are advised to change the network environment and push the live stream again.

Check the Domain Status

If the domain name is in the **Configuring** or **Disabled** state, stream pushing will fail. Perform the following steps to check whether the domain status is normal:

1. Log in to the Live console. In the navigation pane, choose **Domains**.
2. In the domain list, check whether the domain status is **Normal**.

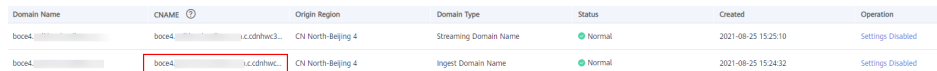
Domain Name	CNAME	Origin Region	Domain Type	Status	Created	Operation
boc4...	boc4... c.cdthwc3...	CN North-Beijing 4	Streaming Domain Name	Normal	2021-08-25 15:25:10	Settings Disabled
boc4...	boc4... c.cdthac...	CN North-Beijing 4	Ingest Domain Name	Normal	2021-08-25 15:24:32	Settings Disabled

- 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 Whether the CNAME Has Taken Effect

By default, upstream acceleration is enabled. If CNAME has not been configured for the ingest domain name, the ingest domain name cannot be resolved. As a result, stream push fails. Perform the following steps to check whether the CNAME record has been configured:

1. Log in to the Live console. In the navigation pane, choose **Domains**.
2. In the domain list, obtain the CNAME record for the ingest domain name.



Domain Name	CNAME	Origin Region	Domain Type	Status	Created	Operation
boc4	boc4-lcdhwc3...	CN North-Beijing 4	Streaming Domain Name	Normal	2021-08-25 15:25:10	Settings Disabled
boc4	boc4-lcdhwc...	CN North-Beijing 4	Ingest Domain Name	Normal	2021-08-25 15:24:32	Settings Disabled

3. Start the **cmd** program in Windows, and use **nslookup** to query the domain name.
4. Follow the instructions in [Configuring CNAME Records](#) to configure the CNAME record for the ingest domain name if the CNAME record allocated by the system is not displayed in the command output.

Check Whether the Ingest URL Is Correct

If URL validation is configured, you need to create an authentication ingest URL. Otherwise, use the original ingest URL.

Check whether the current ingest URL is correct based on the URL assembling rule. If the URL is incorrect, create a correct one.

- The format of an original ingest URL:
`rtmp://Ingest domain name/AppName/StreamName`

Assemble the ingest URL based on the values of **AppName** and **StreamName**.

NOTE

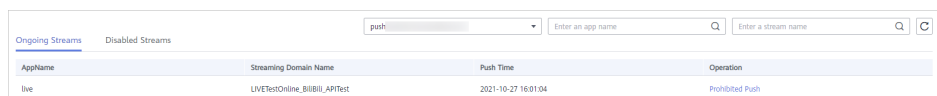
Live supports only RTMP push. The ingest URL must start with **rtmp**.

- For details, see [Stream Authentication](#).

Check Whether the Ingest URL Has Been Occupied

Perform the following steps:

1. Log in to the Live console. In the navigation pane, choose **Streaming > Streams**.
2. Select the desired domain name from the drop-down list. If a live stream is displayed on the **Ongoing** tab page, check whether the stream name has been used.



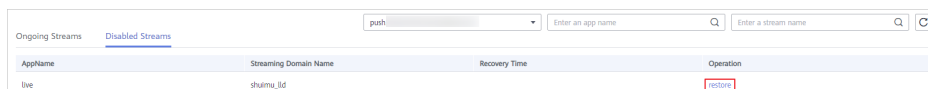
AppName	Streaming Domain Name	Push Time	Operation
live	LIVETestOnline_BIBILI_APPTest	2021-10-27 16:01:04	Prohibited Push

3. Click **Disable** in the **Operation** column to disable the live stream if your ingest URL has been used. You are advised to use a new live stream name (**StreamName**) to push live streams.

Check Whether the Live Stream Has Been Disabled

Perform the following steps:

1. Log in to the Live console. In the navigation pane, choose **Streaming > Streams**.
2. Select your streaming domain name from the drop-down list.
3. Click the **Disabled** tab.
4. Click **Resume** in the **Operation** column if your live stream has been disabled.



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

3 Failed to Play a Live Video

Symptom

The video playback fails.

Perform the following operations to locate the cause and rectify the fault:

- [Check Whether the Streaming URL Is Correct](#)
- [Check Whether the Streaming Domain Name Has Been Associated with the Ingest Domain Name](#)
- [Check Whether the CNAME Has Taken Effect](#)
- [Check the Player](#)

Check Whether the Streaming URL Is Correct

If URL validation is configured, you need to create an authentication streaming URL. Otherwise, use the original streaming URL.

Check whether the current streaming URL is correct based on the URL assembling rule. If the URL is incorrect, create a correct one.

- You can stream your content in FLV, M3U8, or RTMP format.
RTMP format: `rtmp://Streaming domain name/AppName/StreamName`
FLV format: `http://Streaming domain name/AppName/StreamName.flv`
M3U8 format: `http://Streaming domain name/AppName/StreamName.m3u8`

Assemble the ingest URL based on the values of **AppName** and **StreamName**.

- For details about assembling an authentication streaming URL, see [URL Validation](#).

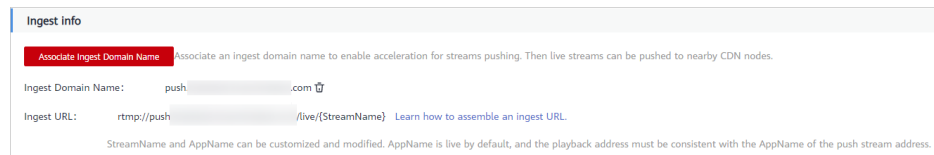
NOTE

The values of **AppName** and **StreamName** in the streaming URL must be the same as those in the ingest URL.

Check Whether the Streaming Domain Name Has Been Associated with the Ingest Domain Name

The ingest domain name must be associated with the streaming domain name so that you can push streams and play live video. Perform the following operations to check whether domain names have been associated:

1. Log in to the Live console. In the navigation pane, choose **Domains**.
2. Click **Settings** in the row containing the target streaming domain name.
3. Click **Associate Ingest Domain Name** and select the target ingest domain name if no ingest information exists in the **Ingest Info** area.



Check Whether the CNAME Has Taken Effect

By default, downstream acceleration is enabled. If you do not configure CNAME resolution, the streaming domain name cannot be resolved. As a result, the playback fails. Perform the following steps to check whether the CNAME record has been configured:

1. Log in to the Live console. In the navigation pane, choose **Domains**.
2. In the domain list, obtain the CNAME record for the streaming domain name.

Domain Name	CNAME	Origin Region	Domain Type	Status	Created	Operation
	xxxx.cdnherc3.com	CN North-Beijing 4	Streaming Domain Name	Normal	2021-08-25 15:25:10	Settings Disabled

3. Start the **cmd** program in Windows, and use **nslookup** to query the domain name.
4. Follow the instructions in [Configuring CNAME Records](#) to configure the CNAME record for the ingest domain name if the CNAME record allocated by the system is not displayed in the command output.

Check the Player

1. Enter the streaming URL in a third-party player (VLC is recommended).
2. Check whether the player is faulty. You are advised to use another mobile phone and PC to test.
3. Check whether the player supports the corresponding format.

Live supports the following streaming formats:

- Web player: M3U8 and FLV
- Mobile player: RTMP, FLV, and M3U8

4. Switch to another player if the player does not support the format.

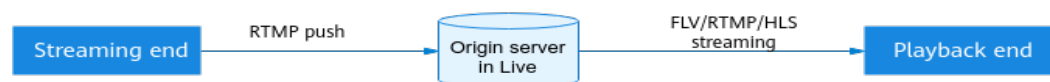
If the problem persists, you are advised to [submit a service ticket](#) to reach technical support.

4 Streaming Video Freezes During Playback

Symptom

Video freezes while being played. The entire live streaming process involves the streaming end, playback end, and origin server in Live (CDN). Therefore, freeze may occur in each phase. See [Figure 4-1](#). You are advised to perform the following operations to locate the cause:

Figure 4-1 Live streaming process



- [Checking the Streaming End](#)
- [Checking the Playback End](#)
- [Checking the Origin Server in Live \(CDN\)](#)

Checking the Streaming End

It may be because freezes occur during stream pushing due to factors such as the streaming device configurations, video parameter settings, and network environment. If freeze occurs on the streaming end, locate the cause from the following aspects:

- Device configurations
During stream pushing, a certain proportion of CPU resources are occupied. If a low-end device with poor hardware configurations is used and its overall CPU usage exceeds 80%, freeze and artifacts will occur, resulting in degradation in video quality. You can change device configurations or use a higher version of streaming device to ensure device stability.
- Streaming SDK configurations
If the bitrate, frame rate, and encoding level set on the encoder are too high, the encoding speed will become slow due to hardware restrictions. Therefore, you are advised to use hard coding on iOS devices because the iOS system is highly compatible with hardware devices and is more power-saving. Android

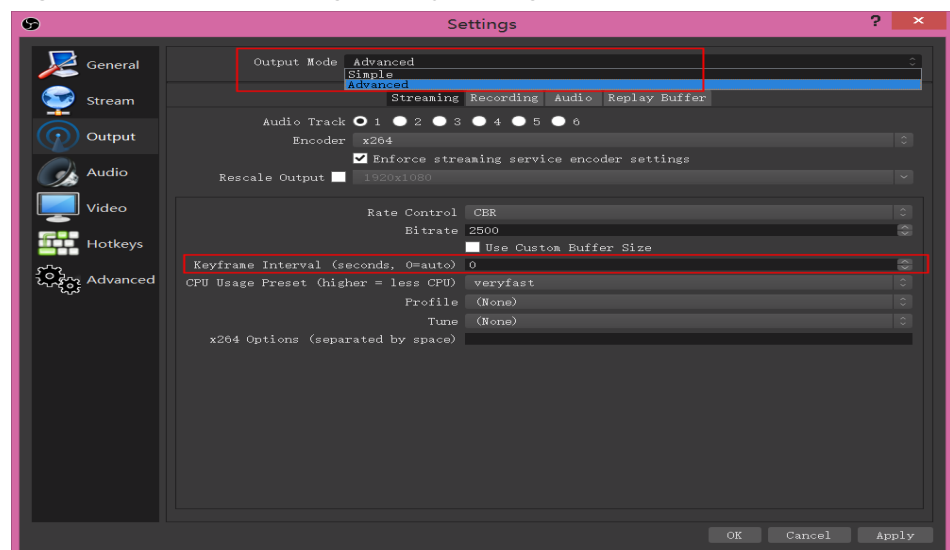
devices have different models and various types of CPUs. It is recommended that Android 4.3 and later versions use hard coding.

- Video parameter settings
Generally, to ensure video smoothness, the frame rate is set to be greater than 15 frames per second (FPS). If the frame rate is lower than 10 fps, noticeable freezes occur. Unless otherwise specified, set the frame rate to a value between 15 fps and 30 fps. Human eyes cannot see more than 30 fps. The bandwidth cost for video transmission also increases with the frame rate.
- Network bandwidth
Perform an online bandwidth test. It is recommended that upstream bandwidth be greater than 10 Mbit/s.
- System resource usage
Check whether a large number of programs are running on the server. It is recommended that you delete and stop these programs to release resources.

Checking the Playback End

- Most players have a receive buffer. A player decodes and plays the video after the buffer is full. The size of the receive buffer also affects freeze during playback. You are advised to adjust the size of the receive buffer to avoid video freezes.
- If the player uses hard encoding in a poor network environment, drop frames and reduce audio bitrate to avoid video freezes.
- Perform an online bandwidth test. If the bandwidth of the player is insufficient or jitter occurs, videos will freeze. 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.
- If you use the third-party tool Open Broadcaster Software (OBS) to push streams, perform the following steps to set parameters.
 - a. Choose **Output** and set **Output Mode** to **Advanced**.
 - b. Set **Keyframe Interval (seconds, 0=auto)** to **2**.

Figure 4-2 OBS streaming latency settings



Checking the Origin Server in Live (CDN)

If both the streaming end and playback end are normal, [submit a service ticket](#) for technical support. Provide your ingest domain name and streaming domain name in the service ticket.