

MetaStudio

FAQs

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Contents

1 About the Service.....	1
1.1 What Is MetaStudio?.....	1
1.2 In Which Regions Is MetaStudio Available?.....	1
1.3 What Content Is Not Allowed on MetaStudio?.....	1
1.4 How Do I Integrate MetaStudio?.....	2
1.5 FAQs Related to MetaStudio Virtual Avatars.....	2
1.6 What If My Account Is Frozen, Deleted, or Has a Low Balance?.....	3
2 Billing.....	5
2.1 What Are the Billing Items of MetaStudio?.....	5
2.2 How Do I Purchase a Third-Party Timbre on MetaStudio?.....	5
2.3 How Do I Set the AK/SK of a Third-Party Voice on MetaStudio?.....	5
2.4 Why Does the Preview Page Keep Loading After I Purchase a MetaStudio Voice Package?.....	5
2.5 Is TTS Billing Language-agnostic on MetaStudio?.....	5
2.6 How Do I View Details About Purchased MetaStudio Voice Packages?.....	6
2.7 Can I Re-Generate My MetaStudio Avatar Image/Voice Without Using Additional Resources?.....	6
2.8 Can I Unsubscribe from MetaStudio Image Modeling and Voice Modeling?.....	6
2.9 Why Is My Account in Arrears?.....	6
2.10 How Do I View the Pay-per-Use Resource Consumption of MetaStudio?.....	7
2.11 How Do I View the Minutes Used from a Purchased MetaStudio Resource Package for Video Production?.....	7
3 Voice and Image Modeling.....	9
3.1 Can I Shoot a Real-Scene Video for Standard MetaStudio Virtual Avatar Training?.....	9
3.2 What If H.265 Training Video Submission Fails on Some Browsers?.....	9
3.3 What If a MetaStudio Virtual Avatar Production Task Fails the Review?.....	11
3.4 Can I Ask for Faster Model Review or Modeling After Submitting a Request on MetaStudio?.....	12
3.5 How Do I Request Retraining for a Standard MetaStudio Virtual Avatar Model?.....	12
3.6 How Do I Request MetaStudio Voice Model Retraining?.....	13
3.7 Can I Use MetaStudio Voice and Image Models on Other Platforms?.....	14
3.8 What Is the Relationship Between MetaStudio Voice/Image Models and Audio/Video Content?.....	15
4 Video Production.....	16
4.1 What If the Pixel of an Uploaded Image Is Too High?.....	16
4.2 Can I Overlay Animated Images on a Video Produced on MetaStudio?.....	16

4.3 How Do I Convert a PowerPoint File to a PDF File?.....	16
4.4 How Do I Present the Animation of a PowerPoint File on MetaStudio?.....	17
4.5 What If a PowerPoint File Cannot Be Uploaded Due to a Parsing Failure?.....	17
4.6 Can I Edit an Uploaded PowerPoint File on MetaStudio?.....	18
4.7 What If Video Compositing Failed on MetaStudio?.....	18
4.8 Can I Download a Composited Video from MetaStudio to a Local Device?.....	19
4.9 Why Is the Virtual Avatar Lip Sync Affected After Editing the Composited Video?.....	19
4.10 How Do I Generate a Video Template on MetaStudio?.....	20
5 Livestreaming.....	21
5.1 What If Livestream Script Saving Failed on MetaStudio?.....	21
5.2 What If a Template Is Unavailable on MetaStudio?.....	21
5.3 Which Firewall Restrictions Should I Remove for Virtual Avatar Livestreams?.....	22
5.4 What If the Live Video on a Third-party Platform Is Not Clear?.....	23
5.5 What If the Livestream on a Third-party Platform Is Interrupted Unexpectedly?.....	24
5.6 What If the Live Video on a Third-party Platform Is Muted?.....	26
6 Intelligent Interaction.....	28
6.1 Does MetaStudio Support Rich Media?.....	28
6.2 How Do I Cope with the Firewall Restrictions on Media Streams of Intelligent Interaction?.....	30
6.3 What If MSS.20010135 Appears on the Intelligent Interaction Page of MetaStudio?.....	30
6.4 How Do I Switch the Language and Voice of Intelligent Interaction in Real Time on MetaStudio?.....	30
7 Asset Management.....	33
7.1 How Do I Receive and Activate Voice Assets and Avatar Model Assets on MetaStudio?.....	33
8 APIs and SDKs.....	35
8.1 How Do I Obtain the Project ID?.....	35
8.2 Why Is the Message APIG.0301 Displayed When I Call an API?.....	36
8.3 What If an Error Code Starting with APIGW Appears When I Call an API?.....	36
8.4 Where Can I Download the MetaStudio Intelligent Interaction SDK?.....	36
8.5 Why Is the Inserted Video Thumbnail Missing in the Preview Image of the Video Composited Using the API?.....	37
8.6 Why Can't I See Videos and Images Uploaded Through APIs During Video Production?.....	37
8.7 What If a Script Malfunctions After I Created or Updated It Using an API?.....	37

1 About the Service

1.1 What Is MetaStudio?

The MetaStudio solution offers a wide range of services, such as virtual avatar video production, livestreaming, and intelligent interaction, breathing new life into content creation across industries.

The major **features** are as follows.

Huawei Cloud MetaStudio is an AI-infused digital content production pipeline designed to streamline the creation of engaging digital content. The platform leverages advanced image and voice modeling techniques to generate lifelike virtual avatar models. These models can then come into play in various scenarios, including video production, livestreaming, and intelligent interaction.

1.2 In Which Regions Is MetaStudio Available?

MetaStudio has been put into commercial use in CN North-Beijing⁴, and in open beta testing (OBT) in AP-Singapore. MetaStudio is still in internal testing in CN East-Shanghai¹. To use MetaStudio in this region, **submit a service ticket**.

Note: Resources are region-specific.

1.3 What Content Is Not Allowed on MetaStudio?

Content that is not allowed on MetaStudio:

- Pornography, gambling, illegal drugs, frauds, or infringement
- Pirated games/software/videos
- P2P financial fraud
- Lottery
- Unlicensed hospitals and pharmaceutical information
- Inaccessible websites or websites that do not contain any substantial information

1.4 How Do I Integrate MetaStudio?


You can integrate MetaStudio using APIs. For details, see [API Reference](#). For any questions related to the integration, contact your account manager.

For commercial integration, provide the enterprise name, region, and contact information, and briefly describe the capabilities of MetaStudio to be integrated and the purpose of integration.

1.5 FAQs Related to MetaStudio Virtual Avatars

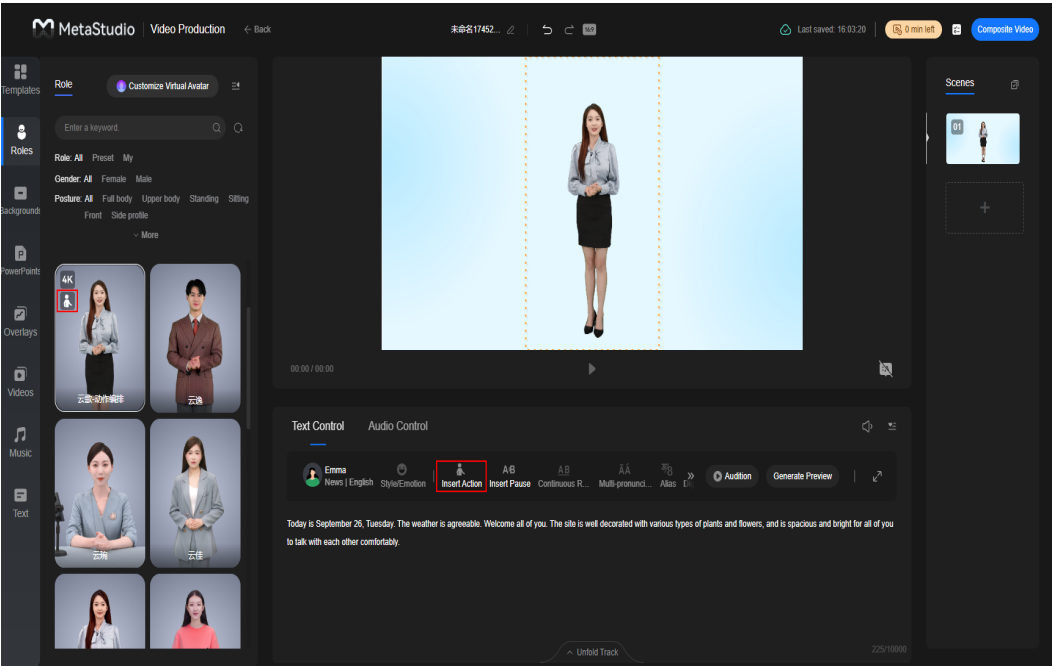
See [Table 1-1](#).

Table 1-1 FAQs related to virtual avatars

No.	Question	Answer
1	Is face swap supported?	No.
2	Is clothes swap supported?	No.
3	Can actions be added?	<p>An action can be added only when both of the following conditions are met:</p> <ul style="list-style-type: none">You submit a service ticket to obtain the permission for choreography.The video used for virtual avatar training should include choreography. For details, see Guide to Choreography Customization. <p>Action insertion is now allowed only for video production, as shown in Figure 1-1.  on a virtual avatar card indicates that this virtual avatar supports action insertion. Note that the audio duration should be long enough so the virtual avatar can perform the inserted action in a timely manner.</p>
4	Do virtual avatars speak as instructed by the input text or speech?	Virtual avatars in videos and livestreams can speak as instructed by the input text or audio.

No	Question	Answer
5	Is semantic understanding of knowledge bases supported?	No. Semantic understanding is a capability of knowledge bases, not of virtual avatars. Virtual avatars perform intelligent interaction with users by answering their questions. The answers are given by the large language model (LLM) or knowledge base.
6	Are text to speech (TTS) and automatic speech recognition (ASR) supported?	TTS is supported but ASR (speech to text) is not. If you need ASR, try ASR services such as Speech Interaction Service (SIS) .

Figure 1-1 Video production



1.6 What If My Account Is Frozen, Deleted, or Has a Low Balance?

See [Table 1-2](#).

Table 1-2 Handling methods

Level-1 Category	Level-2 Category	Handling Method
Freezing	Frozen resources	See When Can a Frozen Resource Be Unfrozen?
	Frozen accounts	See In What Circumstances Will Huawei Cloud Services Be Frozen?
Deletion	Account deletion	See Deleting a Huawei Cloud Account.
Insufficient balance	Insufficient account balance	<p>You need to top up your account in time.</p> <p>If pay-per-use billing is enabled on MetaStudio, you can disable it to avoid overspending.</p> <p>You can configure the Balance Alert function on the Billing Center > Overview page. When your balance drops below the threshold, the system automatically notifies you by SMS or email.</p> <p>If your account is in arrears, top up your account in time.</p>

2 Billing

2.1 What Are the Billing Items of MetaStudio?

The billing items of MetaStudio are virtual avatar image modeling, voice modeling, and video production. Resources of livestreaming and intelligent interaction can be allocated only by the administrator. For details, see [Billing Overview](#).

2.2 How Do I Purchase a Third-Party Timbre on MetaStudio?

See [Purchasing a DupDub Voice Package](#).

2.3 How Do I Set the AK/SK of a Third-Party Voice on MetaStudio?

See [Purchasing a DupDub Voice Package](#).

2.4 Why Does the Preview Page Keep Loading After I Purchase a MetaStudio Voice Package?

Check whether the AK/SK of the purchased third-party voice is correctly configured by referring to [Purchasing a DupDub Voice Package](#). If the configuration is incorrect, the package cannot be used.

2.5 Is TTS Billing Language-agnostic on MetaStudio?

Yes. TTS is billed based on the number of characters. Language is not a billing item.

For details about the billing standards of third-party voices, see the price list on the [DupDub TTS](#) page of KooGallery.

2.6 How Do I View Details About Purchased MetaStudio Voice Packages?

Access [My KooGallery](#) to go to the **Purchased Apps** page to view details about the purchased TTS packages.

2.7 Can I Re-Generate My MetaStudio Avatar Image/Voice Without Using Additional Resources?

If the generated avatar image or voice is below expectations, try the following steps. For example, here is how to address common avatar image modeling issues:

- If the quality of the materials used for avatar image modeling is low, the administrator will dial the mobile number you provided when submitting the training task. You can resubmit the video used for virtual avatar image training after the administrator rejects the task. Before the image modeling task is complete, the required resources remain in use and the quota is not deducted.
- The quota will be deducted after the image modeling task is complete. Generally, retraining is allowed only when there is a service issue. If there is any software issue, [submit a service ticket](#) and provide the avatar modeling task ID and reason for retraining. Once approved, your retraining request will be handled.

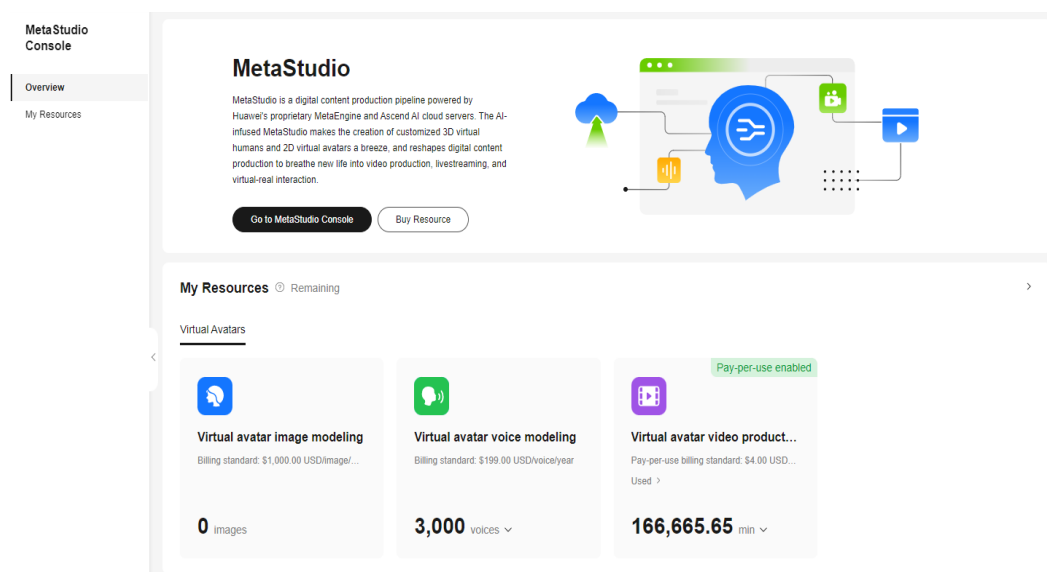
2.8 Can I Unsubscribe from MetaStudio Image Modeling and Voice Modeling?

Both image modeling and voice modeling use one-off billing and cannot be unsubscribed from.

If the model is underperforming due to software issues, you can [submit a service ticket](#) for unsubsubscription. Once verified, your unsubsubscription request will be approved.

2.9 Why Is My Account in Arrears?

In addition to the resources purchased on the resource purchase page, you also need to go to the **Overview** page (as shown in [Figure 2-1](#)) to check whether pay-per-use billing is enabled for any billing item. The **Pay-per-use enabled** corner mark in the upper right corner of a billing item card indicates that pay-per-use billing is enabled. Any resource usage that exceeds the package quota will be automatically billed on a pay-per-use basis.

Figure 2-1 Service overview page

2.10 How Do I View the Pay-per-Use Resource Consumption of MetaStudio?

Some MetaStudio billing items support pay-per-use billing. For details, see [Billing Overview](#). You can query the pay-per-use resource usage and bill details by referring to [Bill Details](#).

2.11 How Do I View the Minutes Used from a Purchased MetaStudio Resource Package for Video Production?

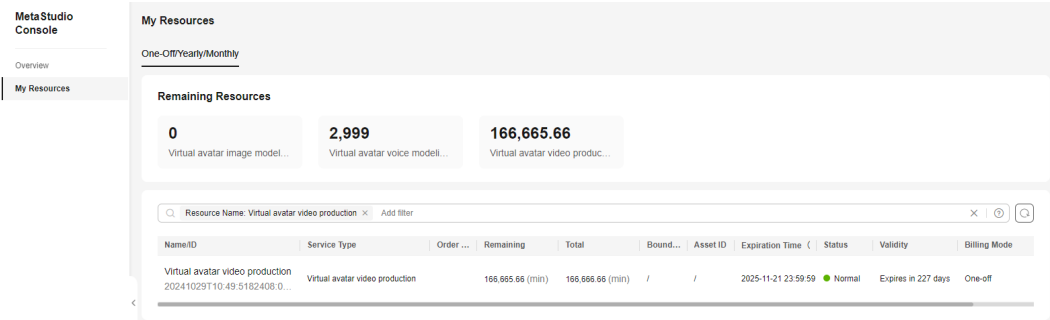
Currently, you cannot directly view the minutes used from your video production resource package. To calculate your usage, subtract the remaining minutes from the package's total minutes.

Procedure:

- Step 1** Log in to the [MetaStudio console](#) and go to the **Overview** page.
- Step 2** In the **My Resources** area, you can view the remaining quota of a purchased resource package for virtual avatar video production.
- Step 3** In the navigation pane, choose **My Resources**.
- Step 4** In the attribute filter box, select **Resource Name > Virtual avatar video production** to view the remaining and total quantities of a purchased resource package, as shown in [Figure 2-2](#).

You can also view the remaining quantity of a purchased resource package in the upper right corner of the [video production page](#).

Figure 2-2 My resources



-----End

3 Voice and Image Modeling

3.1 Can I Shoot a Real-Scene Video for Standard MetaStudio Virtual Avatar Training?

Yes. For details, see [Shooting a Video of a Human](#).

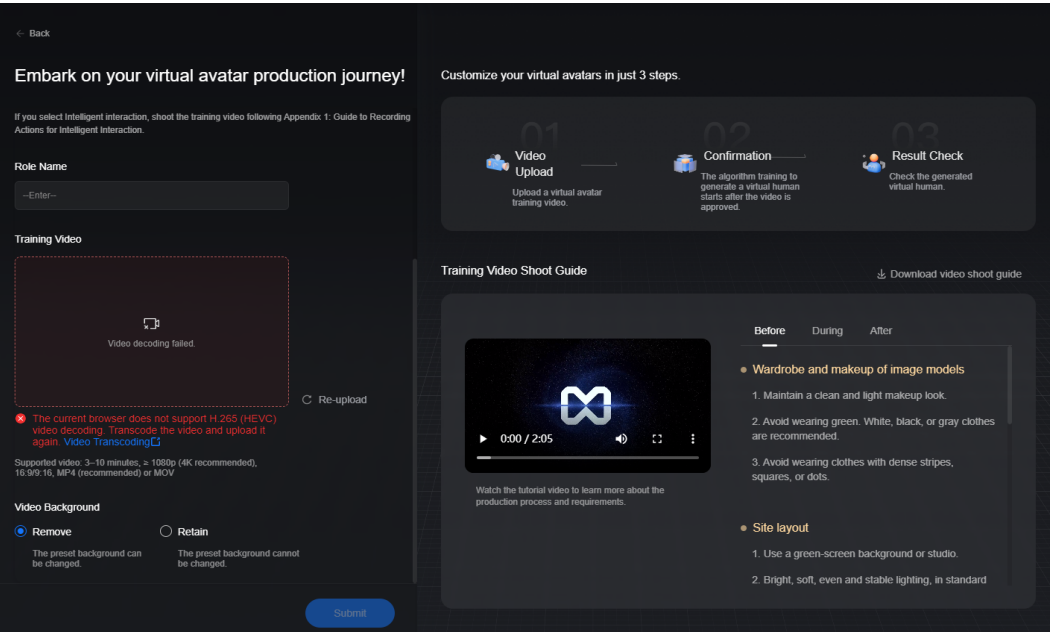
A real-scene video does not support cropping or background changing. The background of the video will be permanently used by the virtual avatar. Only green-screen videos support background changing, but blue-screen videos do not.

3.2 What If H.265 Training Video Submission Fails on Some Browsers?

Symptom

During virtual avatar image modeling, the uploaded training video cannot be played, or a message is displayed during training task submission, indicating that the video resolution is not supported.

Figure 3-1 Virtual avatar image modeling



Possible Causes

Browsers such as Chrome support hardware decoding of H.265 (HEVC) videos. If your PC does not support such videos, the videos cannot be played on your browser, and parameters such as the video resolution cannot be obtained.

Enter **chrome://gpu** in the address box of Chrome and search with **coding**. You can check whether the browser on the PC supports hardware decoding of H.265 (HEVC) videos.

Figure 3-2 Checking the browser configuration

← → ↻ Chrome | chrome://gpu

Video Acceleration Information

Decoding	
Decode h264 baseline	64x64 to 4096x4096 pixels
Decode h264 main	64x64 to 4096x4096 pixels
Decode h264 high	64x64 to 4096x4096 pixels
Decode vp9 profile0	64x64 to 8192x8192 pixels
Decode vp9 profile2	64x64 to 8192x8192 pixels
Decode hevc main	64x64 to 8192x8192 pixels
Decode hevc main 10	64x64 to 8192x8192 pixels
Encoding	
Encode h264 baseline	32x32 to 1920x1088 pixels, and/or 30.000 fps
Encode h264 main	32x32 to 1920x1088 pixels, and/or 30.000 fps
Encode h264 high	32x32 to 1920x1088 pixels, and/or 30.000 fps

Run **ffmpeg -i Video file name** to check whether the video encoding format is H.265 (HEVC).

Figure 3-3 Checking the video encoding format

[illegible]

 NOTE

You need to install FFmpeg first following these steps:

- Download FFmpeg at <https://github.com/BtbN/FFmpeg-Builds/releases>.
- Decompress the FFmpeg package and add the **bin** directory to the system environment variables.
- Run **ffmpeg**. If the version number is displayed, the installation is successful.

Troubleshooting

- **Method 1:** Transcode an H.265 (HEVC) video to an H.264 video using CapCut, and then upload the video to the MetaStudio console for image modeling.
- **Method 2:** Transcode an H.265 (HEVC) video to an H.264 video using FFmpeg, and then upload the video to the MetaStudio console for image modeling.

Run `ffmpeg -i Video file name -c:v libx264 output.mp4`, for example, `ffmpeg -i .\test.mp4 -c:v libx264 output.mp4`.

3.3 What If a MetaStudio Virtual Avatar Production Task Fails the Review?

If a message is displayed indicating that the submitted virtual avatar production task fails the auto review due to the face unmatched with that in the ID card, the possible causes are as follows:

- The face cannot be recognized. Ensure that the entire ID card is clear without light reflection.
- The human image in the training material must be the same as the portrait on the submitted ID card.
- The video direction may be incorrect. Rotate the landscape video to a portrait one.
- The video uses a non-mainstream encoding format. The camera used to shoot the video may use a vendor-specific code. Ensure that the video can be played using the Windows player. Note that the encoding format and container format are different.

3.4 Can I Ask for Faster Model Review or Modeling After Submitting a Request on MetaStudio?

The material you submit for modeling will be manually reviewed before training to check if it is qualified. You are not allowed to ask for shortening the review and production cycle after submitting a request. See [Table 3-1](#).

Table 3-1 Modeling cycle

Model Type	Modeling Cycle
Voice model	The task takes about seven working days.
Image model	Model review and modeling take about seven working days.

3.5 How Do I Request Retraining for a Standard MetaStudio Virtual Avatar Model?

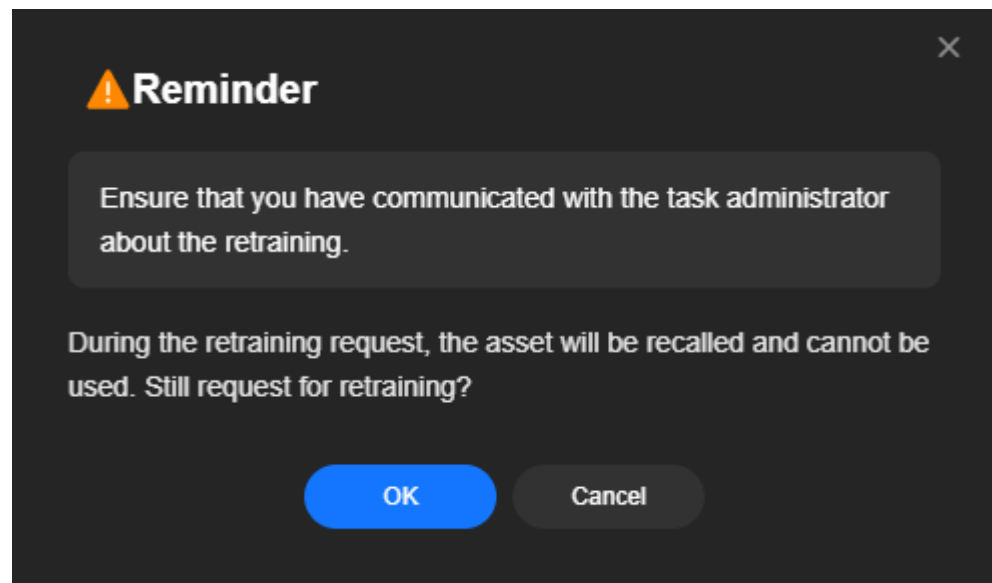
CAUTION

Only models can be retrained, such as the image and voice models of a standard virtual avatar. A composited video does not allow retraining. If the video quality is below expectations, new compositing will consume additional resources.

If you have completed the training of a standard virtual avatar model and approved the result, but still want to request model retraining, do the following:

- Step 1** Log in to the [MetaStudio console](#) and go to the **Overview** page.
- Step 2** Click **Go to MetaStudio Console** to go to the MetaStudio console.
- Step 3** In the navigation pane, choose **Task Center**.
- Step 4** Click the **Avatar Images** tab to find the task requiring retraining. Choose **More > Request Retraining** in the **Operation** column of the task. A dialog box is displayed, as shown in [Figure 3-4](#).

Figure 3-4 Request retraining



Step 5 Follow the instructions in the dialog box. Then click **OK** to start retraining.

----End

3.6 How Do I Request MetaStudio Voice Model Retraining?

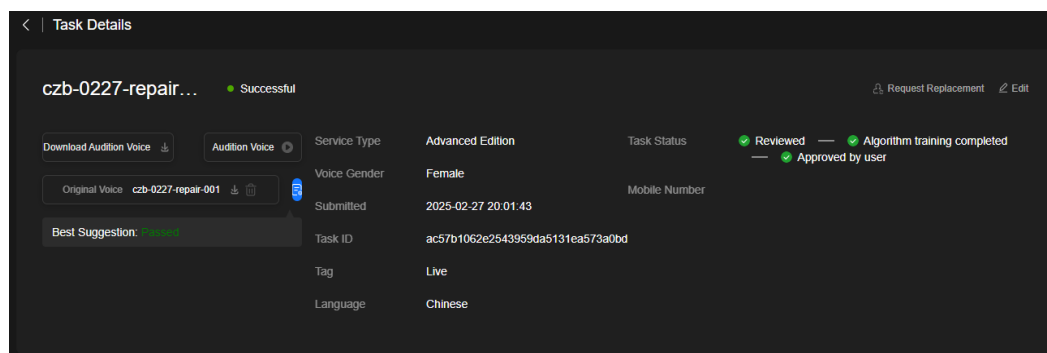
CAUTION

Only models can be retrained, such as the image and voice models of a standard virtual avatar. A composited video does not allow retraining. If the video quality is below expectations, new compositing will consume additional resources.

If you have completed the training of a voice model and approved the result, but still want to request model retraining, do the following:

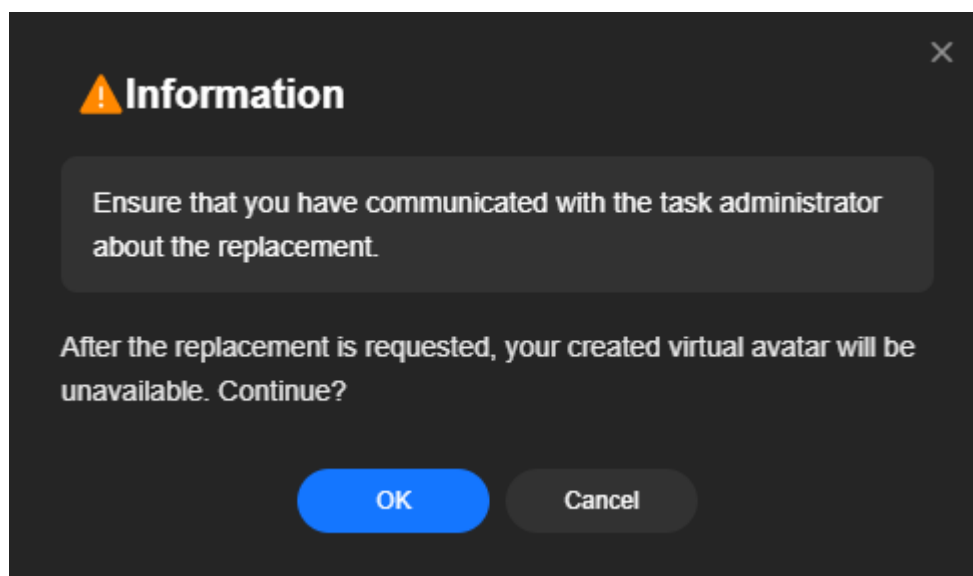
- Step 1** Log in to the [MetaStudio console](#) and go to the **Overview** page.
- Step 2** Click **Go to MetaStudio Console** to go to the MetaStudio console.
- Step 3** In the navigation pane, choose **Task Center**.
- Step 4** Click the **Voice Modeling** tab to find the task requiring retraining. Click **Task Details** in the **Operation** column of the task. The task details are displayed, as shown in [Figure 3-5](#).

Figure 3-5 Task details



Step 5 Click **Request Replacement** in the upper right corner of the page. A dialog box is displayed, as shown in [Figure 3-6](#).

Figure 3-6 Request retraining



Step 6 Follow the instructions in the dialog box. Then click **OK** to start retraining.

----End

3.7 Can I Use MetaStudio Voice and Image Models on Other Platforms?

No. Models generated on MetaStudio can be used only within MetaStudio.

The voice and image model files cannot be exported or downloaded. The voice and image models are not general ones and are, therefore, incompatible with third-party services.

3.8 What Is the Relationship Between MetaStudio Voice/Image Models and Audio/Video Content?

Models generated in a voice/image modeling task are model assets. These assets are used in video production, livestreaming, and intelligent interaction to generate audio/video content. For details, see [Features](#).

- Voice modeling: uses a recorded human voice to generate a voice model
- Image modeling: shoots a human video to generate a virtual avatar model
- Video production: uses a preset or custom virtual avatar image and voice to generate audio/video content
- Livestreaming: uses a preset or custom virtual avatar image and voice for livestreaming
- Intelligent interaction: interactive Q&A between users and virtual avatars equipped with a third-party brain

4 Video Production

4.1 What If the Pixel of an Uploaded Image Is Too High?

The image pixel is not the file size. Changing the size of an image whose pixel is too high cannot solve the problem.

The width and height of an uploaded image must be within at least one of the following ranges:

- Width \leq 2,160; height \leq 3,840
- Width \leq 3,840; height \leq 2,160

4.2 Can I Overlay Animated Images on a Video Produced on MetaStudio?

Yes. You can overlay animated GIFs and static PNG/JPG/JPEG/BMP images on a video.

4.3 How Do I Convert a PowerPoint File to a PDF File?

On the [Video Production](#) page, you can import PowerPoint files as video materials from your local device. If some fonts, formulas, and charts of a PowerPoint file cannot be displayed on the MetaStudio console, you are advised to convert the PowerPoint file to a PDF file and then import it. MetaStudio supports only PDF files converted from PowerPoint files, not PDF files exported from Adobe.

To convert a PowerPoint file to a PDF file, perform the following steps:

Step 1 Open the PowerPoint file on the local PC and choose **File > Save as** in the navigation pane.

Select **PDF** as the file type.

Step 2 Click **Save** to generate a PDF file.

After the PDF file is generated, you can import it on the **Video Production** page.

----End

4.4 How Do I Present the Animation of a PowerPoint File on MetaStudio?

If a PowerPoint file is imported on the **Video Production** page, its dynamic elements such as animation, video, and GIF cannot be shown in the composited video. To present dynamic elements, export the PowerPoint file as a video and upload it to the MetaStudio console.

To convert a PowerPoint file to a video, perform the following steps:

Step 1 Open the PowerPoint file on the local PC and choose **File > Export** in the navigation pane.

Select **Create Video** to set parameters such as the duration of showing each slide.

Step 2 Click **Create Video**. In the dialog box displayed, select a local directory and set the video name.

Step 3 Click **Save** to generate a video file.

After the video file is generated, you need to import it in the **Videos** area on the **Video Production** page.

If the duration of showing each slide in the video does not match the duration of the corresponding audio, you need to divide the video into separated video clips by slide. Then upload the scene-based video clips one by one on the **Video Production** page. The added video can be played only once or cyclically until the script reading ends.

----End

4.5 What If a PowerPoint File Cannot Be Uploaded Due to a Parsing Failure?

Possible causes:

- The PowerPoint file is larger than 100 MB.
- The PowerPoint file contains too many media files, resulting in a high compression ratio.
- Some content of the PowerPoint file, such as animation, is too complex.

After troubleshooting, upload a qualified PowerPoint file.

4.6 Can I Edit an Uploaded PowerPoint File on MetaStudio?

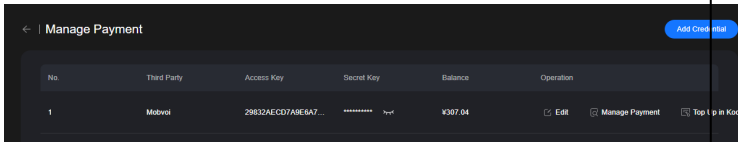
You cannot edit a PowerPoint file, such as zooming in or highlighting content, on the video production page. You need to edit the file locally before uploading it to the console.

4.7 What If Video Compositing Failed on MetaStudio?

If video compositing failed, you can locate and rectify the fault according to the messages in [Table 4-1](#):

Table 4-1 Fault locating and rectification

Error Cause	Handling Method
Invalid characters in the video name.	Delete the sensitive characters in the exported file name.
Duplicate asset name.	Change the exported file name.
The video task status remains To composite .	You need to wait because the video task may be waiting for processing.
Presentation material not found or not available.	<p>Check whether all materials selected in the video to be composited have been activated. If not, the possible causes are:</p> <ol style="list-style-type: none">1. Upload materials used in the video failed. You need to upload them again.2. The materials (PowerPoint files in most cases) in the video have been deleted. You can go to Assets > Recycle Bin to find and restore the materials.3. The materials in the video may contain sensitive content. On the Assets > Materials page, you can select the target asset type and select the Frozen tab to view frozen assets. To unfreeze the assets, submit a service ticket for manual review.

Error Cause	Handling Method
Insufficient voice package quota. Top up your account and try again.	<p>The third-party voice package quota has been used up. You need to purchase a DupDub voice package.</p> <p>To view the balance of a purchased package, perform the following steps:</p> <ol style="list-style-type: none">1. Log in to the MetaStudio console and go to the Overview page.2. Click Go to MetaStudio Console to go to the MetaStudio console.3. In the navigation pane, choose Assets > My Models.4. Click the Voices tab and click Manage Payment on the right of the page to go to the Manage Payment page, where you can view your account balance, as shown in Figure 4-1. <p>Figure 4-1 Viewing account balance</p> 

4.8 Can I Download a Composited Video from MetaStudio to a Local Device?

Yes. On the MetaStudio console, choose **Assets > My Creations > Video**

Production > My Videos, find the video to download, click  in the lower right corner of the video card, and select **Download** from the drop-down list.



4.9 Why Is the Virtual Avatar Lip Sync Affected After Editing the Composited Video?

You need to check the video frame rate of the editing software. The frame rate of the composited video is 25 FPS. If the frame rate of the software is 30 FPS, you need to perform frame interpolation on the video to make it become 30 FPS. However, frame interpolation will also affect the lip sync of the video. To avoid this, you need to set the frame rate of the composited video to an integer multiple of 25 FPS when editing the video.

4.10 How Do I Generate a Video Template on MetaStudio?

You can generate a video draft for compositing video by referring to [Video Production](#). Then, copy this video draft as a template to generate more video drafts, modify them, and then use the modified video clips for compositing.

Procedure:

- Step 1** Log in to the [MetaStudio console](#) and go to the **Overview** page.
 - Step 2** Click **Go to MetaStudio Console** to go to the MetaStudio console.
 - Step 3** In the navigation pane, choose **Assets > My Creations**.
 - Step 4** Click the **Video Production > Video Drafts** tab, find the video draft to be used as a template, click  in the lower right corner of the card, and select **Create Copy** from the drop-down list to copy the video draft.
 - Step 5** Click  in the lower right corner of the new video draft card and select **Edit Video** from the drop-down list.

On the **Video Production** page, you can modify the video content by referring to [Video Production](#), and then use the modified video clip for compositing.
 - Step 6** You can repeat the preceding steps to generate more video drafts for easier video production.
- End

5 Livestreaming

5.1 What If Livestream Script Saving Failed on MetaStudio?

If livestream script saving failed, you can locate and rectify the fault according to the messages in [Table 5-1](#):

Table 5-1 Fault locating and rectification

Error Cause	Handling Method
Invalid characters in the script name.	Delete the sensitive characters in the script name.
Sensitive words included.	Delete the sensitive words in the script.
Presentation material not found or not available.	<p>Check whether all materials selected in the livestream script have been activated. If not, the possible causes are:</p> <ol style="list-style-type: none">1. Upload materials used in the livestream script failed. You need to upload them again.2. The materials in the livestream script have been deleted. You can go to Assets > Recycle Bin to find and restore the materials.3. The materials in the livestream script may contain sensitive content. On the Assets > Materials page, you can select the target asset type and select the Frozen tab to view frozen assets. To unfreeze the assets, submit a service ticket for manual review.

5.2 What If a Template Is Unavailable on MetaStudio?

That depends on the situation:

- If a template you created is unavailable, check whether the assets in the template have been activated. If the assets have been deactivated or deleted, the template will be unavailable.
- If a template shared with me is unavailable, the possible cause is that the sharer cancels the template sharing or the assets in the template have been deactivated or deleted.

5.3 Which Firewall Restrictions Should I Remove for Virtual Avatar Livestreams?

The virtual avatar livestreaming service receives streams as SparkRTC does. The signaling and media access mode is *IP address + port number* or *domain name + port number*. The following firewall restrictions must be removed:

1. Access restrictions for all IP addresses.
2. Configure the SparkRTC port and domain name whitelists for the client firewall.
 - Configure the SparkRTC port whitelist for the firewall, as shown in [Table 5-2](#).

Table 5-2 Port whitelist for the firewall

Port Type	Port
TCP	443, 6447
UDP	20000–20063

- Configure the SparkRTC domain name whitelist for the firewall, as shown in [Table 5-3](#).

Table 5-3 Domain name whitelist for the firewall

No.	Domain Name
1	*.dbankcdn.com
2	*.dbankcdn.cn
3	*.dbankcloud.ru
4	*.dbankcloud.cn
5	*.dbankcloud.com
6	*.hicloud.cn
7	*.hicloud.com
8	*.dbankedge.cn

5.4 What If the Live Video on a Third-party Platform Is Not Clear?

If the live video on a third-party live platform is not clear, possible causes are:

1. The computer does not have a discrete graphics card.
2. **Base (Canvas) Resolution** and **Output (Scaled) Resolution** of Open Broadcaster Software (OBS) are not the same.

Checking the Discrete Graphics Card

The computer on which the third-party live platform is used must be installed with a discrete graphics card.

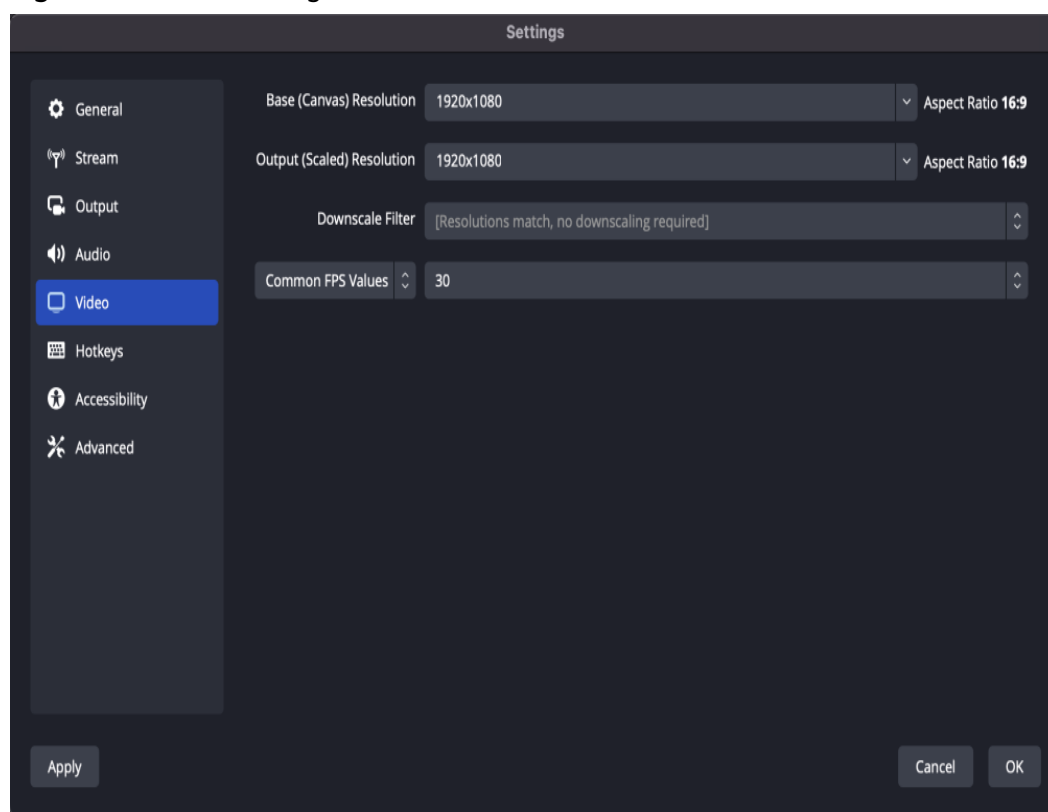
Checking the OBS Video Resolution

Base (Canvas) Resolution and **Output (Scaled) Resolution** of OBS must be the same.

Check method:

- Step 1** Open OBS on the local PC.
- Step 2** On the top navigation bar, choose **File > Settings**. The **Settings** dialog box is displayed.
- Step 3** In the navigation pane on the left, choose **Video** and check whether **Base (Canvas) Resolution** and **Output (Scaled) Resolution** are the same.

If they are different, change them to the same value.


Figure 5-1 Video settings

----End

5.5 What If the Livestream on a Third-party Platform Is Interrupted Unexpectedly?

The possible cause is the automatic logout from the MetaStudio console.

Check method:

- Step 1** After a livestream is started on the MetaStudio console, click  on the right of the URL and select the option of allowing pop-ups from the drop-down list box.
- Step 2** Click **OK**. Two new browser windows are displayed, as shown in [Figure 5-2](#) and [Figure 5-3](#).

If you do not perform any operation on the MetaStudio console for more than 10 minutes, automatic logout will be triggered, causing the live video on the third-party live platform to be interrupted. Keep the page in [Figure 5-3](#) open throughout the livestream to avoid unexpected interruptions.

Figure 5-2 Live video window

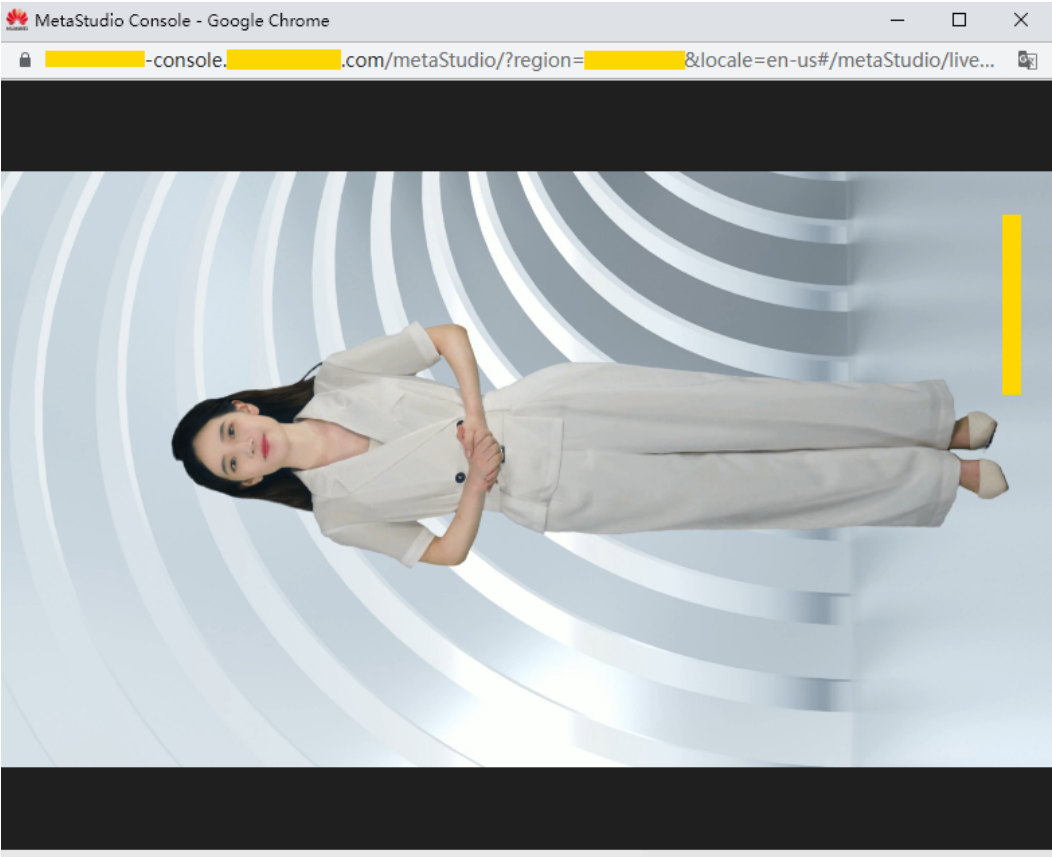
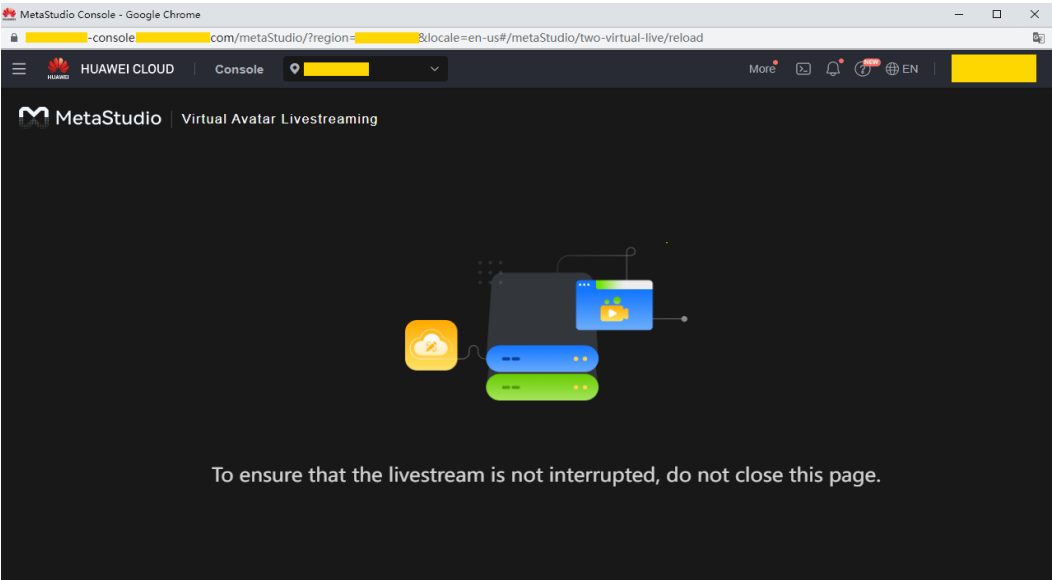


Figure 5-3 Page for ensuring an uninterrupted livestream



-----End

5.6 What If the Live Video on a Third-party Platform Is Muted?

If the live video on a third-party live platform is muted, check whether the OBS audio capture device is different from the Windows audio output device.

Check method:

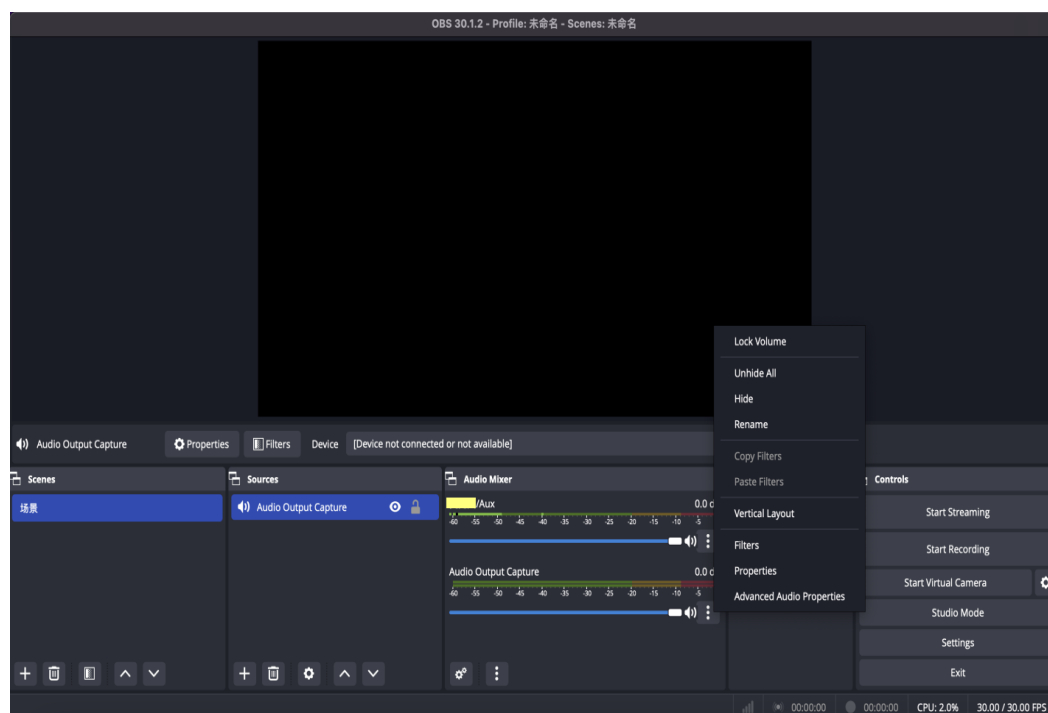
- [Checking the OBS Audio Capture Device](#)
- [Checking the Windows Audio Output Device](#)


Checking the OBS Audio Capture Device

Step 1 Open OBS on the local PC.

Step 2 In the lower part of the page, select **Audio Mixer**.

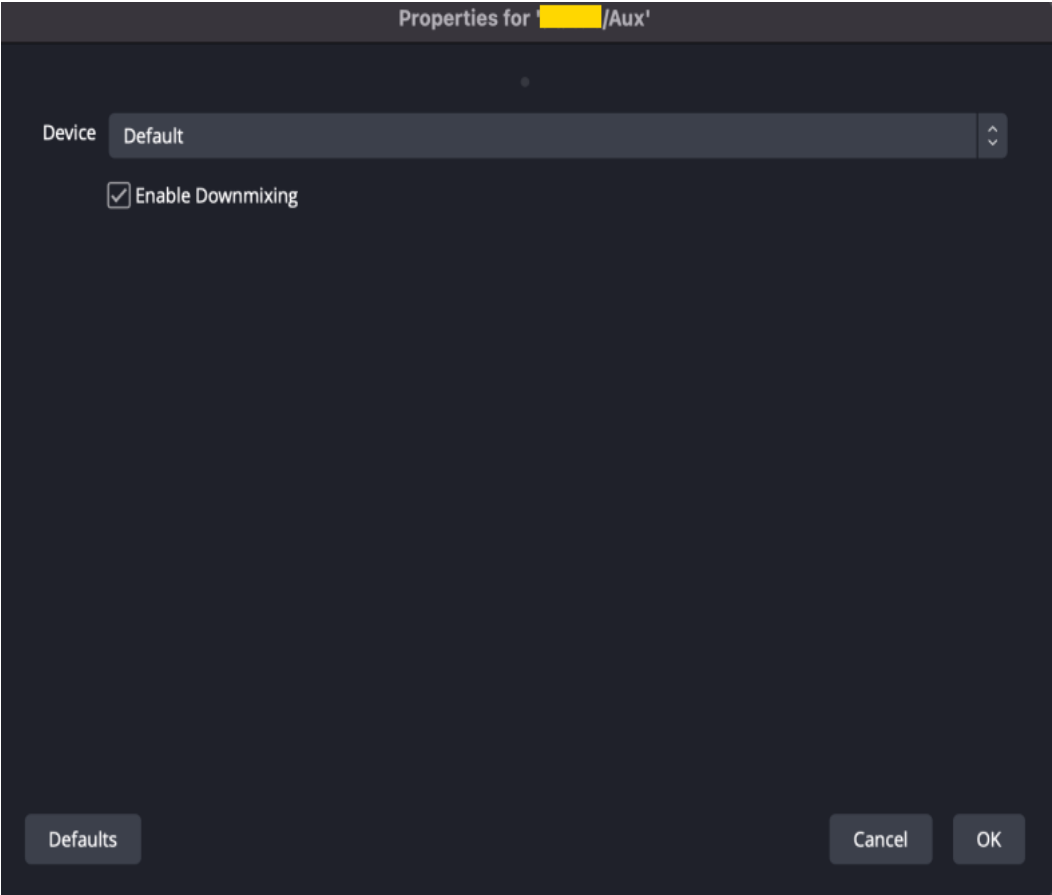
Figure 5-4 OBS



Step 3 Click  in the **Audio Output Capture** area and select **Properties** from the drop-down list box. The dialog box of property settings is displayed, as shown in [Figure 5-5](#).

Check whether the device is the same as the Windows audio output device. If not, OBS cannot capture and send sound to the third-party live platform. You need to change the values to be the same.

Figure 5-5 Audio property settings

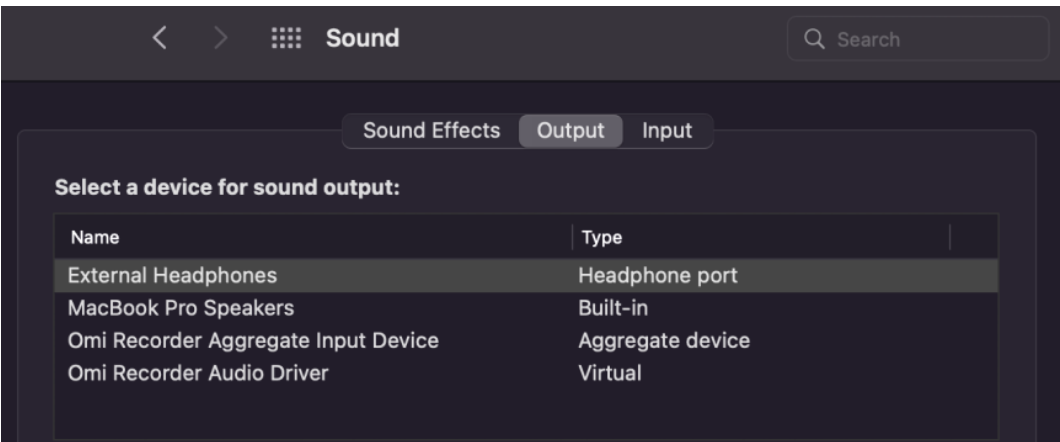


-----End

Checking the Windows Audio Output Device

In Windows system settings, find the sound settings and check the output device, as shown in [Figure 5-6](#).

Figure 5-6 Audio output device



6 Intelligent Interaction

6.1 Does MetaStudio Support Rich Media?

Supported Rich Media Formats

The Q&A with virtual avatars supports the following rich media formats:

- Image: JPG, PNG, BMP, GIF, and SVG
- Video: MP4

Importing Rich Media Files

Rich media files can be imported through the Q&A knowledge base. See the example in [Table 6-1](#).

If you use the default style of the SDK provided by MetaStudio, you need to [submit a service ticket](#) to add the domain name of the image or video link to the whitelist to comply with the content security policy (CSP) of the browser.

Table 6-1 Q&A knowledge base

No.	Question	Answer
1	How do I claim coupons?	<ul style="list-style-type: none">• Example image: <code></code>• Example video: <code><video src="https://test.example.com/AI-POC/3/QR code for claiming coupons.mp4" ></video></code>

Rich Media Display (Default Style of the SDK)

You can use the default style of the SDK for rich media display on the page for intelligent interaction with virtual avatars.

The field **enableCaption** in the following two methods of the **intelligent interaction client SDK** defaults to **False**, indicating customized rich media display. To use the default style of the SDK, change the value of **enableCaption** to **true**.

- Modify **config** of the parameter **param** in the method **create**. That is, change the value of **enableCaption** to **true**.

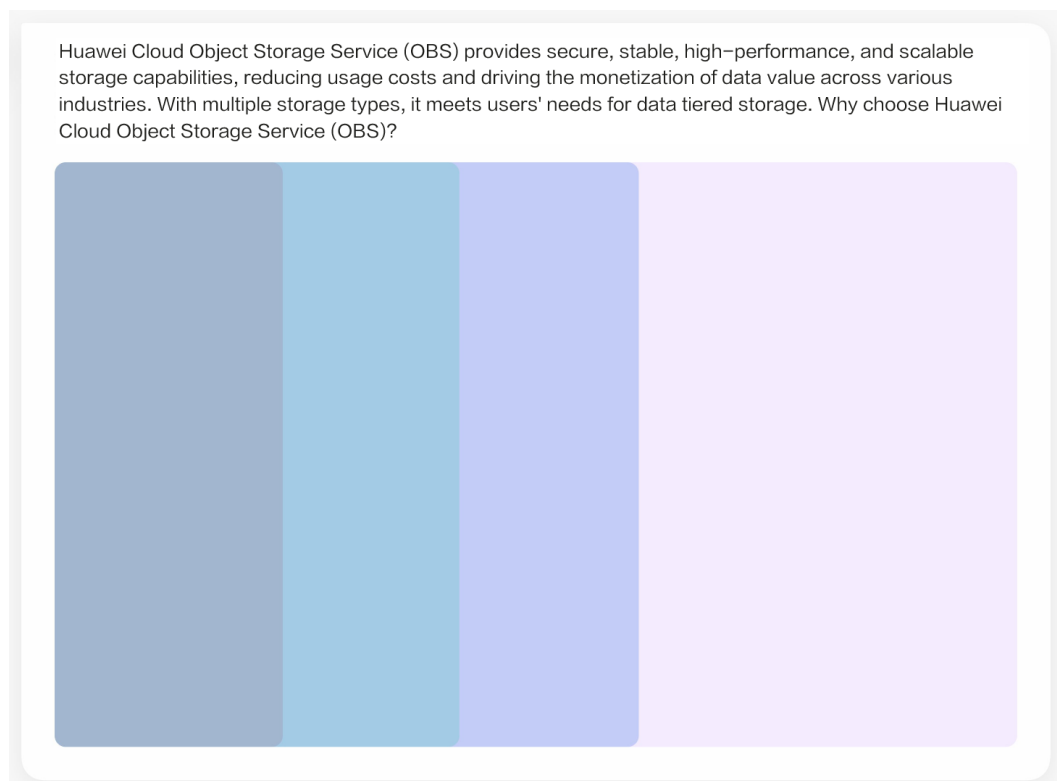
```
await HwICSUISdk.create({
  serverAddress: 'serverAddress',
  robotId: 'robotId',
  onceCode: 'onceCode',
  containerId: 'containerId',
  config: {
    enableCaption: true
  }
});
```

- Change the value of **enableCaption** in the method **setConfig** to **true**.

```
HwICSUISdk.setConfig({
  enableCaption: true
});
```

The following figure shows how the image imported in **Table 6-1** is displayed on the intelligent interaction page when the default style of the SDK is used.

Figure 6-1 Default style of the SDK



Rich Media Display (Custom)

By default, you need to customize rich media display on the page for intelligent interaction with virtual avatars.

You can obtain the answer text through the registration event notification **semanticRecognized**. Then you can extract image and video tags for custom display.

6.2 How Do I Cope with the Firewall Restrictions on Media Streams of Intelligent Interaction?

The virtual avatar intelligent interaction service receives streams as SparkRTC does. The signaling and media access mode is *IP address + port number* or *domain name + port number*. You need to configure the SparkRTC port and domain name whitelists for your firewall by referring to [Which Firewall Restrictions Should I Remove for Virtual Avatar Livestreams?](#)

6.3 What If MSS.20010135 Appears on the Intelligent Interaction Page of MetaStudio?

The error code **MSS.20010135** indicates that the number of concurrent users allowed in a dialog is too low. That is, there are too many users (entering via an activation code) in the dialog.

You can increase the number of concurrent users allowed in the dialog by performing the following steps:

- Step 1** Log in to the [MetaStudio console](#) and go to the **Overview** page.
- Step 2** Click **Go to MetaStudio Console** to go to the MetaStudio console.
- Step 3** In the navigation pane, choose **Assets > My Creations**.
- Step 4** Select **Intelligent Interaction > Dialog Projects** and find the interactive dialog project for which the concurrency needs to be changed.
- Step 5** Click **Edit** in the **Operation** column of the dialog.

Before modifying an interactive dialog, ensure that all users have exited the intelligent interaction page.
- Step 6** On the right of the page, select the **Publish** tab and change **Concurrency**.
- Step 7** Click **Publish** in the upper right corner of the page for the change to take effect.

----End

6.4 How Do I Switch the Language and Voice of Intelligent Interaction in Real Time on MetaStudio?

Interactive dialogs support both Chinese and English. You can switch between two languages on the intelligent interaction page in real time.

Procedure:


- Step 1** Log in to the [MetaStudio console](#) and go to the **Overview** page.
- Step 2** Click **Go to MetaStudio Console** to go to the MetaStudio console.
- Step 3** Click the **Intelligent Interaction** card. On the right of the interactive dialog page, select the **Dialogs** tab, as shown in [Figure 6-2](#).

For exhibition halls, you need to switch to CN North-Beijing4, where you can perform related configuration.

Configure the following parameters. For details about more parameters, see [Dialog Settings](#).

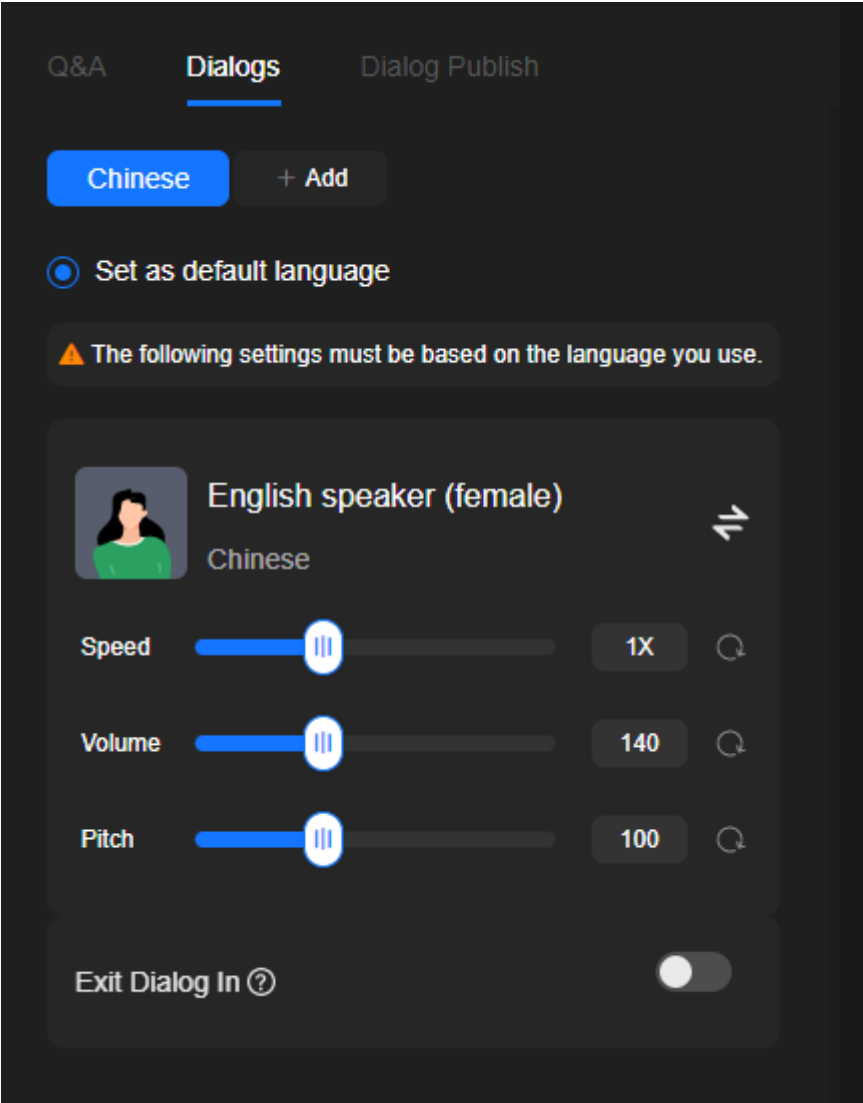
- **Language:** You can add both Chinese and English and set one of them as the default language.

On the GUI of virtual avatar intelligent interaction, the default language is automatically displayed and used by the virtual avatar to answer users' questions. You can click the icon of switching the language in the upper right corner of the page.

- **Voice:** Click  to the right of the voice to switch the voice.

The selected voice must match the selected language to avoid problematic spoken expressions by the virtual avatar.

Figure 6-2 Dialog settings



----End

7 Asset Management

7.1 How Do I Receive and Activate Voice Assets and Avatar Model Assets on MetaStudio?

If the administrator transfers voice or avatar model assets to a tenant, the tenant must receive and activate the assets within seven days. If not, the administrator needs to re-transfer the assets to the tenant.

The asset receiving and activation operations are the same for both voice and avatar model assets. This section uses avatar model asset receiving and activation as an example.

- Step 1** Log in to the [MetaStudio console](#) and go to the **Overview** page.
- Step 2** Click **Go to MetaStudio Console** to go to the MetaStudio console.
- Step 3** In the navigation pane, choose **Assets > Asset Maintenance**.
- Step 4** Select **Received Assets > All**, as shown in [Figure 7-1](#).



Figure 7-1 Received asset management

Received Assets									
Returned Assets									
Template Sharing									
All To Receive Rejected Received Failed									
No.	Task ID	Asset to Transfer	asset name	Asset Quantity	Transferred By	Transferred	Operated	Status	Operation
1	68219d86240329247214ba7e		CAFCq	1	6aa7ba3ed9543208a929c...	2025/05/12 15:04:38	/		View Receive Reject

- Step 5** Click **Receive** in the **Operation** column of the asset to receive.

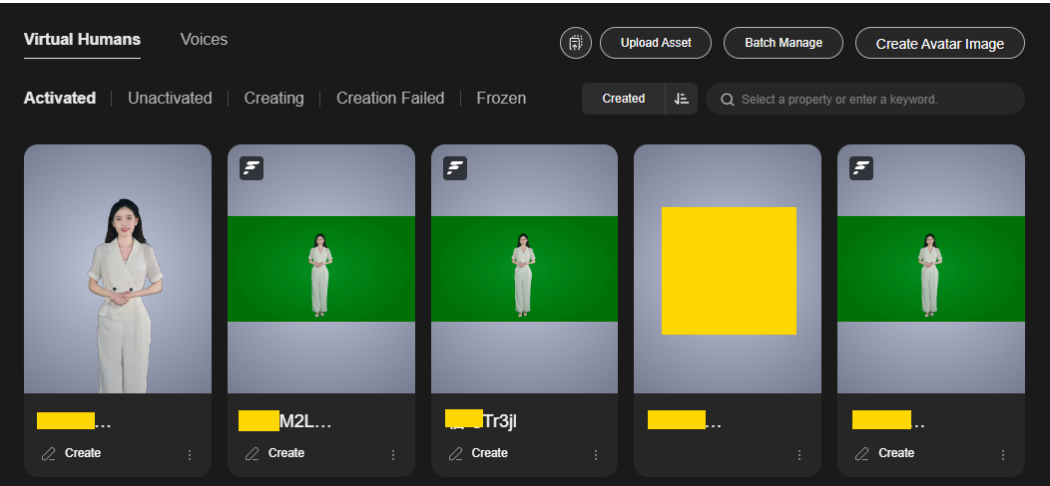
After the asset is received, the asset status changes from **To Receive** to **Received**, as shown in [Figure 7-2](#).

Figure 7-2 Received asset management

Received Assets									
Returned Assets Template Sharing									
All To Receive Rejected Received Failed									
No.	Task ID	Asset to Transfer	asset name	Asset Quantity	Transferred By	Transferred	Operated	Status	Operation
1	68219d86240329472149a7e		 cAFCq	1	6aa9a39d9643208a9628c...	2025/05/12 15:04:38	2025/05/12 15:21:19	Received	View Return

- Step 6** In the navigation pane, choose **Assets > My Models**.
- Step 7** Select **Virtual Humans > Unactivated** and click **Activate** in the desired received asset card. In the dialog box displayed, click **OK**.
- If the message **Asset activated.** appears, the asset has been activated. You can click the **Activated** tab to view activated avatar model assets.

Figure 7-3 Activating an asset



- Step 8** After the preceding operations are complete, the voice and avatar model assets of the account have taken effect. You can use the activated assets for video production or livestreaming.
- End

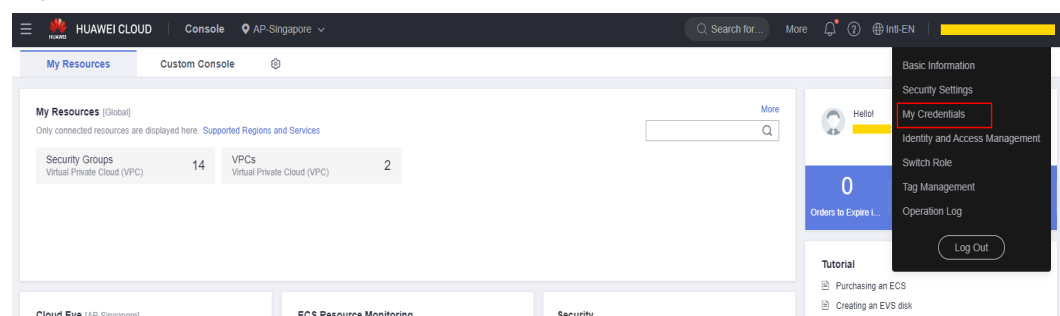
8 APIs and SDKs

8.1 How Do I Obtain the Project ID?

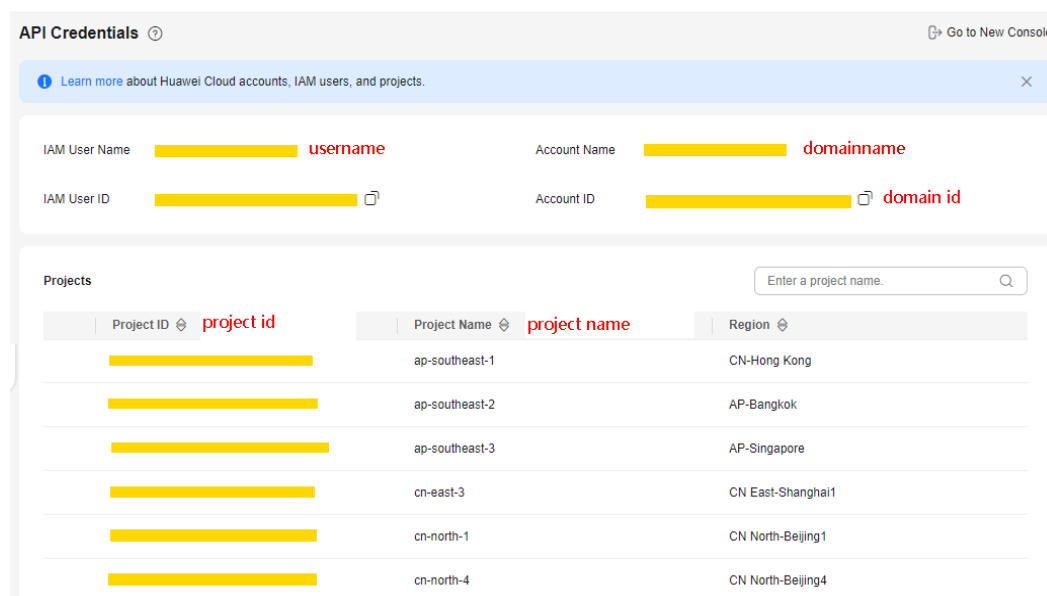
Step 1 Log in to the [console](#).

Step 2 Hover over the username in the upper right corner and select **My Credentials** from the drop-down list.

Figure 8-1 Console



Step 3 On the **API Credentials** page, view project IDs in the project list.

Figure 8-2 Obtaining a project ID

----End

8.2 Why Is the Message APIG.0301 Displayed When I Call an API?

Possible causes:

- **"error_msg": "Incorrect IAM authentication information: verify aksk signature fail", "error_code": "APIG.0301"** indicates a failed AK/SK authentication. Check whether the AK/SK pair is valid and whether the account is restricted due to arrears. For details, see [AK/SK Authentication](#).
- **"error_msg": "Incorrect IAM authentication information: decrypt token fail", "error_code": "APIG.0301"** indicates a failed token decryption. Check whether the token is complete or has expired, whether the region where the token is obtained is the region where the service is called, and whether the account is restricted due to arrears. For details, see [Token Authentication](#).

8.3 What If an Error Code Starting with APIGW Appears When I Call an API?

You can rectify the fault by referring to [Error Codes](#).

8.4 Where Can I Download the MetaStudio Intelligent Interaction SDK?

For the download address, see [SDK Installation Package Download](#).

8.5 Why Is the Inserted Video Thumbnail Missing in the Preview Image of the Video Composited Using the API?

This is because the parameter **image_config** of the API for [creating a virtual avatar video production task](#) is not configured. Specifically:

When the API for [creating a virtual avatar video production task](#) is called to insert video materials, **layer_type** is set to **VIDEO** (video material layer) and **video_config** should be specified. You also need to specify **image_config**, which is used to upload an image as the inserted video thumbnail. In this way, the inserted video thumbnail can be viewed in the preview image of the composited video.

8.6 Why Can't I See Videos and Images Uploaded Through APIs During Video Production?

The possible cause is that the attribute **system_properties** is not set during asset upload:

- If the asset type is **IMAGE**, **system_properties** is used to classify background images (**BACKGROUND_IMG**) and material images (**MATERIAL_IMG**).
- If the asset type is **VIDEO**, **system_properties** is used to classify video overlays (**MATERIAL_VIDEO**) and business card videos (**BUSSINESS_CARD_VIDEO**).

For details, see the API for [Creating an Asset](#).

8.7 What If a Script Malfunctions After I Created or Updated It Using an API?

You can edit a script on the console or by calling an API. The restrictions on both methods are as follows:

- The script thumbnail is only for reference when you edit a script on the console. It does not represent the final visual effect.
- The parameters of the API may be logically related. A script created using the API may malfunction due to incorrect or inaccurate parameter input. You need to check the input parameters by referring to the API document.
- You can edit a script on the console or by calling an API. However, you are not advised to use both methods at the same time.

A script created using incorrect API parameter input may cause exceptions on the console. You need to edit the script on the console or by inputting API parameters correctly.

Possible causes of console exceptions after API calling:

- Fields that do not exist in the API document are used.

- Parameters required for rendering are missing.
- Invalid parameter value. For example, the value type is invalid or the value exceeds the range.
- Incorrect scene sequence. For example, the value of **sequence_no** in **shoot_scripts** must start from 0 and increase in ascending order.
- Incorrect overlay sequence. For example, the value of **layer_index** in **layer_config** must start from 1 and increase in ascending order.
- The position and size of an overlay do not meet the actual requirements. For example, a text overlay is too large and exceeds the preview area.
- The asset does not exist or the asset type is incorrect.