

MetaStudio

API Reference

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1 Before You Start

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.

This document describes how to use application programming interfaces (APIs) to perform operations on Huawei Cloud MetaStudio, such as image modeling, voice modeling, and video production. For details about all supported operations, see [API Overview](#).

Before calling APIs of Huawei Cloud MetaStudio, ensure that you are familiar with MetaStudio. For details, see [Service Overview](#).

MetaStudio supports Representational State Transfer (REST) APIs, allowing you to call APIs using HTTPS. For details, see [Calling APIs](#).

Endpoints

An endpoint is the request address for calling an API. Endpoints vary depending on regions and services. For the endpoints of MetaStudio, see [Table 1-1](#). You can also query the endpoints of MetaStudio from [Regions and Endpoints](#).

Table 1-1 MetaStudio endpoints

Region Name	Region	Endpoint
AP-Singapore	ap-southeast-3	metastudio.ap-southeast-3.myhuaweicloud.com

Constraints on APIs

See [Table 1-2](#).

Table 1-2 Constraints on APIs

Item	Constraint
Timbre	Before selecting a timbre by calling livestreaming or intelligent interaction APIs, check whether the timbre is available on the live room editing or dialog setting page of the MetaStudio console. The API calling will be successful only when the timbre is available on the page.
Intelligent interaction	The following three intelligent interaction API groups apply only to iFLYTEK AIUI and iFLYTEK Spark Cognitive Model: • Virtual Avatar Knowledge Base Skill Management • Virtual Avatar Knowledge Base Intent Management • Virtual Avatar Knowledge Base Question Management

API Request Throttling

MetaStudio sets a limit on the number of API calls to prevent service interruption caused by repeated API calls in a short period of time.

NOTICE

If the error message **APIGW.0308** is returned when an API is called, the API request throttling is triggered. You need to adjust the API calling interval by referring to the following table. Alternatively, wait for a period of time and then send API requests.

For details about error codes starting with **APIGW**, see [Error Codes](#).

Table 1-3 API request throttling

API Category	API	Single Tenant (CN North-Beijing4)	Single Tenant (CN East-Shanghai1)	Single Tenant (AP-Singapore)
Digital Asset Management	Creating an Asset	10 times per second	5 times per second	5 times per second
	Querying Assets	20 times per second	10 times per second	10 times per second
	Updating an Asset	10 times per second	5 times per second	5 times per second
	Deleting an Asset	10 times per second	5 times per second	5 times per second
	Querying Asset Details	20 times per second	10 times per second	10 times per second

API Category	API	Single Tenant (CN North-Beijing4)	Single Tenant (CN East-Shanghai1)	Single Tenant (AP-Singapore)
	Restoring a Deleted Asset	10 times per second	5 times per second	5 times per second
	Batch Asset Operations	Once per second	Once per second	Once per second
	Querying Asset Summary	20 times per second	10 times per second	10 times per second
	Querying Asset Copy Information	20 times per second	10 times per second	10 times per second
	Copying an Asset	4 times per second	3 times per second	3 times per second
File Management	Creating a File and Obtaining the URL for File Upload	10 times per second	5 times per second	5 times per second
	Deleting a File	10 times per second	5 times per second	5 times per second
	Confirming the Upload of a File	10 times per second	5 times per second	5 times per second
	Creating a Large File	10 times per second	5 times per second	5 times per second
Video Script Management	Creating a Video Script	10 times per second	5 times per second	5 times per second
	Querying Video Scripts	20 times per second	10 times per second	10 times per second
	Querying Video Script Details	20 times per second	10 times per second	10 times per second
	Updating a Video Script	10 times per second	5 times per second	5 times per second
	Deleting a Video Script	10 times per second	5 times per second	5 times per second
	Copying a Video Script	10 times per second	5 times per second	5 times per second
Video Production Management	Querying Video Production Tasks	20 times per second	10 times per second	10 times per second

API Category	API	Single Tenant (CN North-Beijing4)	Single Tenant (CN East-Shanghai1)	Single Tenant (AP-Singapore)
Virtual Avatar Video Production Management	Creating a Virtual Avatar Video Production Task	5 times per second	3 times per second	3 times per second
	Querying Virtual Avatar Video Production Task Details	20 times per second	10 times per second	10 times per second
	Canceling a Virtual Avatar Video Production Task in the Waiting Status	5 times per second	3 times per second	3 times per second
Intelligent Live Room Management	Creating an Intelligent Live Room	5 times per second	3 times per second	3 times per second
	Querying Intelligent Live Rooms	20 times per second	10 times per second	10 times per second
	Querying Intelligent Livestreaming Script Details	20 times per second	10 times per second	10 times per second
	Updating Intelligent Live Room Information	5 times per second	3 times per second	3 times per second
	Deleting an Intelligent Live Room	4 times per second	3 times per second	3 times per second
	Creating an Interaction Rule Library for Live Rooms	4 times per second	3 times per second	3 times per second
	Querying Interaction Rule Libraries for Live Rooms	20 times per second	10 times per second	10 times per second
	Updating an Interaction Rule Library for Live Rooms	4 times per second	3 times per second	3 times per second

API Category	API	Single Tenant (CN North-Beijing4)	Single Tenant (CN East-Shanghai1)	Single Tenant (AP-Singapore)
	Deleting an Interaction Rule Library for Live Rooms	4 times per second	3 times per second	3 times per second
Livestreaming Task Management	Starting a Virtual Avatar Intelligent Livestreaming Task	4 times per second	3 times per second	3 times per second
	Querying Livestreaming Tasks of a Live Room	20 times per second	10 times per second	10 times per second
	Querying Virtual Avatar Intelligent Livestreaming Task Details	20 times per second	10 times per second	10 times per second
	Ending a Virtual Avatar Intelligent Livestreaming Task	4 times per second	3 times per second	3 times per second
	Controlling Virtual Avatar Intelligent Livestreaming	4 times per second	3 times per second	3 times per second
	Querying All Virtual Avatar Livestreaming Tasks of a Tenant	10 times per second	5 times per second	5 times per second
	Reporting Livestreaming Events	4 times per second	3 times per second	3 times per second
Live Product Management	Creating a Product	4 times per second	3 times per second	3 times per second
	Querying Products	20 times per second	10 times per second	10 times per second
	Updating a Product	4 times per second	3 times per second	3 times per second
	Querying Product Details	20 times per second	10 times per second	10 times per second
	Deleting a Product	4 times per second	3 times per second	3 times per second

API Category	API	Single Tenant (CN North-Beijing4)	Single Tenant (CN East-Shanghai1)	Single Tenant (AP-Singapore)
	Configuring a Product Asset Portfolio	4 times per second	3 times per second	3 times per second
Image Modeling Task Management	Creating a Virtual Avatar Model Training Task	10 times per second	3 times per second	3 times per second
	Querying Virtual Avatar Model Training Tasks	20 times per second	10 times per second	10 times per second
	Querying Virtual Avatar Model Training Task Details	20 times per second	10 times per second	10 times per second
	Deleting a Virtual Avatar Model Training Task	10 times per second	3 times per second	3 times per second
	Updating a Virtual Avatar Model Training Task	10 times per second	3 times per second	3 times per second
	Executing a Virtual Avatar Model Training Task as a Tenant	10 times per second	3 times per second	3 times per second
Voice Modeling Task Management	Querying Personalized Audio Duration	20 times per second	10 times per second	10 times per second
	Creating a Voice Training Task (Basic Edition)	10 times per second	3 times per second	3 times per second
	Creating a Voice Training Task (Advanced Edition)	10 times per second	3 times per second	3 times per second
	Creating a Voice Training Task (Premium Edition)	10 times per second	3 times per second	3 times per second
	Querying Voice Training Tasks	20 times per second	10 times per second	10 times per second
	Submitting a Voice Training Task	10 times per second	3 times per second	3 times per second

API Category	API	Single Tenant (CN North-Beijing4)	Single Tenant (CN East-Shanghai1)	Single Tenant (AP-Singapore)
	Querying Voice Training Task Details	20 times per second	10 times per second	10 times per second
	Deleting a Voice Training Task	10 times per second	3 times per second	3 times per second
	Querying Task Operation Logs	20 times per second	10 times per second	10 times per second
	Obtaining the URL for Uploading a Voice File	20 times per second	10 times per second	10 times per second
	Obtaining the Review Result of a Voice Training Task	20 times per second	10 times per second	10 times per second
	Setting the Task Batch	10 times per second	3 times per second	3 times per second
	Confirming the Online Recording Result	10 times per second	3 times per second	3 times per second
	Obtaining the Confirmed Online Recording Result	20 times per second	10 times per second	10 times per second
TTS Management	Creating a TTS Preview Task	5 times per second	3 times per second	3 times per second
	Obtaining a TTS Preview File	20 times per second	10 times per second	10 times per second

Concepts

- Account

A domain is created upon successful registration. The domain has full access permissions for all of its cloud services and resources. It can be used to reset user passwords and grant user permissions. The account is a payment entity and should not be used to perform routine management. For security purposes, create IAM users and grant them permissions for routine management.

- IAM user

An IAM user is created using an account to use cloud services. Each IAM user has its own identity credentials (password and access keys).

An IAM user can view the account ID and user ID on the My Credentials page of the console. The domain name, username, and password will be required for API authentication.

- Region

A region is a physical location where cloud resources are deployed. Availability zones (AZs) in the same region can communicate with each other over an intranet but AZs in different regions cannot communicate with each other. For low network latency and quick resource access, select the nearest region. The choice of regions may also be subject to legal compliance requirements.

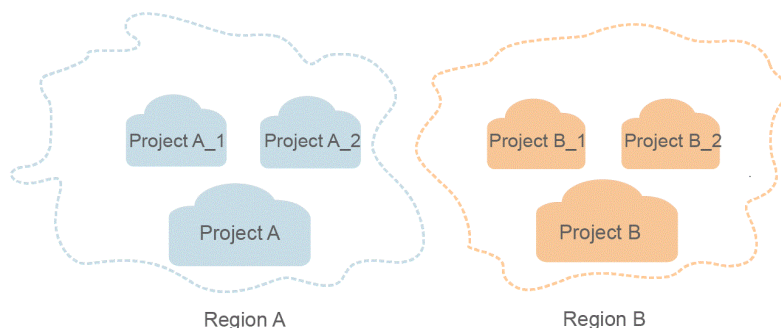
- AZ

An AZ is one or more physical data centers within a region. It has independent cooling, fire extinguishing, moisture-proof, and electricity facilities. Within an AZ, compute, networking, storage, and other resources are logically divided into multiple clusters. AZs within a region are connected using high-speed optical fibers for high availability.

- Project

Projects group and isolate resources (including compute, storage, and network resources) across physical regions. A default project is provided for each region, and subprojects can be created under each default project. Users can be granted permissions to access all resources in a specific project. For more refined access control, create subprojects under a project and purchase resources in the subprojects. Users can then be assigned permissions to access only specific resources in the subprojects.

Figure 1-1 Project isolating model



2 API Overview

The following tables list the Huawei Cloud MetaStudio APIs. Before calling a MetaStudio API, you need to obtain a user token. The obtained token can then be used to authenticate the calling of other APIs.

Digital Asset Management

Table 2-1 Digital asset management APIs

API	Description
POST /v1/{project_id}/digital-assets	Creating an Asset
GET /v1/{project_id}/digital-assets	Querying Assets
PUT /v1/{project_id}/digital-assets/{asset_id}	Updating an Asset
DELETE /v1/{project_id}/digital-assets/{asset_id}	Deleting an Asset
GET /v1/{project_id}/digital-assets/{asset_id}	Querying Asset Details
POST /v1/{project_id}/digital-assets/{asset_id}/restore	Restoring a Deleted Asset
POST /v1/{project_id}/digital-assets/batch-action	Batch Asset Operations
POST /v1/{project_id}/digital-assets/summarys	Querying Asset Summary
GET /v1/{project_id}/digital-assets/{asset_id}/replication-info	Querying Asset Copy Information
POST /v1/{project_id}/digital-assets-by-replication-info	Copying an Asset

File Management

Table 2-2 File management APIs

API	Description
DELETE /v1/{project_id}/files/{file_id}	Deleting a File
POST /v1/{project_id}/files	Creating a File and Obtaining the URL for File Upload
POST /v1/{project_id}/files/{file_id}/complete	Confirming the Upload of a File
POST /v1/{project_id}/large-files	Creating a Large File

Video Script Management

Table 2-3 Video script management APIs

API	Description
POST /v1/{project_id}/digital-human-video-scripts	Creating a Video Script
GET /v1/{project_id}/digital-human-video-scripts	Querying Video Scripts
GET /v1/{project_id}/digital-human-video-scripts/{script_id}	Querying Video Script Details
PUT /v1/{project_id}/digital-human-video-scripts/{script_id}	Updating a Video Script
DELETE /v1/{project_id}/digital-human-video-scripts/{script_id}	Deleting a Video Script
POST /v1/{project_id}/digital-human-video-scripts/{script_id}/copy	Copying a Video Script

Video Production Management

Table 2-4 Video production management APIs

API	Description
GET /v1/{project_id}/digital-human-videos	Querying Video Production Tasks

Virtual Avatar Video Production Management

Table 2-5 Virtual avatar video production management APIs

API	Description
POST /v1/{project_id}/2d-digital-human-videos	Creating a Virtual Avatar Video Production Task
GET /v1/{project_id}/2d-digital-human-videos/{job_id}	Querying Virtual Avatar Video Production Task Details
POST /v1/{project_id}/2d-digital-human-videos/{job_id}/cancel	Canceling a Virtual Avatar Video Production Task in the Waiting Status

Intelligent Live Room Management

Table 2-6 Intelligent live room management APIs

API	Description
POST /v1/{project_id}/smart-live-rooms	Creating an Intelligent Live Room
GET /v1/{project_id}/smart-live-rooms	Querying Intelligent Live Rooms
GET /v1/{project_id}/smart-live-rooms/{room_id}	Querying Intelligent Livestreaming Script Details
PUT /v1/{project_id}/smart-live-rooms/{room_id}	Updating Intelligent Live Room Information
DELETE /v1/{project_id}/smart-live-rooms/{room_id}	Deleting an Intelligent Live Room
POST /v1/{project_id}/smart-live-interaction-rule-groups	Creating an Interaction Rule Library for Live Rooms
GET /v1/{project_id}/smart-live-interaction-rule-groups	Querying Interaction Rule Libraries for Live Rooms
PUT /v1/{project_id}/smart-live-interaction-rule-groups/{group_id}	Updating an Interaction Rule Library for Live Rooms
DELETE /v1/{project_id}/smart-live-interaction-rule-groups/{group_id}	Deleting an Interaction Rule Library for Live Rooms

Livestreaming Task Management

Table 2-7 Livestreaming task management APIs

API	Description
POST /v1/{project_id}/smart-live-rooms/{room_id}/smart-live-jobs	Starting a Virtual Avatar Intelligent Livestreaming Task
GET /v1/{project_id}/smart-live-rooms/{room_id}/smart-live-jobs	Querying Livestreaming Tasks of a Live Room
GET /v1/{project_id}/smart-live-rooms/{room_id}/smart-live-jobs/{job_id}	Querying Virtual Avatar Intelligent Livestreaming Task Details
POST /v1/{project_id}/smart-live-rooms/{room_id}/smart-live-jobs/{job_id}/stop	Ending a Virtual Avatar Intelligent Livestreaming Task
POST /v1/{project_id}/smart-live-rooms/{room_id}/smart-live-jobs/{job_id}/command	Controlling Virtual Avatar Intelligent Livestreaming
GET /v1/{project_id}/smart-live-jobs	Querying All Virtual Avatar Livestreaming Tasks of a Tenant
POST /v1/{project_id}/smart-live-rooms/{room_id}/smart-live-jobs/{job_id}/live-event-report	Reporting Livestreaming Events

Live Product Management

Table 2-8 Live product management APIs

API	Description
POST /v1/{project_id}/products	Creating a Product
GET /v1/{project_id}/products	Querying Products
PUT /v1/{project_id}/products/{product_id}	Updating a Product
GET /v1/{project_id}/products/{product_id}	Querying Product Details
DELETE /v1/{project_id}/products/{product_id}	Deleting a Product
POST /v1/{project_id}/products/{product_id}/assets	Configuring a Product Asset Portfolio

Image Modeling Management

Table 2-9 Image modeling management APIs

API	Description
POST /v1/{project_id}/digital-human-training-manage/user/jobs	Creating a Virtual Avatar Model Training Task
GET /v1/{project_id}/digital-human-training-manage/user/jobs	Querying Virtual Avatar Model Training Tasks
GET /v1/{project_id}/digital-human-training-manage/user/jobs/{job_id}	Querying Virtual Avatar Model Training Task Details
DELETE /v1/{project_id}/digital-human-training-manage/user/jobs/{job_id}	Deleting a Virtual Avatar Model Training Task
PUT /v1/{project_id}/digital-human-training-manage/user/jobs/{job_id}	Updating a Virtual Avatar Model Training Task
POST /v1/{project_id}/digital-human-training-manage/user/jobs/{job_id}/command	Executing a Virtual Avatar Model Training Task as a Tenant

Voice Modeling Task Management

Table 2-10 Voice modeling task management APIs

API	Description
POST /v1/{project_id}/voice-training-manage/user/basic-jobs	Creating a Voice Training Task (Basic Edition)
POST /v1/{project_id}/voice-training-manage/user/middle-jobs	Creating a Voice Training Task (Advanced Edition)
POST /v1/{project_id}/voice-training-manage/user/advance-jobs	Creating a Voice Training Task (Premium Edition)
GET /v1/{project_id}/voice-training-manage/user/jobs	Querying Voice Training Tasks
POST /v1/{project_id}/voice-training-manage/user/jobs/{job_id}	Submitting a Voice Training Task
GET /v1/{project_id}/voice-training-manage/user/jobs/{job_id}	Querying Voice Training Task Details
DELETE /v1/{project_id}/voice-training-manage/user/jobs/{job_id}	Deleting a Voice Training Task
GET /v1/{project_id}/voice-training-manage/user/jobs/{job_id}/op-logs	Querying Task Operation Logs

API	Description
GET /v1/{project_id}/voice-training-manage/user/jobs/{job_id}/uploading-address-url	Obtaining the URL for Uploading a Voice File
GET /v1/{project_id}/voice-training-manage/user/jobs/{job_id}/audit-result	Obtaining the Review Result of a Voice Training Task
POST /v1/{project_id}/voice-training-manage/user/training-segment	Confirming the Online Recording Result
GET /v1/{project_id}/voice-training-manage/user/training-segment	Obtaining the Confirmed Online Recording Result

TTS Management

Table 2-11 TTS management APIs

API	Description
POST /v1/{project_id}/ttsc/audition	Creating a TTS Preview Task
GET /v1/{project_id}/ttsc/audition-file/{job_id}	Obtaining a TTS Preview File

3 Calling APIs

3.1 Making an API Request

This section describes the structure of a REST API request, and uses the IAM API for [creating an IAM user](#) as an example to demonstrate how to call an API.

Request URI

A request URI is in the following format:

{URI-scheme}://{Endpoint}/{resource-path}?{query-string}

Although a request URI is included in the request header, most programming languages or frameworks require the request URI to be transmitted separately.

Table 3-1 URI parameter description

Parameter	Description
URI-scheme	Protocol used to transmit requests. All APIs use HTTPS.
Endpoint	Domain name or IP address of the server bearing the REST service. The endpoint varies between services in different regions. It can be obtained from Regions and Endpoints . For example, the endpoint of IAM in region CN-Hong Kong is iam.ap-southeast-1.myhuaweicloud.com .
resource-path	Access path of an API for performing a specified operation. Obtain the path from the URI of an API. For example, the resource-path of the API used to obtain a user token is /v3/auth/tokens .
query-string	Query parameter, which is optional. Ensure that a question mark (?) is included before each query parameter that is in the format of <i>Parameter name=Parameter value</i> . For example, ?limit=10 indicates that a maximum of 10 data records will be displayed.

IAM is a global service. You can create an IAM user using the endpoint of IAM in any region. For example, to create an IAM user in the **CN-Hong Kong** region, obtain the endpoint of IAM (**iam.ap-southeast-1.myhuaweicloud.com**) for this region and the **resource-path** (**/v3.0/OS-USER/users**) in the URI of the API for **creating an IAM user**. Then construct the URI as follows:

```
https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
```

Figure 3-1 Example URI



NOTE

To simplify the URI display in this document, each API is provided only with a **resource-path** and a request method. The **URI-scheme** of all APIs is **HTTPS**, and the endpoints of all APIs in the same region are identical.

Request Methods

The HTTP protocol defines the following request methods that can be used to send a request to the server.

Table 3-2 HTTP methods

Method	Description
GET	Requests the server to return specified resources.
PUT	Requests the server to update specified resources.
POST	Requests the server to add resources or perform special operations.
DELETE	Requests the server to delete specified resources, for example, an object.
HEAD	Same as GET except that the server must return only the response header.
PATCH	Requests the server to update partial content of a specified resource. If the resource does not exist, a new resource will be created.

For example, in the case of the API for **creating an IAM user**, the request method is **POST**. An example request is as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
```

Request Header

You can also add additional header fields to a request, such as the fields required by a specified URI or HTTP method. For example, to request for the authentication information, add **Content-Type**, which specifies the request body type.

Common request header fields are as follows.

Table 3-3 Common request header fields

Parameter	Description	Mandatory	Example Value
Host	Specifies the server domain name and port number of the resources being requested. The value can be obtained from the URL of the service API. The value is in the format of <i>Hostname:Port number</i> . If the port number is not specified, the default port is used. The default port number for https is 443 .	No This field is mandatory for AK/SK authentication.	code.test.com or code.test.com:443
Content-Type	Specifies the type (or format) of the message body. The default value application/json is recommended. Other values of this field will be provided for specific APIs if any.	Yes	application/json
Content-Length	Specifies the length of the request body. The unit is byte.	No	3495
X-Project-Id	Specifies the project ID. Obtain the project ID by following the instructions in Obtaining a Project ID .	No This field is mandatory for requests that use AK/SK authentication in the Dedicated Cloud (DeC) scenario or multi-project scenario.	e9993fc787d94b6c886cbaa340f9c0f4

Parameter	Description	Mandatory	Example Value
X-Auth-Token	Specifies the user token. It is a response to the API for obtaining a user token (This is the only API that does not require authentication). After the request is processed, the value of X-Subject-Token in the response header is the token value.	No This field is mandatory for token authentication.	The following is part of an example token: MIIPAgYJKoZlhvc NAQcCo...ggg1B BIINPXsidG9rZ

 NOTE

In addition to supporting authentication using tokens, APIs support authentication using AK/SK, which uses SDKs to sign a request. During the signature, the **Authorization** (signature authentication) and **X-Sdk-Date** (time when a request is sent) headers are automatically added in the request.

For more details, see "Authentication Using AK/SK" in [Authentication](#).

The following shows an example request of the API for **creating an IAM user** when AK/SK authentication is used:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
Content-Type: application/json
X-Sdk-Date: 20240416T095341Z
Authorization: SDK-HMAC-SHA256 Access=*****, SignedHeaders=content-type;host;x-sdk-date,
Signature=*****
```

(Optional) Request Body

This part is optional. A request body is generally sent in a structured format (for example, JSON or XML), which is specified by **Content-Type** in the request header. It is used to transfer content other than the request header. If the request body contains full-width characters, these characters must be coded in UTF-8.

The request body varies depending on APIs. Certain APIs do not require the request body, such as the APIs requested using the GET and DELETE methods.

The following shows an example request (a request body included) of the API for **creating an IAM user**. You can learn about request parameters and related description from this example. The bold parameters need to be replaced for a real request.

- **accountid**: account ID of an IAM user
- **username**: name of an IAM user
- **email**: email of an IAM user
- **password**: login password of an IAM user

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
Content-Type: application/json
X-Sdk-Date: 20240416T095341Z
```

```
Authorization: SDK-HMAC-SHA256 Access=*****, SignedHeaders=content-type;host;x-sdk-date,  
Signature=*****
```

```
{  
  "user": {  
    "domain_id": "accountid",  
    "name": "username",  
    "password": "*****",  
    "email": "email",  
    "description": "IAM User Description"  
  }  
}
```

If all data required for the API request is available, you can send the request to call the API through [curl](#), [Postman](#), or coding.

3.2 Authentication

Requests for calling an API can be authenticated using either of the following methods:

- AK/SK authentication: Requests are encrypted using AK/SK pairs. AK/SK authentication is recommended because it is more secure than token authentication.
- Token authentication: Requests are authenticated using tokens.

AK/SK Authentication

NOTE

- AK/SK authentication supports API requests with a body not larger than 12 MB. For API requests with a larger body, token authentication is recommended.
- The AK/SK can either be permanent or temporary. If it is temporary, the **X-Security-Token** field must be included in the request header. The value is the security token of the temporary AK/SK.

In AK/SK authentication, AK/SK is used to sign requests and the signature is then added to the requests for authentication.

- AK: access key ID, which is a unique identifier used in conjunction with a secret access key to sign requests cryptographically.
- SK: secret access key, which is used in conjunction with an AK to sign requests cryptographically. It identifies a request sender and prevents the request from being modified.

In AK/SK authentication, you can use an AK/SK to sign requests based on the signature algorithm or using the signing SDK. For details about how to sign requests and use the signing SDK, see [API Request Signing Guide](#).

NOTE

The signing SDK is only used for signing requests and is different from the SDKs provided by services.

Token Authentication

NOTE

The validity period of a token is 24 hours. When using a token for authentication, cache it to prevent frequently calling the IAM API used to obtain a user token.

A token specifies temporary permissions in a computer system. During API authentication using a token, the token is added to requests to get permissions for calling the API. You can obtain a token by calling the [Obtaining a User Token](#) API.

IMS is a project-level service. When you call the API, set **auth.scope** in the request body to **project**.

```
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username", // IAM user name
          "password": $ADMIN_PASS, //IAM user password. You are advised to store it in ciphertext in
the configuration file or an environment variable and decrypt it when needed to ensure security.
          "domain": {
            "name": "domainname" // Name of the account that the IAM user belongs to
          }
        }
      }
    },
    "scope": {
      "project": {
        "name": "xxxxxxx" // Project name
      }
    }
  }
}
```

After a token is obtained, the **X-Auth-Token** header field must be added to requests to specify the token when calling other APIs. For example, if the token is **ABCDEFGH....**, **X-Auth-Token: ABCDEFGH....** can be added to a request as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
Content-Type: application/json
X-Auth-Token: ABCDEFGH....
```

3.3 Response

Status Code

After sending a request, you will receive a response, including a status code, response header, and response body.

A status code is a group of digits, ranging from 1xx to 5xx. It indicates the status of a request. For more information, see [Status Codes](#).

For example, if status code **201** is returned for calling the API used to [create an IAM user](#), the request is successful.

Response Header

Similar to a request, a response also has a header, for example, **Content-Type**.

Figure 3-2 shows the response header fields for the API used to **create an IAM user**. The **X-Subject-Token** header field is the desired user token. This token can then be used to authenticate the calling of other APIs.

NOTE

For security purposes, you are advised to set the token in ciphertext in configuration files or environment variables and decrypt it when using it.

Figure 3-2 Header fields of the response to the request for creating an IAM user

```
"X-Frame-Options": "SAMEORIGIN",
"X-IAM-ETag-id": "2562365939-d8f6f12921974cb097338ac11fceac8a",
"Transfer-Encoding": "chunked",
"Strict-Transport-Security": "max-age=31536000; includeSubdomains;",
"Server": "api-gateway",
"X-Request-Id": "af2953f2bcc67a42325a69a19e6c32a2",
"X-Content-Type-Options": "nosniff",
"Connection": "keep-alive",
"X-Download-Options": "noopen",
"X-XSS-Protection": "1; mode=block;",
"X-IAM-Trace-Id": "token_ null_af2953f2bcc67a42325a69a19e6c32a2",
"Date": "Tue, 21 May 2024 09:03:40 GMT",
"Content-Type": "application/json; charset=utf8"
```

(Optional) Response Body

The body of a response is often returned in a structured format (for example, JSON or XML) as specified in the **Content-Type** header field. The response body transfers content except the response header.

The following shows part of the response body for the API used to **create an IAM user**.

```
{
  "user": {
    "id": "c131886aec...",
    "name": "IAMUser",
    "description": "IAM User Description",
    "areacode": "",
    "phone": "",
    "email": "***@***.com",
    "status": null,
    "enabled": true,
    "pwd_status": false,
    "access_mode": "default",
    "is_domain_owner": false,
    "xuser_id": "",
    "xuser_type": "",
    "password_expires_at": null,
    "create_time": "2024-05-21T09:03:41.000000",
    "domain_id": "d78cbac1.....",
    "xdomain_id": "30086000.....",
    "xdomain_type": "",
    "default_project_id": null
  }
}
```

If an error occurs during API calling, an error code and a message will be displayed. The following shows an error response body.

```
{
  "error_msg": "The request message format is invalid.",
  "error_code": "IMG.0001"
}
```

In the response body, **error_code** is an error code, and **error_msg** provides information about the error.

4 Asset Management

4.1 Digital Asset Management

4.1.1 Creating an Asset

Function

Adds and uploads new media assets, including the virtual avatar model, background image, material image and video, and PowerPoint, to the asset library.

-  **NOTE**
If the asset type is **IMAGE**, **system_properties** is used to classify the background image (**BACKGROUND_IMG**) and the material image (**MATERIAL_IMG**).
-  **NOTE**
If the asset type is **VIDEO**, **system_properties** is used to classify material videos (**MATERIAL_VIDEO**) and business card videos (**BUSSINESS_CARD_VIDEO**).
-  **NOTE**
system_properties with **CREATED_BY_PLATFORM** is used to classify **VIDEO** assets generated by MetaStudio.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/digital-assets

Table 4-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Request Parameters

Table 4-2 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.
X-MSS-Authorization	No	String	Internal token of virtual humans.

Table 4-3 Request body parameters

Parameter	Mandatory	Type	Description
asset_name	Yes	String	Details: Asset name. Constraints: N/A Options: The value contains 0 to 256 characters. Default value: N/A
asset_description	No	String	Details: Asset description. Constraints: N/A Options: The value contains 0 to 4,096 characters. Default value: N/A

Parameter	Mandatory	Type	Description
asset_type	Yes	String	Details: Asset type. Constraints: VOICE_MODEL and HUMAN_MODEL_2D are not available for common users. Options: Public asset type. Options: • VOICE_MODEL: timbre model • VIDEO: video file • IMAGE: image file • PPT: slide file • MUSIC: music • AUDIO: audio • COMMON_FILE: common file Virtual avatar asset. Options: • HUMAN_MODEL_2D: virtual avatar model • BUSINESS_CARD_TEMPLATE: business card template 3D virtual human asset. Options: • HUMAN_MODEL: 3D virtual human model • SCENE: scene model • ANIMATION: animated action • MATERIAL: stylized material • NORMAL_MODEL: general model Default value: N/A
review_config	No	ReviewConfig object	Configures content review.

Parameter	Mandatory	Type	Description
tags	No	Array of strings	Details: Tags. NOTE Avatar system asset tag definition: • Field: NEWS, BUSINESS, E_COMMERCE, MARKETING, KNOWLEDGE, EDUCATION, MEDICAL, SPORTS • Gender: MALE, FEMALE • Posture: FULL_BODY, HALF_BODY, STANDING, SITTING, FRONT_PHOTO, SIDE_PHOTO • Region: ASIAN, WESTERN, MIDDLE_EASTERNER, AFRICAN, LATINO Constraints: N/A Options: A maximum of 50 tags are allowed. A tag contains 0 to 128 characters. Default value: N/A

Parameter	Mandatory	Type	Description
asset_extra_meta	No	AssetExtraMeta object	Details: Additional asset metadata. Constraints: Select a structure based on asset_type . Other unmatched structures will be ignored. • HUMAN_MODEL: Enter human_model_meta. • HUMAN_MODEL_2D: Enter human_model_2d_meta. • SCENE: Enter scene_meta. • ANIMATION: Enter animation_meta. • MATERIAL: Enter material_meta. • VOICE_MODEL: Enter voice_model_meta. • VIDEO: Enter video_meta. • IMAGE: Enter image_meta. • PPT: Enter ppt_meta. • AUDIO: Enter audio_meta.
system_properties	No	Array of SystemProperty objects	Details: Sets system properties. This is an internal parameter and common users do not need to set it. Constraints: N/A Options: The maximum number is 50. Default value: N/A

Parameter	Mandatory	Type	Description
shared_config	No	AssetSharedConfig object	Details: Configures asset sharing. Constraints: Currently, this parameter is used only for asset sharing related to livestreaming template sharing. Options: N/A Default value: N/A
is_need_generate_cover	No	Boolean	Details: Whether to generate a thumbnail. Constraints: This parameter is used only for video assets. Options: • true: A thumbnail is automatically generated. • false: A thumbnail is not automatically generated. Default value: false
asset_order	No	Integer	Details: Specifies the display sequence on the console. If the values are the same, the latest value is placed in the front by default. Constraints: N/A Default value: N/A Value range: 0-32767

Parameter	Mandatory	Type	Description
supported_service	No	Array of strings	Supported service type. Options: • VIDEO_2D: virtual avatar video production • LIVE_2D: virtual avatar livestreaming • CHAT_2D: virtual avatar intelligent interaction

Table 4-4 ReviewConfig

Parameter	Mandatory	Type	Description
no_need_review	No	Boolean	Content review whitelist. This feature is available only for users in the whitelist. The auto review policies apply to other users.

Table 4-5 AssetExtraMeta

Parameter	Mandatory	Type	Description
human_model_meta	No	HumanModelAssetMeta object	Virtual human model metadata.
voice_model_meta	No	VoiceModelAssetMeta object	Timbre model metadata.
ppt_meta	No	PPTAssetMeta object	PPT asset metadata information.
animation_metadata	No	AnimationAssetMeta object	Animated action asset metadata.
scene_meta	No	SceneAssetMeta object	Scenario metadata.
material_metadata	No	MaterialAssetMeta object	Material metadata.
human_model_2d_meta	No	HumanModel2DAssetMeta object	Virtual avatar model metadata

Parameter	Mandatory	Type	Description
image_meta	No	ImageAssetMeta object	Image metadata
video_meta	No	VideoAssetMeta object	Video metadata, which is automatically extracted.
audio_meta	No	AudioAssetMeta object	Audio metadata, which is automatically extracted.

Table 4-6 HumanModelAssetMeta

Parameter	Mandatory	Type	Description
style_id	No	String	Details: Virtual human model style ID. Constraints: Currently, only the preset styles are supported. Options: • system_male_001: male style 01 • system_female_001: female style 01 • system_male_002: male style 02 • system_female_002: female style 02 Default value: N/A

Parameter	Mandatory	Type	Description
modeling_type	No	String	Details: Virtual human modeling type. Constraints: N/A Options: • UPLOADED: model uploaded by a tenant • PICTURE_MODELING: model generated from a photo • CHARACTER_CUSTOMIZATION_MODELING: model generated through face avatar creation Default value: UPLOADED
modeling_job_id	No	String	Details: Modeling task ID. Constraints: This parameter is automatically specified only when it is a model generated by MetaStudio. Options: The value contains 0 to 64 characters. Default value: N/A
model_properties	No	HumanModelMetaProperties object	Records model configuration information.
components	No	Array of ComponentInfo objects	Replaceable components.

Table 4-7 HumanModelMetaProperties

Parameter	Mandatory	Type	Description
whole_model_base_file_id	No	String	Details: Model file_id used to generate WHOLE_MODEL Constraints: If the recorded information is the same as the value of file_id in the main file, the model has been generated and there is no need to export the entire model. Options: The value contains 0 to 64 characters. Default value: N/A
load_model_file_id	No	String	Details: Model file_id used for rendering. Constraints: If the value is empty or no match is found, the main file is used. Options: The value contains 0 to 64 characters. Default value: N/A

Table 4-8 ComponentInfo

Parameter	Mandatory	Type	Description
component_name	Yes	String	Details: Component name. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
component_type	Yes	String	Details: Component type. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
component_description	No	String	Details: Component description. Constraints: N/A Options: The value contains 0 to 512 characters. Default value: N/A

Table 4-9 VoiceModelAssetMeta

Parameter	Mandatory	Type	Description
order	No	Integer	Details: Display order. Constraints: N/A Value range: 0-32767 Default value: 999
model_type	No	String	Details: Voice asset type. Constraints: N/A Options: • COMMON: general emotion model • CLONE: voice cloning model Default value: CLONE
sex	No	String	Details: Voice gender. Constraints: N/A Options: • UNKNOWN: voice of an unknown gender • MALE: male voice • FEMALE: female voice Default value: UNKNOWN

Parameter	Mandatory	Type	Description
language	No	String	Details: Voice language. Constraints: N/A Options: • UNKNOWN: unknown • CN: Chinese • EN: English • GER: German • fr: French • Kr: Korean • por: Portuguese • JPN: Japanese • Ita: Italian • ESP: Spanish • DBH: Northeast China dialect • GT: Hong Kong & Taiwan dialect • GXH: Guangxi dialect • HBH: Hubei dialect • SXH: Shaanxi dialect • SCH: Sichuan dialect • YY: Cantonese • Russian: Russian • Filipino: Tagalog • Dutch: Dutch • Indonesian: Indonesian • Vietnamese: Vietnamese • Arabic: Arabic • Turkish: Turkish • Malay: Malay • Thai: Thai • Finnish: Finnish Default value: UNKNOWN

Parameter	Mandatory	Type	Description
speed_ratio	No	Float	Details: Speaking speed zoom ratio. Constraints: N/A Value range: 0-100 Default value: 1
volume_ratio	No	Float	Details: Volume zoom ratio. Constraints: N/A Value range: 0-100 Default value: 1
is_realtime_voice	No	Boolean	Details: Whether the timbre supports real-time synthesis. Constraints: Timbre that supports real-time synthesis can be used for livestreaming and intelligent interaction. Timbre that does not support real-time synthesis can only be used for video production. Options: • true: Real-time synthesis is supported. • false: Real-time synthesis is not supported. Default value: true
style	No	String	Style reference
external_voice_meta	No	ExternalVoiceAssetMeta object	Third-party TTS timbre metadata.

Parameter	Mandatory	Type	Description
is_support_vc_process	No	Boolean	Whether VC is supported. Default value: false
is_flexus	No	Boolean	Whether the voice is of the Flexus edition. Default value: false

Table 4-10 ExternalVoiceAssetMeta

Parameter	Mandatory	Type	Description
provider	Yes	String	Third-party TTS vendor. Options: • XIMALAYA: Himalaya TTS • HUAWEI_EI: Huawei Cloud EI TTS • MOBVOI: DupDub TTS • AUDIOX: AudioX TTS • SINOVOICE: SinoVoice TTS • DATABAKER: Databaker TTS • AISPEECH: AISpeech TTS

Table 4-11 PPTAssetMeta

Parameter	Mandatory	Type	Description
auto_analysis	No	Boolean	Details: Whether the PowerPoint file needs to be automatically parsed. Constraints: Parsing some complex PowerPoint files or PowerPoint files with a high compression ratio may fail. If the PowerPoint file contains more than 50 pages, only the first 50 pages will be converted. The converted images may not be completely restored. You need to confirm the restoration result. Options: • true: automatic parsing • false: automatic parsing not required Default value: false
ppt_analysis_status	No	String	Details: PowerPoint file parsing status. Constraints: N/A Options: • INITIALIZE: initial • WAITING: waiting for parsing • CONVERTING: parsing... • FAILED: failed • SUCCEEDED: succeeded • CANCELED: canceled Default value: N/A
error_info	No	ErrorResponse object	Error information

Parameter	Mandatory	Type	Description
page_count	No	Integer	Details: Total number of PowerPoint pages. Constraints: N/A Value range: 0-256 Default value: 0
pages	No	Array of PPTPageInfo objects	PPT page image.

Table 4-12 PPTPageInfo

Parameter	Mandatory	Type	Description
page_no	No	Integer	Details: Page number. Constraints: N/A Value range: 1-256
file_id	No	String	Details: ID of the image file of a specified page. Constraints: N/A Options: The value contains 1 to 64 characters. Default value: N/A

Parameter	Mandatory	Type	Description
page_content	No	String	Details: ID of the image file of a specified page Constraints: N/A Options: The value contains 0 to 2,048 characters. Default value: N/A

Table 4-13 AnimationAssetMeta

Parameter	Mandatory	Type	Description
style_id	No	String	Virtual human model style ID.
duration	No	Float	Animation duration. Value range: 0-32767 Default value: 0
auto_analysis	No	Boolean	Indicates whether an action needs to be automatically parsed. Default value: false
voice_delay	No	Float	Delay duration for playing a voice. Unit: second For example, if the entry animation lasts for 3 seconds and voice_delay is set to 4 seconds, the voice is played from the fourth second on after the entry animation starts. Value range: 0-100 Default value: 0

Parameter	Mandatory	Type	Description
animation_insert_restriction	No	String	Limit on the position where an animation is inserted. • ONLY_BEGINNING: During video production, the animation can appear only in the beginning. • ONLY_END: During video production, the animation can appear only in the end.

Table 4-14 SceneAssetMeta

Parameter	Mandatory	Type	Description
components	No	Array of SceneComponentInfo objects	Operable components (such as the screen, light, and camera).
default_configs	No	Map<String, SceneComponentInfo >	Default scene settings (camera position and initial person position).

Table 4-15 SceneComponentInfo

Parameter	Mandatory	Type	Description
index	No	Integer	Component index. Value range: 1-10
component_name	Yes	String	Component name.
component_type	Yes	String	Component type. • CAMERA: camera • PANEL: screen • LIGHT: light
component_desc	No	String	Component description.

Table 4-16 MaterialAssetMeta

Parameter	Mandatory	Type	Description
components	No	Array of MaterialComponentInfo objects	Replaceable material components.

Table 4-17 MaterialComponentInfo

Parameter	Mandatory	Type	Description
component_name	Yes	String	Material component name.
component_type	Yes	String	Material component type. • CLOTHES: clothes • PANTS: pants • SHOES: shoes • HAIR: hair • EYELASH: eyelashes • EYEBROW: eyebrows
component_desc	No	String	Material component description.

Table 4-18 HumanModel2DAssetMeta

Parameter	Mandatory	Type	Description
is_action_editable	No	Boolean	Details: Whether the actions of a virtual avatar can be edited. Constraints: N/A Options: • true: editable • false: not editable Default value: false

Parameter	Mandatory	Type	Description
is_real_backgr ound	No	Boolean	Details: Whether it is a real-scene virtual avatar. Constraints: If yes, the background does not need to be changed. Options: • true: real-scene virtual avatar • false: general virtual avatar without background Default value: false
support_live	No	Boolean	Details: Whether livestreaming is supported. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
model_versio n	No	String	Details: Virtual avatar model version Constraints: N/A Options: • V2: V2 model • V3: V3 model • V3_2: V3.2 model Default value: V2

Parameter	Mandatory	Type	Description
model_resolution	No	String	Details: Virtual avatar model resolution. Constraints: N/A Options: • 1080P: 1080p. 1080p or 720p video can be output. • 4K: 4K. 4K, 1080p, or 720p video can be output. Default value: 1080P
device_names	No	Array of strings	Details: Devices for which compilation tasks have been executed. Constraints: Walking virtual avatars can be used only for video production. Options: A maximum of 16 device names are allowed. A device name contains 1 to 64 characters. Default value: false
is_with_action_library	No	Boolean	Whether the virtual avatar has an atomic action library. NOTE • A virtual avatar with an atomic action library supports choreography. Default value: false
action_tag_map	No	Array of ActionTagInfo objects	Action tag mapping.
is_flexus	No	Boolean	Whether it is a Flexus virtual avatar. Default value: false

Table 4-19 ActionTagInfo

Parameter	Mandatory	Type	Description
action_name_zh	Yes	String	Atomic action name in Chinese.
action_name_en	Yes	String	Atomic action name in English.
catalog	No	String	Action category name.
file_name	No	String	Sample video file name. The value contains 1 to 256 characters.
tag	No	String	Action tag.

Table 4-20 ImageAssetMeta

Parameter	Mandatory	Type	Description
codec	No	String	Details: Image encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A
width	No	Integer	Details: Image width. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196

Parameter	Mandatory	Type	Description
height	No	Integer	Details: Image height. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196
size	No	Number	Details: Image size. Constraints: Automatically extracted. Default value: N/A Value range: 0-9223372036854775807
mode	No	String	Details: Image form. Constraints: Automatically extracted. Options: • Horizontal: horizontal • Vertical: vertical Default value: N/A
error_info	No	ErrorResponse object	Error message

Table 4-21 VideoAssetMeta

Parameter	Mandatory	Type	Description
video_codec	No	String	Details: Video encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A
width	No	Integer	Details: Video image width. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196
height	No	Integer	Details: Video height. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196
frame_rate	No	String	Details: Video frame rate. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A

Parameter	Mandatory	Type	Description
video_bit_rate	No	Integer	Details: Average video bitrate, in kbit/s. Constraints: Automatically extracted. Default value: N/A Value range: 0-104857600
duration	No	Integer	Details: Duration, in second. Constraints: Automatically extracted. Default value: N/A Value range: 0-86400
audio_codec	No	String	Details: Audio encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A
audio_bit_rate	No	Integer	Details: Average audio bitrate, in kbit/s. Constraints: Automatically extracted. Default value: N/A Value range: 0-16384

Parameter	Mandatory	Type	Description
audio_channels	No	Integer	Details: Number of audio channels. Constraints: Automatically extracted. Default value: N/A Value range: 0-100
sample	No	Integer	Details: Sampling rate, in Hz. Constraints: Automatically extracted. Default value: N/A Value range: 0-100000
mode	No	String	Details: Horizontal or vertical display. Constraints: Automatically extracted. Options: • Horizontal: horizontal • Vertical: vertical Default value: N/A
video_transcoding_status	No	String	Details: Video transcoding status. Constraints: Automatically filled. Options: • WAITING: waiting for transcoding • TRANSCODING: transcoding... • FAILED: failed • SUCCEEDED: succeeded Default value: N/A

Parameter	Mandatory	Type	Description
error_info	No	ErrorResponse object	Error message

Table 4-22 AudioAssetMeta

Parameter	Mandatory	Type	Description
duration	No	Integer	Details: Duration, in second. Constraints: Automatically extracted. Default value: N/A Value range: 0-86400
audio_codec	No	String	Details: Audio encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A
audio_bit_rate	No	Integer	Details: Average audio bitrate, in kbit/s. Constraints: Automatically extracted. Default value: N/A Value range: 0-16384

Parameter	Mandatory	Type	Description
audio_channels	No	Integer	Details: Number of audio channels. Constraints: Automatically extracted. Default value: N/A Value range: 0-100
sample	No	Integer	Details: Sampling rate, in Hz. Constraints: Automatically extracted. Default value: N/A Value range: 0-100000
error_info	No	ErrorResponse object	Error message

Table 4-23 ErrorResponse

Parameter	Mandatory	Type	Description
error_code	No	String	Error code.
error_msg	No	String	Error description.

Table 4-24 SystemProperty

Parameter	Mandatory	Type	Description
action	No	String	Details: Operation. Constraints: System properties cannot be modified by common users. Options: • ADD: adding • DELETE: deleting Default value: N/A

Parameter	Mandatory	Type	Description
key	No	String	Details: System property. Constraints: System properties cannot be modified by common users. Options: Public asset property. Options: • BACKGROUND_IMG: 2D background image for video production. Set value to Yes. • CREATED_BY_PLATFORM: whether it is generated by the platform Virtual avatar asset property. Options: • MATERIAL_IMG: material image, which is used as an image layer. Set value to Yes. • MATERIAL_VIDEO: material video, which is used as a video layer. Set value to Yes. • DIGITAL_HUMAN_2D_VIDEO: virtual avatar video • DIGITAL_HUMAN_3D_VIDEO: 3D virtual human video • BUSINESS_CARD_VIDEO: business card video • BUSSINESS_CARD_VIDEO: business card video (expired) • PHOTO_VIDEO: photo-based virtual avatar video Video translation asset property. Options: • TO_BE_TRANSLATED_VIDEO: source video for translation The value can be Yes. • TRANSLATED_VIDEO: translated video

Parameter	Mandatory	Type	Description
			3D virtual human asset attribute. Options: • STYLE_ID: style ID • DH_ID: virtual human ID (not available yet) • PLATFORM_AVAILABLE: whether the platform is available (not available yet) • RENDER_ENGINE: engine type. Set value to UE or MetaEngine. • BACKGROUND_SCENE: 2D background scene for video production. Set value to Horizontal or Vertical. • LAYER_CONFIG_ENABLE: available foreground layer configuration Default value: N/A
value	No	String	Details: System attribute value. Constraints: System properties cannot be modified by common users. Options: The value contains 1 to 1,024 characters. Default value: N/A

Table 4-25 AssetSharedConfig

Parameter	Mandatory	Type	Description
shared_type	No	String	Sharing type. • PRIVATE: accessible only to the current tenant • PUBLIC: accessible to all tenants. Currently, only system assets are accessible to all tenants. • SHARED: accessible to specified tenants, who are specified by the owner.
expire_time	No	String	Time when the sharing expires. The default value is 30 days, that is, 23:59:59 on the day when sharing starts plus 30 days.
allowed_project_ids	No	Array of strings	Tenants allowed to access the asset.

Response Parameters

Status code: 200

Table 4-26 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 4-27 Response body parameters

Parameter	Type	Description
asset_id	String	Digital asset ID.

Status code: 400

Table 4-28 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/6a6a1f8354f64dd9b9a614def7b59d83/digital-assets
{
  "asset_name": "Sara Model",
  "asset_description": "Virtual employee",
  "asset_type": "HUMAN_MODEL",
  "tags": [ "Virtual employee" ]
}
```

Example Responses

Status code: 200

Successful.

```
{
  "asset_id": "93769b5a-c8c6-4692-9c95-53933a1f0c93"
}
```

Status code: 400

```
{
  "error_code": "MSS.00000003",
  "error_msg": "Invalid parameter"
}
```

Status Codes

Status Code	Description
200	Successful.
400	Parameters error, including the error code and its description.

Error Codes

See [Error Codes](#).

4.1.2 Querying Assets

Function

You can query media assets in the asset library.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/digital-assets

Table 4-29 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Table 4-30 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of items displayed on each page. Value range: 1-100 Default value: 10
offset	No	Integer	Offset where the query starts. Value range: 0-2147483647 Default value: 0
name	No	String	Fuzzy search by name.
tag	No	String	Fuzzy search by tag.
tag_combination_type	No	String	Tag query combination mode INTERSECTION: intersection UNION_SET: union Default value: UNION_SET
start_time	No	String	Start time. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
end_time	No	String	End time. The format complies with RFC 3339, for example, 2021-01-10T10:43:17Z.

Parameter	Mandatory	Type	Description
asset_type	No	String	Asset type. If there are more than one, separate them with commas (,). ● HUMAN_MODEL: 3D virtual human model ● VOICE_MODEL: timbre model (uploaded only by the system administrator) ● SCENE: scene model ● ANIMATION: animated actions ● VIDEO: video file ● IMAGE: image file ● PPT: slide file ● MATERIAL: stylized materials ● HUMAN_MODEL_2D: virtual avatar network model ● BUSINESS_CARD_TEMPLATE: business card template ● MUSIC: music ● AUDIO: audio
sort_key	No	String	Sorting field. Options: ● create_time: sorting by creation time ● update_time: sorting by update time ● asset_order: sorting by asset
sort_dir	No	String	Sorting mode. ● asc: ascending order ● desc: descending order asc is used by default.

Parameter	Mandatory	Type	Description
asset_source	No	String	Asset source. • SYSTEM: system asset • CUSTOMIZATION: tenant asset • ALL: all assets Tenant assets are queried by default. Default value: CUSTOMIZATION
asset_state	No	String	Asset status. Use commas (,) to separate multiple asset statuses. • CREATING: The asset is being created. The main file has not been uploaded. • FAILED: Main file upload failed. • UNACTIVED: The main file has been uploaded. The asset is not activated and cannot be used for other services. (Users can update the status.) • ACTIVED: The main file has been uploaded. The asset is activated and can be used for other services. (Users can update the status.) • DELETING: The asset is being deleted. The asset is unavailable but can be restored. • DELETED: The asset has been deleted. The asset is unavailable and cannot be restored. • BLOCK: The asset has been frozen. The asset is unavailable and cannot be viewed. • WAITING_DELETE: The asset will be taken offline. By default, assets in all statuses are queried.

Parameter	Mandatory	Type	Description
style_id	No	String	Query associated assets by style ID. • system_male_001: male style 01 • system_female_001: female style 01 • system_male_002: male style 02 • system_female_002: female style 02
accurate_query_field	No	Array of strings	Use the field for exact query.
render_engine	No	String	Available engine. • UE: UE engine • MetaEngine: MetaEngine NOTE This field is valid only for users in the MetaEngine whitelist.
asset_id	No	Array of strings	Asset ID.
sex	No	String	Gender. Use commas (,) to separate multiple options.
language	No	String	Language. If there is more than one, separate them with commas (,).

Parameter	Mandatory	Type	Description
system_property	No	String	System attribute. <i>key</i> and <i>value</i> are separated with colons (:). Use commas (,) to separate them if there are more than one key. For example, system_property=BACKGROUND_IMG:Yes,RENDER_ENGINE:MetaEngine. Options: Public asset attribute. Options: • BACKGROUND_IMG: 2D background image for video production. The value can be Yes. • CREATED_BY_PLATFORM: indicates whether it is generated by the platform. The value can be Yes. Virtual avatar asset attribute. Options: • MATERIAL_IMG: material image used as the foreground. The value can be Yes. • MATERIAL_VIDEO: material video used as the foreground. The value can be Yes. • TO_BE_TRANSLATED_VIDEO: source video for translation. The value can be Yes. 3D virtual human asset attribute. Options: • STYLE_ID: style ID • RENDER_ENGINE: engine type. The value can be UE or MetaEngine. • BACKGROUND_SCENE: 2D background scene for video production. The value can be Horizontal or Vertical.

Parameter	Mandatory	Type	Description
action_editable	No	Boolean	Indicates whether an action is editable. This parameter is only available for virtual avatar model query.
is_with_action_library	No	Boolean	Whether the virtual avatar has an atomic action library. NOTE A virtual avatar with an atomic action library supports choreography.
is_movable	No	Boolean	Whether a virtual avatar can walk. This parameter is valid only for querying virtual human models.
voice_provider	No	String	The value can be HUAWEI_METASTUDIO or MOBVOI . HUAWEI_METASTUDIO : MetaStudio's proprietary timbre MOBVOI : Mobvoi's timbre
role	No	String	Role. SHARER : sharer. SHAREE : sharee
is_realtime_voice	No	Boolean	Whether the timbre supports real-time compositing. This parameter is valid only for timbre query. NOTE Timbre that supports real-time compositing can be used for livestreaming and intelligent interaction. Timbre that does not support real-time compositing can only be used for video production.
human_model_2d_version	No	String	Model version
include_device_name	No	String	Name of a compilation task that has been executed under an asset
exclude_device_name	No	String	Name of a compilation task that has been executed under an asset

Parameter	Mandatory	Type	Description
supported_service	No	String	Service type supported by an asset. By default, all assets are queried. • VIDEO_2D: virtual avatar video production • LIVE_2D: virtual avatar livestreaming • CHAT_2D: virtual avatar intelligent interaction

Request Parameters

Table 4-31 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 4-32 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 4-33 Response body parameters

Parameter	Type	Description
count	Integer	Total assets. Value range: 0-2147483647
assets	Array of DigitalAssetInfo objects	Asset information list.

Table 4-34 DigitalAssetInfo

Parameter	Type	Description
project_id	String	Tenant ID
asset_id	String	Asset ID.
asset_name	String	Asset name.
asset_description	String	Asset description.
app_user_id	String	Third-party user ID. NOTE An asset is created by specifying the value of the X-App-UserId header.
create_time	String	Time when an asset is created.
update_time	String	Time when an asset is updated.

Parameter	Type	Description
asset_type	String	Asset types. Public asset type. Options: • VOICE_MODEL: timbre model • VIDEO: video file • IMAGE: image file • PPT: slide file • MUSIC: music • AUDIO: audio • COMMON_FILE: common file Virtual avatar asset type. Options: • HUMAN_MODEL_2D: virtual avatar model • BUSINESS_CARD_TEMPLLET: business card template 3D virtual human asset type. Options: • HUMAN_MODEL: 3D virtual human model • SCENE: scene model • ANIMATION: animated actions • MATERIAL: stylized materials • NORMAL_MODEL: normal model
asset_state	String	Asset status. • CREATING: The asset is being created. The main file has not been uploaded. • FAILED: Main file upload failed. • UNACTIVED: The main file has been uploaded. The asset is not activated and cannot be used for other services. (Users can update the status.) • ACTIVED: The main file has been uploaded. The asset is activated and can be used for other services. (Users can update the status.) • DELETING: The asset is being deleted. The asset is unavailable but can be restored. • DELETED: The asset has been deleted. The asset is unavailable and cannot be restored. • BLOCK: The asset has been frozen. The asset is unavailable and cannot be viewed. • WAITING_DELETE: The asset will be taken offline.

Parameter	Type	Description
fail_type	String	Failure causes: ● AUTOMATIC_REVIEW_REJECT: Auto review failed. ● MANUAL_REVIEW_REJECT: Manual review failed. Default value: AUTOMATIC_REVIEW_REJECT
reason	String	Freezing, unfreezing, and failure causes.
tags	Array of strings	Tags. NOTE Avatar system asset tag definition: ● Field: NEWS, BUSINESS, E-COMMERCE, MARKETING, KNOWLEDGE, EDUCATION, SPORTS ● Gender: MALE, FEMALE ● Posture: FULL-BODY, HALF-BODY, STANDING, SITTING, WALKING ● Region: ASIAN, WESTERN, MIDDLE-EASTERNER, AFRICAN, LATINO
asset_extra_meta	AssetExtraMeta object	Details: Additional asset metadata. Constraints: Select a structure based on asset_type . Other unmatched structures will be ignored. ● HUMAN_MODEL: Enter human_model_meta. ● HUMAN_MODEL_2D: Enter human_model_2d_meta. ● SCENE: Enter scene_meta. ● ANIMATION: Enter animation_meta. ● MATERIAL: Enter material_meta. ● VOICE_MODEL: Enter voice_model_meta. ● VIDEO: Enter video_meta. ● IMAGE: Enter image_meta. ● PPT: Enter ppt_meta. ● AUDIO: Enter audio_meta.
system_properties	Array of SystemProperty objects	Sets system attributes.

Parameter	Type	Description
files	Array of AssetFileInfo objects	Files under an asset.
asset_order	Integer	Display order Value range: 0-32767
supported_service	Array of strings	Supported service type. Options: • VIDEO_2D: virtual avatar video production • LIVE_2D: virtual avatar livestreaming • CHAT_2D: virtual avatar intelligent interaction

Table 4-35 AssetExtraMeta

Parameter	Type	Description
human_model_meta	HumanModelAssetMeta object	Virtual human model metadata.
voice_model_meta	VoiceModelAssetMeta object	Timbre model metadata.
ppt_meta	PPTAssetMeta object	PPT asset metadata information.
animation_meta	AnimationAssetMeta object	Animated action asset metadata.
scene_meta	SceneAssetMeta object	Scenario metadata.
material_meta	MaterialAssetMeta object	Material metadata.
human_model_2d_meta	HumanModel2DAssetMeta object	Virtual avatar model metadata
image_meta	ImageAssetMeta object	Image metadata
video_meta	VideoAssetMeta object	Video metadata, which is automatically extracted.
audio_meta	AudioAssetMeta object	Audio metadata, which is automatically extracted.

Table 4-36 HumanModelAssetMeta

Parameter	Type	Description
style_id	String	Details: Virtual human model style ID. Constraints: Currently, only the preset styles are supported. Options: • system_male_001: male style 01 • system_female_001: female style 01 • system_male_002: male style 02 • system_female_002: female style 02 Default value: N/A
modeling_type	String	Details: Virtual human modeling type. Constraints: N/A Options: • UPLOADED: model uploaded by a tenant • PICTURE_MODELING: model generated from a photo • CHARACTER_CUSTOMIZATION_MODELING: model generated through face avatar creation Default value: UPLOADED
modeling_job_id	String	Details: Modeling task ID. Constraints: This parameter is automatically specified only when it is a model generated by MetaStudio. Options: The value contains 0 to 64 characters. Default value: N/A
model_properties	HumanModelAssetMetaProperties object	Records model configuration information.

Parameter	Type	Description
components	Array of ComponentInfo objects	Replaceable components.

Table 4-37 HumanModelMetaProperties

Parameter	Type	Description
whole_model_base_file_id	String	Details: Model file_id used to generate WHOLE_MODEL Constraints: If the recorded information is the same as the value of file_id in the main file, the model has been generated and there is no need to export the entire model. Options: The value contains 0 to 64 characters. Default value: N/A
load_model_file_id	String	Details: Model file_id used for rendering. Constraints: If the value is empty or no match is found, the main file is used. Options: The value contains 0 to 64 characters. Default value: N/A

Table 4-38 ComponentInfo

Parameter	Type	Description
component_name	String	Details: Component name. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
component_type	String	Details: Component type. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
component_desc	String	Details: Component description. Constraints: N/A Options: The value contains 0 to 512 characters. Default value: N/A

Table 4-39 VoiceModelAssetMeta

Parameter	Type	Description
order	Integer	Details: Display order. Constraints: N/A Value range: 0-32767 Default value: 999

Parameter	Type	Description
model_type	String	Details: Voice asset type. Constraints: N/A Options: • COMMON: general emotion model • CLONE: voice cloning model Default value: CLONE
sex	String	Details: Voice gender. Constraints: N/A Options: • UNKNOWN: voice of an unknown gender • MALE: male voice • FEMALE: female voice Default value: UNKNOWN

Parameter	Type	Description
language	String	Details: Voice language. Constraints: N/A Options: • UNKNOWN: unknown • CN: Chinese • EN: English • GER: German • fr: French • Kr: Korean • por: Portuguese • JPN: Japanese • Ita: Italian • ESP: Spanish • DBH: Northeast China dialect • GT: Hong Kong & Taiwan dialect • GXH: Guangxi dialect • HBH: Hubei dialect • SXH: Shaanxi dialect • SCH: Sichuan dialect • YY: Cantonese • Russian: Russian • Filipino: Tagalog • Dutch: Dutch • Indonesian: Indonesian • Vietnamese: Vietnamese • Arabic: Arabic • Turkish: Turkish • Malay: Malay • Thai: Thai • Finnish: Finnish Default value: UNKNOWN

Parameter	Type	Description
speed_ratio	Float	Details: Speaking speed zoom ratio. Constraints: N/A Value range: 0-100 Default value: 1
volume_ratio	Float	Details: Volume zoom ratio. Constraints: N/A Value range: 0-100 Default value: 1
is_realtime_voice	Boolean	Details: Whether the timbre supports real-time synthesis. Constraints: Timbre that supports real-time synthesis can be used for livestreaming and intelligent interaction. Timbre that does not support real-time synthesis can only be used for video production. Options: • true: Real-time synthesis is supported. • false: Real-time synthesis is not supported. Default value: true
style	String	Style reference
voice_capability	VoiceCapability object	Capability set supported by the timbre asset. NOTE The timbre capability set can be queried but cannot be configured.
external_voice_meta	ExternalVoiceAssetMeta object	Third-party TTS timbre metadata.

Parameter	Type	Description
is_support_vc_process	Boolean	Whether VC is supported. Default value: false
is_flexus	Boolean	Whether the voice is of the Flexus edition. Default value: false

Table 4-40 VoiceCapability

Parameter	Type	Description
is_support_phoneme_en	Boolean	Details: Whether the voice supports English phonetics. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_phoneme	Boolean	Details: Whether the voice supports Chinese multi-pronunciation words. Constraints: N/A Options: • true: supported • false: unsupported Default value: false

Parameter	Type	Description
is_support_break_time	Boolean	Details: Whether the voice supports pauses. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_break_strength	Boolean	Details: Whether the voice supports rhythm. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_speed	Boolean	Details: Whether the voice supports global speaking speed. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_prosody	Boolean	Details: Whether the voice supports local speaking speed. Constraints: N/A Options: • true: supported • false: unsupported Default value: false

Parameter	Type	Description
is_support_ssml_say_as	Boolean	Details: Whether the voice supports say-as SSML tags. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_ssml_sub	Boolean	Details: Whether the voice supports sub SSML tags. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_word	Boolean	Details: Whether the voice supports continuous reading. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_voice_cache	Boolean	Whether cache is supported. Default value: false

Parameter	Type	Description
conversion_rate	Float	Details: Synthesis rate. Constraints: N/A Options: • 0-50 Value range: 0-50 Default value: 0.0
conversion_rate_en	Float	Details: Synthesis rate of English. Constraints: N/A Options: • 0-50 Value range: 0-50 Default value: 0.0
is_support_srt	Boolean	

Table 4-41 ExternalVoiceAssetMeta

Parameter	Type	Description
provider	String	Third-party TTS vendor. Options: • XIMALAYA: Himalaya TTS • HUAWEI_EI: Huawei Cloud EI TTS • MOBVOI: DupDub TTS • AUDIOX: AudioX TTS • SINOVOICE: SinoVoice TTS • DATABAKER: Databaker TTS • AISPEECH: AISpeech TTS

Table 4-42 PPTAssetMeta

Parameter	Type	Description
auto_analysis	Boolean	Details: Whether the PowerPoint file needs to be automatically parsed. Constraints: Parsing some complex PowerPoint files or PowerPoint files with a high compression ratio may fail. If the PowerPoint file contains more than 50 pages, only the first 50 pages will be converted. The converted images may not be completely restored. You need to confirm the restoration result. Options: • true: automatic parsing • false: automatic parsing not required Default value: false
ppt_analysis_status	String	Details: PowerPoint file parsing status. Constraints: N/A Options: • INITIALIZE: initial • WAITING: waiting for parsing • CONVERTING: parsing... • FAILED: failed • SUCCEEDED: succeeded • CANCELED: canceled Default value: N/A
error_info	ErrorResponse object	Error information

Parameter	Type	Description
page_count	Integer	Details: Total number of PowerPoint pages. Constraints: N/A Value range: 0-256 Default value: 0
pages	Array of PPTPageInfo objects	PPT page image.

Table 4-43 PPTPageInfo

Parameter	Type	Description
page_no	Integer	Details: Page number. Constraints: N/A Value range: 1-256
file_id	String	Details: ID of the image file of a specified page. Constraints: N/A Options: The value contains 1 to 64 characters. Default value: N/A
page_content	String	Details: ID of the image file of a specified page Constraints: N/A Options: The value contains 0 to 2,048 characters. Default value: N/A

Table 4-44 AnimationAssetMeta

Parameter	Type	Description
style_id	String	Virtual human model style ID.
duration	Float	Animation duration. Value range: 0-32767 Default value: 0
auto_analysis	Boolean	Indicates whether an action needs to be automatically parsed. Default value: false
voice_delay	Float	Delay duration for playing a voice. Unit: second For example, if the entry animation lasts for 3 seconds and voice_delay is set to 4 seconds, the voice is played from the fourth second on after the entry animation starts. Value range: 0-100 Default value: 0
animation_insert_restriction	String	Limit on the position where an animation is inserted. ● ONLY_BEGINNING: During video production, the animation can appear only in the beginning. ● ONLY_END: During video production, the animation can appear only in the end.

Table 4-45 SceneAssetMeta

Parameter	Type	Description
components	Array of SceneComponentInfo objects	Operable components (such as the screen, light, and camera).
default_configs	Map<String, SceneComponents >	Default scene settings (camera position and initial person position).

Table 4-46 SceneComponentInfo

Parameter	Type	Description
index	Integer	Component index. Value range: 1-10
component_name	String	Component name.
component_type	String	Component type. ● CAMERA: camera ● PANEL: screen ● LIGHT: light
component_desc	String	Component description.

Table 4-47 MaterialAssetMeta

Parameter	Type	Description
components	Array of MaterialComponentInfo objects	Replaceable material components.

Table 4-48 MaterialComponentInfo

Parameter	Type	Description
component_name	String	Material component name.
component_type	String	Material component type. ● CLOTHES: clothes ● PANTS: pants ● SHOES: shoes ● HAIR: hair ● EYELASH: eyelashes ● EYEBROW: eyebrows
component_desc	String	Material component description.

Table 4-49 HumanModel2DAssetMeta

Parameter	Type	Description
is_action_editable	Boolean	Details: Whether the actions of a virtual avatar can be edited. Constraints: N/A Options: • true: editable • false: not editable Default value: false
is_real_background	Boolean	Details: Whether it is a real-scene virtual avatar. Constraints: If yes, the background does not need to be changed. Options: • true: real-scene virtual avatar • false: general virtual avatar without background Default value: false
support_live	Boolean	Details: Whether livestreaming is supported. Constraints: N/A Options: • true: supported • false: unsupported Default value: false

Parameter	Type	Description
model_version	String	Details: Virtual avatar model version Constraints: N/A Options: • V2: V2 model • V3: V3 model • V3_2: V3.2 model Default value: V2
model_resolution	String	Details: Virtual avatar model resolution. Constraints: N/A Options: • 1080P: 1080p. 1080p or 720p video can be output. • 4K: 4K. 4K, 1080p, or 720p video can be output. Default value: 1080P
device_names	Array of strings	Details: Devices for which compilation tasks have been executed. Constraints: Walking virtual avatars can be used only for video production. Options: A maximum of 16 device names are allowed. A device name contains 1 to 64 characters. Default value: false
is_with_action_library	Boolean	Whether the virtual avatar has an atomic action library. NOTE • A virtual avatar with an atomic action library supports choreography. Default value: false

Parameter	Type	Description
action_tag_map	Array of ActionTagInfo objects	Action tag mapping.
is_flexus	Boolean	Whether it is a Flexus virtual avatar. Default value: false

Table 4-50 ActionTagInfo

Parameter	Type	Description
action_name_zh	String	Atomic action name in Chinese.
action_name_en	String	Atomic action name in English.
catalog	String	Action category name.
file_name	String	Sample video file name. The value contains 1 to 256 characters.
tag	String	Action tag.

Table 4-51 ImageAssetMeta

Parameter	Type	Description
codec	String	Details: Image encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A

Parameter	Type	Description
width	Integer	Details: Image width. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196
height	Integer	Details: Image height. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196
size	Number	Details: Image size. Constraints: Automatically extracted. Default value: N/A Value range: 0-9223372036854775807
mode	String	Details: Image form. Constraints: Automatically extracted. Options: • Horizontal: horizontal • Vertical: vertical Default value: N/A
error_info	ErrorResponse object	Error message

Table 4-52 VideoAssetMeta

Parameter	Type	Description
video_codec	String	Details: Video encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A
width	Integer	Details: Video image width. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196
height	Integer	Details: Video height. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196
frame_rate	String	Details: Video frame rate. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A

Parameter	Type	Description
video_bit_rate	Integer	Details: Average video bitrate, in kbit/s. Constraints: Automatically extracted. Default value: N/A Value range: 0-104857600
duration	Integer	Details: Duration, in second. Constraints: Automatically extracted. Default value: N/A Value range: 0-86400
audio_codec	String	Details: Audio encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A
audio_bit_rate	Integer	Details: Average audio bitrate, in kbit/s. Constraints: Automatically extracted. Default value: N/A Value range: 0-16384

Parameter	Type	Description
audio_channels	Integer	Details: Number of audio channels. Constraints: Automatically extracted. Default value: N/A Value range: 0-100
sample	Integer	Details: Sampling rate, in Hz. Constraints: Automatically extracted. Default value: N/A Value range: 0-100000
mode	String	Details: Horizontal or vertical display. Constraints: Automatically extracted. Options: • Horizontal: horizontal • Vertical: vertical Default value: N/A
video_transcoding_status	String	Details: Video transcoding status. Constraints: Automatically filled. Options: • WAITING: waiting for transcoding • TRANSCODING: transcoding... • FAILED: failed • SUCCEEDED: succeeded Default value: N/A

Parameter	Type	Description
error_info	ErrorResponse object	Error message

Table 4-53 AudioAssetMeta

Parameter	Type	Description
duration	Integer	Details: Duration, in second. Constraints: Automatically extracted. Default value: N/A Value range: 0-86400
audio_codec	String	Details: Audio encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A
audio_bit_rate	Integer	Details: Average audio bitrate, in kbit/s. Constraints: Automatically extracted. Default value: N/A Value range: 0-16384

Parameter	Type	Description
audio_channels	Integer	Details: Number of audio channels. Constraints: Automatically extracted. Default value: N/A Value range: 0-100
sample	Integer	Details: Sampling rate, in Hz. Constraints: Automatically extracted. Default value: N/A Value range: 0-100000
error_info	ErrorResponse object	Error message

Table 4-54 ErrorResponse

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Table 4-55 SystemProperty

Parameter	Type	Description
action	String	Details: Operation. Constraints: System properties cannot be modified by common users. Options: • ADD: adding • DELETE: deleting Default value: N/A

Parameter	Type	Description
key	String	Details: System property. Constraints: System properties cannot be modified by common users. Options: Public asset property. Options: • BACKGROUND_IMG: 2D background image for video production. Set value to Yes. • CREATED_BY_PLATFORM: whether it is generated by the platform Virtual avatar asset property. Options: • MATERIAL_IMG: material image, which is used as an image layer. Set value to Yes. • MATERIAL_VIDEO: material video, which is used as a video layer. Set value to Yes. • DIGITAL_HUMAN_2D_VIDEO: virtual avatar video • DIGITAL_HUMAN_3D_VIDEO: 3D virtual human video • BUSINESS_CARD_VIDEO: business card video • BUSSINESS_CARD_VIDEO: business card video (expired) • PHOTO_VIDEO: photo-based virtual avatar video Video translation asset property. Options: • TO_BE_TRANSLATED_VIDEO: source video for translation The value can be Yes. • TRANSLATED_VIDEO: translated video 3D virtual human asset attribute. Options: • STYLE_ID: style ID • DH_ID: virtual human ID (not available yet) • PLATFORM_AVAILABLE: whether the platform is available (not available yet) • RENDER_ENGINE: engine type. Set value to UE or MetaEngine. • BACKGROUND_SCENE: 2D background scene for video production. Set value to Horizontal or Vertical. • LAYER_CONFIG_ENABLE: available foreground layer configuration

Parameter	Type	Description
		Default value: N/A
value	String	Details: System attribute value. Constraints: System properties cannot be modified by common users. Options: The value contains 1 to 1,024 characters. Default value: N/A

Table 4-56 AssetFileInfo

Parameter	Type	Description
file_id	String	File ID.
file_name	String	The file name is case-insensitive and can contain 1 to 256 characters.
file_md5	String	MD5 value of the file content. The value must contain 24 characters.
file_size	Long	Total file size. The value ranges from 1 to 5368709120. Value range: 1-5368709120
file_type	String	File type (the file name extension is extracted by default).

Parameter	Type	Description
asset_file_category	String	File category in an asset. Each type of asset has different file categories. • MAIN: main file • COVER: thumbnail file • PAGE: content page image • SAMPLE: sample audio • OTHER: other files • WHOLE_MODEL: full model • USER_MODIFIED_MODEL: model uploaded by a user. NOTE • When the asset type is SCENE, ANIMATION, VIDEO, IMAGE, or MATERIAL, categories are MAIN, COVER, and OTHER. • When the asset type is PPT, categories are MAIN, COVER, PAGE, and OTHER. • When the asset type is HUMAN_MODEL, categories are MAIN, COVER, and OTHER. • When the asset type is VOICE_MODEL, categories are MAIN, SAMPLE (sample audio file), and OTHER. • When the asset type is HUMAN_MODEL_2D, categories are MAIN, COVER, SAMPLE (sample action), and OTHER (mask file). • When the asset type is BUSINESS_CARD_TEMPLAT, categories are MAIN and COVER (business card demo).
download_url	String	File download URL, which is valid for 24 hours.
state	String	File status. Options: • CREATING: being uploaded • CREATED: uploaded (auto approved) • FAILED: upload failed • CANCELLED: upload cancelled • DELETING: being deleted • DELETED: deleted • UPLOADED: uploaded (not approved yet) • REVIEW: manual review (uploaded) • BLOCK: frozen
reason	String	Rejection reason.
file_extra_metadata	FileExtraMetadata object	File data.

Table 4-57 FileExtraMeta

Parameter	Type	Description
video_transcoding_status	String	Video transcoding status. • WAITING • TRANSCODING • FAILED • SUCCEEDED

Status code: 400**Table 4-58** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

GET https://{endpoint}/v1/6a6a1f8354f64dd9b9a614def7b59d83/digital-assets

Example Responses

Status code: 200

Successful.

```
{
  "count": 1,
  "assets": [ {
    "asset_id": "24bad716-87b1-45e5-8912-6102f7693265",
    "asset_name": "Culture and tourism 3",
    "asset_description": "Background image",
    "create_time": "2021-10-30T12:30:35Z",
    "asset_type": "IMAGE",
    "asset_state": "ACTIVED",
    "tags": [ "Culture and tourism" ],
    "files": [ {
      "file_id": "93769b5a-c8c6-4692-9c95-53933a1f0c93",
      "file_name": "Culture and tourism 3.png",
      "file_md5": "6sxnj34jQZFvuJhXRwD7nw==",
      "file_size": 6519699,
      "file_type": "png",
      "asset_file_category": "MAIN",
      "download_url": "https://metastudio.obs.cn-north-4.myhuaweicloud.com:443/SYSTEM/d6e7dde03cab4ce06f2c3cbb19f2682c/9fd37af847980ae086c98d282570bd72.png?AWSAccessKeyId=MYEO6O12LEA6YE2TYTW8&Expires=1706739167&response-content-disposition=attachment%3B+filename%3Dutf-8%27%27%25E6%2596%2587%25E6%2597%2585%25E9%25A3%258E3.png&x-amz-security-token=ggpjbi1ub3JQ4IEfiM6O&Signature=NzXKRDLDNmkWQI4axyMrTMtKS8k%3D",
      "state": "CREATED"
    } ]
  } ]
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status Codes

Status Code	Description
200	Successful.
400	Parameters error, including the error code and its description.

Error Codes

See [Error Codes](#).

4.1.3 Updating an Asset

Function

You can update media asset information in the asset library.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v1/{project_id}/digital-assets/{asset_id}

Table 4-59 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
asset_id	Yes	String	Asset ID.

Request Parameters

Table 4-60 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 4-61 Request body parameters

Parameter	Mandatory	Type	Description
asset_name	No	String	Details: Asset name. Constraints: N/A Options: The value contains 0 to 256 characters. Default value: N/A

Parameter	Mandatory	Type	Description
asset_description	No	String	Details: Asset description. Constraints: N/A Options: The value contains 0 to 4,096 characters. Default value: N/A

Parameter	Mandatory	Type	Description
asset_type	No	String	Details: Asset type. Constraints: VOICE_MODEL and HUMAN_MODEL_2D are not available for common users. Options: Public asset type. Options: • VOICE_MODEL: timbre model • VIDEO: video file • IMAGE: image file • PPT: slide file • MUSIC: music • AUDIO: audio • COMMON_FILE: common file Virtual avatar asset. Options: • HUMAN_MODEL_2D: virtual avatar model • BUSINESS_CARD_TEMPLATE: business card template 3D virtual human asset. Options: • HUMAN_MODEL: 3D virtual human model • SCENE: scene model • ANIMATION: animated action • MATERIAL: stylized material • NORMAL_MODEL: general model Default value: N/A

Parameter	Mandatory	Type	Description
asset_state	No	String	Details: Asset status. Constraints: Tenants can only activate or deactivate assets. Other statuses are automatically updated. Options: • UNACTIVED: deactivated. Unactivated assets cannot be used for other services. • ACTIVED: activated. Activated assets can be used for other services. • WAITING_DELETE: The asset will be taken offline. (Activated assets are available for the administrator.) Default value: N/A
review_config	No	ReviewConfig object	Configures content review.

Parameter	Mandatory	Type	Description
tags	No	Array of strings	Details: Tags. NOTE Avatar system asset tag definition: • Field: NEWS, BUSINESS, E-COMMERCE, MARKETING, KNOWLEDGE, EDUCATION, SPORTS • Gender: MALE, FEMALE • Posture: FULL-BODY, HALF-BODY, STANDING, SITTING, WALKING • Region: ASIAN, WESTERN, MIDDLE-EASTERNER, AFRICAN, LATINO Constraints: N/A Options: A maximum of 50 tags are allowed. A tag contains 0 to 128 characters. Default value: N/A

Parameter	Mandatory	Type	Description
asset_extra_meta	No	AssetExtraMeta object	Details: Additional asset metadata. Constraints: Select a structure based on asset_type . Other unmatched structures will be ignored. • HUMAN_MODEL: Enter human_model_meta. • HUMAN_MODEL_2D: Enter human_model_2d_meta. • SCENE: Enter scene_meta. • ANIMATION: Enter animation_meta. • MATERIAL: Enter material_meta. • VOICE_MODEL: Enter voice_model_meta. • VIDEO: Enter video_meta. • IMAGE: Enter image_meta. • PPT: Enter ppt_meta. • AUDIO: Enter audio_meta.
system_properties	No	Array of SystemProperty objects	Sets system attributes.
shared_config	No	AssetSharedConfig object	Sharing configuration
asset_order	No	Integer	Details: Specifies the display sequence on the console. If the values are the same, the latest value is placed in the front by default. Constraints: N/A Default value: N/A Value range: 0-32767

Parameter	Mandatory	Type	Description
supported_service	No	Array of strings	Supported service type. Options: • VIDEO_2D: virtual avatar video production • LIVE_2D: virtual avatar livestreaming • CHAT_2D: virtual avatar intelligent interaction

Table 4-62 ReviewConfig

Parameter	Mandatory	Type	Description
no_need_review	No	Boolean	Content review whitelist. This feature is available only for users in the whitelist. The auto review policies apply to other users.

Table 4-63 AssetExtraMeta

Parameter	Mandatory	Type	Description
human_model_meta	No	HumanModelAssetMeta object	Virtual human model metadata.
voice_model_meta	No	VoiceModelAssetMeta object	Timbre model metadata.
ppt_meta	No	PPTAssetMeta object	PPT asset metadata information.
animation_meta	No	AnimationAssetMeta object	Animated action asset metadata.
scene_meta	No	SceneAssetMeta object	Scenario metadata.
material_meta	No	MaterialAssetMeta object	Material metadata.
human_model_2d_meta	No	HumanModel2DAssetMeta object	Virtual avatar model metadata

Parameter	Mandatory	Type	Description
image_meta	No	ImageAssetMeta object	Image metadata
video_meta	No	VideoAssetMeta object	Video metadata, which is automatically extracted.
audio_meta	No	AudioAssetMeta object	Audio metadata, which is automatically extracted.

Table 4-64 HumanModelAssetMeta

Parameter	Mandatory	Type	Description
style_id	No	String	Details: Virtual human model style ID. Constraints: Currently, only the preset styles are supported. Options: • system_male_001: male style 01 • system_female_001: female style 01 • system_male_002: male style 02 • system_female_002: female style 02 Default value: N/A

Parameter	Mandatory	Type	Description
modeling_type	No	String	Details: Virtual human modeling type. Constraints: N/A Options: • UPLOADED: model uploaded by a tenant • PICTURE_MODELING: model generated from a photo • CHARACTER_CUSTOMIZATION_MODELING: model generated through face avatar creation Default value: UPLOADED
modeling_job_id	No	String	Details: Modeling task ID. Constraints: This parameter is automatically specified only when it is a model generated by MetaStudio. Options: The value contains 0 to 64 characters. Default value: N/A
model_properties	No	HumanModelMetaProperties object	Records model configuration information.
components	No	Array of ComponentInfo objects	Replaceable components.

Table 4-65 HumanModelMetaProperties

Parameter	Mandatory	Type	Description
whole_model_base_file_id	No	String	Details: Model file_id used to generate WHOLE_MODEL Constraints: If the recorded information is the same as the value of file_id in the main file, the model has been generated and there is no need to export the entire model. Options: The value contains 0 to 64 characters. Default value: N/A
load_model_file_id	No	String	Details: Model file_id used for rendering. Constraints: If the value is empty or no match is found, the main file is used. Options: The value contains 0 to 64 characters. Default value: N/A

Table 4-66 ComponentInfo

Parameter	Mandatory	Type	Description
component_name	Yes	String	Details: Component name. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
component_type	Yes	String	Details: Component type. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
component_desc	No	String	Details: Component description. Constraints: N/A Options: The value contains 0 to 512 characters. Default value: N/A

Table 4-67 VoiceModelAssetMeta

Parameter	Mandatory	Type	Description
order	No	Integer	Details: Display order. Constraints: N/A Value range: 0-32767 Default value: 999
model_type	No	String	Details: Voice asset type. Constraints: N/A Options: • COMMON: general emotion model • CLONE: voice cloning model Default value: CLONE
sex	No	String	Details: Voice gender. Constraints: N/A Options: • UNKNOWN: voice of an unknown gender • MALE: male voice • FEMALE: female voice Default value: UNKNOWN

Parameter	Mandatory	Type	Description
language	No	String	Details: Voice language. Constraints: N/A Options: • UNKNOWN: unknown • CN: Chinese • EN: English • GER: German • fr: French • Kr: Korean • por: Portuguese • JPN: Japanese • Ita: Italian • ESP: Spanish • DBH: Northeast China dialect • GT: Hong Kong & Taiwan dialect • GXH: Guangxi dialect • HBH: Hubei dialect • SXH: Shaanxi dialect • SCH: Sichuan dialect • YY: Cantonese • Russian: Russian • Filipino: Tagalog • Dutch: Dutch • Indonesian: Indonesian • Vietnamese: Vietnamese • Arabic: Arabic • Turkish: Turkish • Malay: Malay • Thai: Thai • Finnish: Finnish Default value: UNKNOWN

Parameter	Mandatory	Type	Description
speed_ratio	No	Float	Details: Speaking speed zoom ratio. Constraints: N/A Value range: 0-100 Default value: 1
volume_ratio	No	Float	Details: Volume zoom ratio. Constraints: N/A Value range: 0-100 Default value: 1
is_realtime_voice	No	Boolean	Details: Whether the timbre supports real-time synthesis. Constraints: Timbre that supports real-time synthesis can be used for livestreaming and intelligent interaction. Timbre that does not support real-time synthesis can only be used for video production. Options: • true: Real-time synthesis is supported. • false: Real-time synthesis is not supported. Default value: true
style	No	String	Style reference
external_voice_meta	No	ExternalVoiceAssetMeta object	Third-party TTS timbre metadata.

Parameter	Mandatory	Type	Description
is_support_vc_process	No	Boolean	Whether VC is supported. Default value: false
is_flexus	No	Boolean	Whether the voice is of the Flexus edition. Default value: false

Table 4-68 ExternalVoiceAssetMeta

Parameter	Mandatory	Type	Description
provider	Yes	String	Third-party TTS vendor. Options: • XIMALAYA: Himalaya TTS • HUAWEI_EI: Huawei Cloud EI TTS • MOBVOI: DupDub TTS • AUDIOX: AudioX TTS • SINOVOICE: SinoVoice TTS • DATABAKER: Databaker TTS • AISPEECH: AISpeech TTS

Table 4-69 PPTAssetMeta

Parameter	Mandatory	Type	Description
auto_analysis	No	Boolean	Details: Whether the PowerPoint file needs to be automatically parsed. Constraints: Parsing some complex PowerPoint files or PowerPoint files with a high compression ratio may fail. If the PowerPoint file contains more than 50 pages, only the first 50 pages will be converted. The converted images may not be completely restored. You need to confirm the restoration result. Options: • true: automatic parsing • false: automatic parsing not required Default value: false
ppt_analysis_status	No	String	Details: PowerPoint file parsing status. Constraints: N/A Options: • INITIALIZE: initial • WAITING: waiting for parsing • CONVERTING: parsing... • FAILED: failed • SUCCEEDED: succeeded • CANCELED: canceled Default value: N/A
error_info	No	ErrorResponse object	Error information

Parameter	Mandatory	Type	Description
page_count	No	Integer	Details: Total number of PowerPoint pages. Constraints: N/A Value range: 0-256 Default value: 0
pages	No	Array of PPTPageInfo objects	PPT page image.

Table 4-70 PPTPageInfo

Parameter	Mandatory	Type	Description
page_no	No	Integer	Details: Page number. Constraints: N/A Value range: 1-256
file_id	No	String	Details: ID of the image file of a specified page. Constraints: N/A Options: The value contains 1 to 64 characters. Default value: N/A

Parameter	Mandatory	Type	Description
page_content	No	String	Details: ID of the image file of a specified page Constraints: N/A Options: The value contains 0 to 2,048 characters. Default value: N/A

Table 4-71 AnimationAssetMeta

Parameter	Mandatory	Type	Description
style_id	No	String	Virtual human model style ID.
duration	No	Float	Animation duration. Value range: 0-32767 Default value: 0
auto_analysis	No	Boolean	Indicates whether an action needs to be automatically parsed. Default value: false
voice_delay	No	Float	Delay duration for playing a voice. Unit: second For example, if the entry animation lasts for 3 seconds and voice_delay is set to 4 seconds, the voice is played from the fourth second on after the entry animation starts. Value range: 0-100 Default value: 0

Parameter	Mandatory	Type	Description
animation_insert_restriction	No	String	Limit on the position where an animation is inserted. • ONLY_BEGINNING: During video production, the animation can appear only in the beginning. • ONLY_END: During video production, the animation can appear only in the end.

Table 4-72 SceneAssetMeta

Parameter	Mandatory	Type	Description
components	No	Array of SceneComponentInfo objects	Operable components (such as the screen, light, and camera).
default_configs	No	Map<String, SceneComponentInfo >	Default scene settings (camera position and initial person position).

Table 4-73 SceneComponentInfo

Parameter	Mandatory	Type	Description
index	No	Integer	Component index. Value range: 1-10
component_name	Yes	String	Component name.
component_type	Yes	String	Component type. • CAMERA: camera • PANEL: screen • LIGHT: light
component_desc	No	String	Component description.

Table 4-74 MaterialAssetMeta

Parameter	Mandatory	Type	Description
components	No	Array of MaterialComponentInfo objects	Replaceable material components.

Table 4-75 MaterialComponentInfo

Parameter	Mandatory	Type	Description
component_name	Yes	String	Material component name.
component_type	Yes	String	Material component type. • CLOTHES: clothes • PANTS: pants • SHOES: shoes • HAIR: hair • EYELASH: eyelashes • EYEBROW: eyebrows
component_desc	No	String	Material component description.

Table 4-76 HumanModel2DAssetMeta

Parameter	Mandatory	Type	Description
is_action_editable	No	Boolean	Details: Whether the actions of a virtual avatar can be edited. Constraints: N/A Options: • true: editable • false: not editable Default value: false

Parameter	Mandatory	Type	Description
is_real_backgr ound	No	Boolean	Details: Whether it is a real-scene virtual avatar. Constraints: If yes, the background does not need to be changed. Options: • true: real-scene virtual avatar • false: general virtual avatar without background Default value: false
support_live	No	Boolean	Details: Whether livestreaming is supported. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
model_versio n	No	String	Details: Virtual avatar model version Constraints: N/A Options: • V2: V2 model • V3: V3 model • V3_2: V3.2 model Default value: V2

Parameter	Mandatory	Type	Description
model_resolution	No	String	Details: Virtual avatar model resolution. Constraints: N/A Options: • 1080P: 1080p. 1080p or 720p video can be output. • 4K: 4K. 4K, 1080p, or 720p video can be output. Default value: 1080P
device_names	No	Array of strings	Details: Devices for which compilation tasks have been executed. Constraints: Walking virtual avatars can be used only for video production. Options: A maximum of 16 device names are allowed. A device name contains 1 to 64 characters. Default value: false
is_with_action_library	No	Boolean	Whether the virtual avatar has an atomic action library. NOTE • A virtual avatar with an atomic action library supports choreography. Default value: false
action_tag_map	No	Array of ActionTagInfo objects	Action tag mapping.
is_flexus	No	Boolean	Whether it is a Flexus virtual avatar. Default value: false

Table 4-77 ActionTagInfo

Parameter	Mandatory	Type	Description
action_name_zh	Yes	String	Atomic action name in Chinese.
action_name_en	Yes	String	Atomic action name in English.
catalog	No	String	Action category name.
file_name	No	String	Sample video file name. The value contains 1 to 256 characters.
tag	No	String	Action tag.

Table 4-78 ImageAssetMeta

Parameter	Mandatory	Type	Description
codec	No	String	Details: Image encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A
width	No	Integer	Details: Image width. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196

Parameter	Mandatory	Type	Description
height	No	Integer	Details: Image height. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196
size	No	Number	Details: Image size. Constraints: Automatically extracted. Default value: N/A Value range: 0-9223372036854775807
mode	No	String	Details: Image form. Constraints: Automatically extracted. Options: • Horizontal: horizontal • Vertical: vertical Default value: N/A
error_info	No	ErrorResponse object	Error message

Table 4-79 VideoAssetMeta

Parameter	Mandatory	Type	Description
video_codec	No	String	Details: Video encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A
width	No	Integer	Details: Video image width. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196
height	No	Integer	Details: Video height. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196
frame_rate	No	String	Details: Video frame rate. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A

Parameter	Mandatory	Type	Description
video_bit_rate	No	Integer	Details: Average video bitrate, in kbit/s. Constraints: Automatically extracted. Default value: N/A Value range: 0-104857600
duration	No	Integer	Details: Duration, in second. Constraints: Automatically extracted. Default value: N/A Value range: 0-86400
audio_codec	No	String	Details: Audio encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A
audio_bit_rate	No	Integer	Details: Average audio bitrate, in kbit/s. Constraints: Automatically extracted. Default value: N/A Value range: 0-16384

Parameter	Mandatory	Type	Description
audio_channels	No	Integer	Details: Number of audio channels. Constraints: Automatically extracted. Default value: N/A Value range: 0-100
sample	No	Integer	Details: Sampling rate, in Hz. Constraints: Automatically extracted. Default value: N/A Value range: 0-100000
mode	No	String	Details: Horizontal or vertical display. Constraints: Automatically extracted. Options: • Horizontal: horizontal • Vertical: vertical Default value: N/A
video_transcoding_status	No	String	Details: Video transcoding status. Constraints: Automatically filled. Options: • WAITING: waiting for transcoding • TRANSCODING: transcoding... • FAILED: failed • SUCCEEDED: succeeded Default value: N/A

Parameter	Mandatory	Type	Description
error_info	No	ErrorResponse object	Error message

Table 4-80 AudioAssetMeta

Parameter	Mandatory	Type	Description
duration	No	Integer	Details: Duration, in second. Constraints: Automatically extracted. Default value: N/A Value range: 0-86400
audio_codec	No	String	Details: Audio encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A
audio_bit_rate	No	Integer	Details: Average audio bitrate, in kbit/s. Constraints: Automatically extracted. Default value: N/A Value range: 0-16384

Parameter	Mandatory	Type	Description
audio_channels	No	Integer	Details: Number of audio channels. Constraints: Automatically extracted. Default value: N/A Value range: 0-100
sample	No	Integer	Details: Sampling rate, in Hz. Constraints: Automatically extracted. Default value: N/A Value range: 0-100000
error_info	No	ErrorResponse object	Error message

Table 4-81 ErrorResponse

Parameter	Mandatory	Type	Description
error_code	No	String	Error code.
error_msg	No	String	Error description.

Table 4-82 SystemProperty

Parameter	Mandatory	Type	Description
action	No	String	Details: Operation. Constraints: System properties cannot be modified by common users. Options: • ADD: adding • DELETE: deleting Default value: N/A

Parameter	Mandatory	Type	Description
key	No	String	Details: System property. Constraints: System properties cannot be modified by common users. Options: Public asset property. Options: • BACKGROUND_IMG: 2D background image for video production. Set value to Yes. • CREATED_BY_PLATFORM: whether it is generated by the platform Virtual avatar asset property. Options: • MATERIAL_IMG: material image, which is used as an image layer. Set value to Yes. • MATERIAL_VIDEO: material video, which is used as a video layer. Set value to Yes. • DIGITAL_HUMAN_2D_VIDEO: virtual avatar video • DIGITAL_HUMAN_3D_VIDEO: 3D virtual human video • BUSINESS_CARD_VIDEO: business card video • BUSSINESS_CARD_VIDEO: business card video (expired) • PHOTO_VIDEO: photo-based virtual avatar video Video translation asset property. Options: • TO_BE_TRANSLATED_VIDEO: source video for translation The value can be Yes. • TRANSLATED_VIDEO: translated video

Parameter	Mandatory	Type	Description
			3D virtual human asset attribute. Options: • STYLE_ID: style ID • DH_ID: virtual human ID (not available yet) • PLATFORM_AVAILABLE: whether the platform is available (not available yet) • RENDER_ENGINE: engine type. Set value to UE or MetaEngine. • BACKGROUND_SCENE: 2D background scene for video production. Set value to Horizontal or Vertical. • LAYER_CONFIG_ENABLE: available foreground layer configuration Default value: N/A
value	No	String	Details: System attribute value. Constraints: System properties cannot be modified by common users. Options: The value contains 1 to 1,024 characters. Default value: N/A

Table 4-83 AssetSharedConfig

Parameter	Mandatory	Type	Description
shared_type	No	String	Sharing type. • PRIVATE: accessible only to the current tenant • PUBLIC: accessible to all tenants. Currently, only system assets are accessible to all tenants. • SHARED: accessible to specified tenants, who are specified by the owner.
expire_time	No	String	Time when the sharing expires. The default value is 30 days, that is, 23:59:59 on the day when sharing starts plus 30 days.
allowed_project_ids	No	Array of strings	Tenants allowed to access the asset.

Response Parameters

Status code: 200

Table 4-84 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 4-85 Response body parameters

Parameter	Type	Description
project_id	String	Tenant ID
asset_id	String	Asset ID.
asset_name	String	Asset name.
asset_description	String	Asset description.

Parameter	Type	Description
app_user_id	String	Third-party user ID. NOTE An asset is created by specifying the value of the X-App-UserId header.
create_time	String	Time when an asset is created.
update_time	String	Time when an asset is updated.
asset_type	String	Asset types. Public asset type. Options: VOICE_MODEL: timbre model VIDEO: video file IMAGE: image file PPT: slide file MUSIC: music AUDIO: audio COMMON_FILE: common file Virtual avatar asset type. Options: HUMAN_MODEL_2D: virtual avatar model BUSINESS_CARD_TEMPLAT: business card template 3D virtual human asset type. Options: HUMAN_MODEL: 3D virtual human model SCENE: scene model ANIMATION: animated actions MATERIAL: stylized materials NORMAL_MODEL: normal model

Parameter	Type	Description
asset_state	String	Asset status. • CREATING: The asset is being created. The main file has not been uploaded. • FAILED: Main file upload failed. • UNACTIVED: The main file has been uploaded. The asset is not activated and cannot be used for other services. (Users can update the status.) • ACTIVED: The main file has been uploaded. The asset is activated and can be used for other services. (Users can update the status.) • DELETING: The asset is being deleted. The asset is unavailable but can be restored. • DELETED: The asset has been deleted. The asset is unavailable and cannot be restored. • BLOCK: The asset has been frozen. The asset is unavailable and cannot be viewed. • WAITING_DELETE: The asset will be taken offline.
fail_type	String	Failure causes: • AUTOMATIC_REVIEW_REJECT: Auto review failed. • MANUAL_REVIEW_REJECT: Manual review failed. Default value: AUTOMATIC_REVIEW_REJECT
reason	String	Freezing, unfreezing, and failure causes.
tags	Array of strings	Tags. NOTE Avatar system asset tag definition: • Field: NEWS, BUSINESS, E-COMMERCE, MARKETING, KNOWLEDGE, EDUCATION, SPORTS • Gender: MALE, FEMALE • Posture: FULL-BODY, HALF-BODY, STANDING, SITTING, WALKING • Region: ASIAN, WESTERN, MIDDLE-EASTERNER, AFRICAN, LATINO

Parameter	Type	Description
asset_extra_meta	AssetExtraMeta object	Details: Additional asset metadata. Constraints: Select a structure based on asset_type . Other unmatched structures will be ignored. • HUMAN_MODEL: Enter human_model_meta. • HUMAN_MODEL_2D: Enter human_model_2d_meta. • SCENE: Enter scene_meta. • ANIMATION: Enter animation_meta. • MATERIAL: Enter material_meta. • VOICE_MODEL: Enter voice_model_meta. • VIDEO: Enter video_meta. • IMAGE: Enter image_meta. • PPT: Enter ppt_meta. • AUDIO: Enter audio_meta.
system_properties	Array of SystemProperty objects	Sets system attributes.
files	Array of AssetFileInfo objects	Files under an asset.
asset_order	Integer	Display order Value range: 0-32767
supported_service	Array of strings	Supported service type. Options: • VIDEO_2D: virtual avatar video production • LIVE_2D: virtual avatar livestreaming • CHAT_2D: virtual avatar intelligent interaction

Table 4-86 AssetExtraMeta

Parameter	Type	Description
human_model_meta	HumanModelAssetMeta object	Virtual human model metadata.

Parameter	Type	Description
voice_model_meta	VoiceModelAssetMeta object	Timbre model metadata.
ppt_meta	PPTAssetMeta object	PPT asset metadata information.
animation_meta	AnimationAssetMeta object	Animated action asset metadata.
scene_meta	SceneAssetMeta object	Scenario metadata.
material_meta	MaterialAssetMeta object	Material metadata.
human_model_2d_meta	HumanModel2DAssetMeta object	Virtual avatar model metadata
image_meta	ImageAssetMeta object	Image metadata
video_meta	VideoAssetMeta object	Video metadata, which is automatically extracted.
audio_meta	AudioAssetMeta object	Audio metadata, which is automatically extracted.

Table 4-87 HumanModelAssetMeta

Parameter	Type	Description
style_id	String	Details: Virtual human model style ID. Constraints: Currently, only the preset styles are supported. Options: • system_male_001: male style 01 • system_female_001: female style 01 • system_male_002: male style 02 • system_female_002: female style 02 Default value: N/A

Parameter	Type	Description
modeling_type	String	Details: Virtual human modeling type. Constraints: N/A Options: • UPLOADED: model uploaded by a tenant • PICTURE_MODELING: model generated from a photo • CHARACTER_CUSTOMIZATION_MODELING: model generated through face avatar creation Default value: UPLOADED
modeling_job_id	String	Details: Modeling task ID. Constraints: This parameter is automatically specified only when it is a model generated by MetaStudio. Options: The value contains 0 to 64 characters. Default value: N/A
model_properties	HumanModelMetaProperties object	Records model configuration information.
components	Array of ComponentInfo objects	Replaceable components.

Table 4-88 HumanModelMetaProperties

Parameter	Type	Description
whole_model_base_file_id	String	Details: Model file_id used to generate WHOLE_MODEL Constraints: If the recorded information is the same as the value of file_id in the main file, the model has been generated and there is no need to export the entire model. Options: The value contains 0 to 64 characters. Default value: N/A
load_model_file_id	String	Details: Model file_id used for rendering. Constraints: If the value is empty or no match is found, the main file is used. Options: The value contains 0 to 64 characters. Default value: N/A

Table 4-89 ComponentInfo

Parameter	Type	Description
component_name	String	Details: Component name. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A

Parameter	Type	Description
component_type	String	Details: Component type. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
component_desc	String	Details: Component description. Constraints: N/A Options: The value contains 0 to 512 characters. Default value: N/A

Table 4-90 VoiceModelAssetMeta

Parameter	Type	Description
order	Integer	Details: Display order. Constraints: N/A Value range: 0-32767 Default value: 999
model_type	String	Details: Voice asset type. Constraints: N/A Options: ● COMMON: general emotion model ● CLONE: voice cloning model Default value: CLONE

Parameter	Type	Description
sex	String	Details: Voice gender. Constraints: N/A Options: • UNKNOWN: voice of an unknown gender • MALE: male voice • FEMALE: female voice Default value: UNKNOWN

Parameter	Type	Description
language	String	Details: Voice language. Constraints: N/A Options: • UNKNOWN: unknown • CN: Chinese • EN: English • GER: German • fr: French • Kr: Korean • por: Portuguese • JPN: Japanese • Ita: Italian • ESP: Spanish • DBH: Northeast China dialect • GT: Hong Kong & Taiwan dialect • GXH: Guangxi dialect • HBH: Hubei dialect • SXH: Shaanxi dialect • SCH: Sichuan dialect • YY: Cantonese • Russian: Russian • Filipino: Tagalog • Dutch: Dutch • Indonesian: Indonesian • Vietnamese: Vietnamese • Arabic: Arabic • Turkish: Turkish • Malay: Malay • Thai: Thai • Finnish: Finnish Default value: UNKNOWN

Parameter	Type	Description
speed_ratio	Float	Details: Speaking speed zoom ratio. Constraints: N/A Value range: 0-100 Default value: 1
volume_ratio	Float	Details: Volume zoom ratio. Constraints: N/A Value range: 0-100 Default value: 1
is_realtime_voice	Boolean	Details: Whether the timbre supports real-time synthesis. Constraints: Timbre that supports real-time synthesis can be used for livestreaming and intelligent interaction. Timbre that does not support real-time synthesis can only be used for video production. Options: ● true: Real-time synthesis is supported. ● false: Real-time synthesis is not supported. Default value: true
style	String	Style reference
voice_capability	VoiceCapability object	Capability set supported by the timbre asset. NOTE The timbre capability set can be queried but cannot be configured.
external_voice_meta	ExternalVoiceAssetMeta object	Third-party TTS timbre metadata.

Parameter	Type	Description
is_support_vc_process	Boolean	Whether VC is supported. Default value: false
is_flexus	Boolean	Whether the voice is of the Flexus edition. Default value: false

Table 4-91 VoiceCapability

Parameter	Type	Description
is_support_phoneme_en	Boolean	Details: Whether the voice supports English phonetics. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_phoneme	Boolean	Details: Whether the voice supports Chinese multi-pronunciation words. Constraints: N/A Options: • true: supported • false: unsupported Default value: false

Parameter	Type	Description
is_support_break_time	Boolean	Details: Whether the voice supports pauses. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_break_strength	Boolean	Details: Whether the voice supports rhythm. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_speed	Boolean	Details: Whether the voice supports global speaking speed. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_prosody	Boolean	Details: Whether the voice supports local speaking speed. Constraints: N/A Options: • true: supported • false: unsupported Default value: false

Parameter	Type	Description
is_support_ssml_say_as	Boolean	Details: Whether the voice supports say-as SSML tags. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_ssml_sub	Boolean	Details: Whether the voice supports sub SSML tags. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_word	Boolean	Details: Whether the voice supports continuous reading. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_voice_cache	Boolean	Whether cache is supported. Default value: false

Parameter	Type	Description
conversion_rate	Float	Details: Synthesis rate. Constraints: N/A Options: • 0-50 Value range: 0-50 Default value: 0.0
conversion_rate_en	Float	Details: Synthesis rate of English. Constraints: N/A Options: • 0-50 Value range: 0-50 Default value: 0.0
is_support_srt	Boolean	Indicates whether to generate STR subtitle files. Default value: false

Table 4-92 ExternalVoiceAssetMeta

Parameter	Type	Description
provider	String	Third-party TTS vendor. Options: • XIMALAYA: Himalaya TTS • HUAWEI_EI: Huawei Cloud EI TTS • MOBVOI: DupDub TTS • AUDIOX: AudioX TTS • SINOVOICE: SinoVoice TTS • DATABAKER: Databaker TTS • AISPEECH: AISpeech TTS

Table 4-93 PPTAssetMeta

Parameter	Type	Description
auto_analysis	Boolean	Details: Whether the PowerPoint file needs to be automatically parsed. Constraints: Parsing some complex PowerPoint files or PowerPoint files with a high compression ratio may fail. If the PowerPoint file contains more than 50 pages, only the first 50 pages will be converted. The converted images may not be completely restored. You need to confirm the restoration result. Options: • true: automatic parsing • false: automatic parsing not required Default value: false
ppt_analysis_status	String	Details: PowerPoint file parsing status. Constraints: N/A Options: • INITIALIZE: initial • WAITING: waiting for parsing • CONVERTING: parsing... • FAILED: failed • SUCCEEDED: succeeded • CANCELED: canceled Default value: N/A
error_info	ErrorResponse object	Error information

Parameter	Type	Description
page_count	Integer	Details: Total number of PowerPoint pages. Constraints: N/A Value range: 0-256 Default value: 0
pages	Array of PPTPageInfo objects	PPT page image.

Table 4-94 PPTPageInfo

Parameter	Type	Description
page_no	Integer	Details: Page number. Constraints: N/A Value range: 1-256
file_id	String	Details: ID of the image file of a specified page. Constraints: N/A Options: The value contains 1 to 64 characters. Default value: N/A
page_content	String	Details: ID of the image file of a specified page Constraints: N/A Options: The value contains 0 to 2,048 characters. Default value: N/A

Table 4-95 AnimationAssetMeta

Parameter	Type	Description
style_id	String	Virtual human model style ID.
duration	Float	Animation duration. Value range: 0-32767 Default value: 0
auto_analysis	Boolean	Indicates whether an action needs to be automatically parsed. Default value: false
voice_delay	Float	Delay duration for playing a voice. Unit: second For example, if the entry animation lasts for 3 seconds and voice_delay is set to 4 seconds, the voice is played from the fourth second on after the entry animation starts. Value range: 0-100 Default value: 0
animation_insert_restriction	String	Limit on the position where an animation is inserted. ● ONLY_BEGINNING: During video production, the animation can appear only in the beginning. ● ONLY_END: During video production, the animation can appear only in the end.

Table 4-96 SceneAssetMeta

Parameter	Type	Description
components	Array of SceneComponentInfo objects	Operable components (such as the screen, light, and camera).
default_configs	Map<String, SceneComponentInfo >	Default scene settings (camera position and initial person position).

Table 4-97 SceneComponentInfo

Parameter	Type	Description
index	Integer	Component index. Value range: 1-10
component_name	String	Component name.
component_type	String	Component type. ● CAMERA: camera ● PANEL: screen ● LIGHT: light
component_desc	String	Component description.

Table 4-98 MaterialAssetMeta

Parameter	Type	Description
components	Array of MaterialComponentInfo objects	Replaceable material components.

Table 4-99 MaterialComponentInfo

Parameter	Type	Description
component_name	String	Material component name.
component_type	String	Material component type. ● CLOTHES: clothes ● PANTS: pants ● SHOES: shoes ● HAIR: hair ● EYELASH: eyelashes ● EYEBROW: eyebrows
component_desc	String	Material component description.

Table 4-100 HumanModel2DAssetMeta

Parameter	Type	Description
is_action_editable	Boolean	Details: Whether the actions of a virtual avatar can be edited. Constraints: N/A Options: • true: editable • false: not editable Default value: false
is_real_background	Boolean	Details: Whether it is a real-scene virtual avatar. Constraints: If yes, the background does not need to be changed. Options: • true: real-scene virtual avatar • false: general virtual avatar without background Default value: false
support_live	Boolean	Details: Whether livestreaming is supported. Constraints: N/A Options: • true: supported • false: unsupported Default value: false

Parameter	Type	Description
model_version	String	Details: Virtual avatar model version Constraints: N/A Options: • V2: V2 model • V3: V3 model • V3_2: V3.2 model Default value: V2
model_resolution	String	Details: Virtual avatar model resolution. Constraints: N/A Options: • 1080P: 1080p. 1080p or 720p video can be output. • 4K: 4K. 4K, 1080p, or 720p video can be output. Default value: 1080P
device_names	Array of strings	Details: Devices for which compilation tasks have been executed. Constraints: Walking virtual avatars can be used only for video production. Options: A maximum of 16 device names are allowed. A device name contains 1 to 64 characters. Default value: false
is_with_action_library	Boolean	Whether the virtual avatar has an atomic action library. NOTE • A virtual avatar with an atomic action library supports choreography. Default value: false

Parameter	Type	Description
action_tag_map	Array of ActionTagInfo objects	Action tag mapping.
is_flexus	Boolean	Whether it is a Flexus virtual avatar. Default value: false

Table 4-101 ActionTagInfo

Parameter	Type	Description
action_name_zh	String	Atomic action name in Chinese.
action_name_en	String	Atomic action name in English.
catalog	String	Action category name.
file_name	String	Sample video file name. The value contains 1 to 256 characters.
tag	String	Action tag.

Table 4-102 ImageAssetMeta

Parameter	Type	Description
codec	String	Details: Image encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A

Parameter	Type	Description
width	Integer	Details: Image width. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196
height	Integer	Details: Image height. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196
size	Number	Details: Image size. Constraints: Automatically extracted. Default value: N/A Value range: 0-9223372036854775807
mode	String	Details: Image form. Constraints: Automatically extracted. Options: • Horizontal: horizontal • Vertical: vertical Default value: N/A
error_info	ErrorResponse object	Error message

Table 4-103 VideoAssetMeta

Parameter	Type	Description
video_codec	String	Details: Video encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A
width	Integer	Details: Video image width. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196
height	Integer	Details: Video height. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196
frame_rate	String	Details: Video frame rate. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A

Parameter	Type	Description
video_bit_rate	Integer	Details: Average video bitrate, in kbit/s. Constraints: Automatically extracted. Default value: N/A Value range: 0-104857600
duration	Integer	Details: Duration, in second. Constraints: Automatically extracted. Default value: N/A Value range: 0-86400
audio_codec	String	Details: Audio encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A
audio_bit_rate	Integer	Details: Average audio bitrate, in kbit/s. Constraints: Automatically extracted. Default value: N/A Value range: 0-16384

Parameter	Type	Description
audio_channels	Integer	Details: Number of audio channels. Constraints: Automatically extracted. Default value: N/A Value range: 0-100
sample	Integer	Details: Sampling rate, in Hz. Constraints: Automatically extracted. Default value: N/A Value range: 0-100000
mode	String	Details: Horizontal or vertical display. Constraints: Automatically extracted. Options: • Horizontal: horizontal • Vertical: vertical Default value: N/A
video_transcoding_status	String	Details: Video transcoding status. Constraints: Automatically filled. Options: • WAITING: waiting for transcoding • TRANSCODING: transcoding... • FAILED: failed • SUCCEEDED: succeeded Default value: N/A

Parameter	Type	Description
error_info	ErrorResponse object	Error message

Table 4-104 AudioAssetMeta

Parameter	Type	Description
duration	Integer	Details: Duration, in second. Constraints: Automatically extracted. Default value: N/A Value range: 0-86400
audio_codec	String	Details: Audio encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A
audio_bit_rate	Integer	Details: Average audio bitrate, in kbit/s. Constraints: Automatically extracted. Default value: N/A Value range: 0-16384

Parameter	Type	Description
audio_channels	Integer	Details: Number of audio channels. Constraints: Automatically extracted. Default value: N/A Value range: 0-100
sample	Integer	Details: Sampling rate, in Hz. Constraints: Automatically extracted. Default value: N/A Value range: 0-100000
error_info	ErrorResponse object	Error message

Table 4-105 ErrorResponse

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Table 4-106 SystemProperty

Parameter	Type	Description
action	String	Details: Operation. Constraints: System properties cannot be modified by common users. Options: • ADD: adding • DELETE: deleting Default value: N/A

Parameter	Type	Description
key	String	Details: System property. Constraints: System properties cannot be modified by common users. Options: Public asset property. Options: • BACKGROUND_IMG: 2D background image for video production. Set value to Yes. • CREATED_BY_PLATFORM: whether it is generated by the platform Virtual avatar asset property. Options: • MATERIAL_IMG: material image, which is used as an image layer. Set value to Yes. • MATERIAL_VIDEO: material video, which is used as a video layer. Set value to Yes. • DIGITAL_HUMAN_2D_VIDEO: virtual avatar video • DIGITAL_HUMAN_3D_VIDEO: 3D virtual human video • BUSINESS_CARD_VIDEO: business card video • BUSSINESS_CARD_VIDEO: business card video (expired) • PHOTO_VIDEO: photo-based virtual avatar video Video translation asset property. Options: • TO_BE_TRANSLATED_VIDEO: source video for translation The value can be Yes. • TRANSLATED_VIDEO: translated video 3D virtual human asset attribute. Options: • STYLE_ID: style ID • DH_ID: virtual human ID (not available yet) • PLATFORM_AVAILABLE: whether the platform is available (not available yet) • RENDER_ENGINE: engine type. Set value to UE or MetaEngine. • BACKGROUND_SCENE: 2D background scene for video production. Set value to Horizontal or Vertical. • LAYER_CONFIG_ENABLE: available foreground layer configuration

Parameter	Type	Description
		Default value: N/A
value	String	Details: System attribute value. Constraints: System properties cannot be modified by common users. Options: The value contains 1 to 1,024 characters. Default value: N/A

Table 4-107 AssetFileInfo

Parameter	Type	Description
file_id	String	File ID.
file_name	String	The file name is case-insensitive and can contain 1 to 256 characters.
file_md5	String	MD5 value of the file content. The value must contain 24 characters.
file_size	Long	Total file size. The value ranges from 1 to 5368709120. Value range: 1-5368709120
file_type	String	File type (the file name extension is extracted by default).

Parameter	Type	Description
asset_file_category	String	File category in an asset. Each type of asset has different file categories. • MAIN: main file • COVER: thumbnail file • PAGE: content page image • SAMPLE: sample audio • OTHER: other files • WHOLE_MODEL: full model • USER_MODIFIED_MODEL: model uploaded by a user. NOTE • When the asset type is SCENE, ANIMATION, VIDEO, IMAGE, or MATERIAL, categories are MAIN, COVER, and OTHER. • When the asset type is PPT, categories are MAIN, COVER, PAGE, and OTHER. • When the asset type is HUMAN_MODEL, categories are MAIN, COVER, and OTHER. • When the asset type is VOICE_MODEL, categories are MAIN, SAMPLE (sample audio file), and OTHER. • When the asset type is HUMAN_MODEL_2D, categories are MAIN, COVER, SAMPLE (sample action), and OTHER (mask file). • When the asset type is BUSINESS_CARD_TEMPLAT, categories are MAIN and COVER (business card demo).
download_url	String	File download URL, which is valid for 24 hours.
state	String	File status. Options: • CREATING: being uploaded • CREATED: uploaded (auto approved) • FAILED: upload failed • CANCELLED: upload cancelled • DELETING: being deleted • DELETED: deleted • UPLOADED: uploaded (not approved yet) • REVIEW: manual review (uploaded) • BLOCK: frozen
reason	String	Rejection reason.
file_extra_metadata	FileExtraMetadata object	File data.

Table 4-108 FileExtraMeta

Parameter	Type	Description
video_transcoding_status	String	Video transcoding status. • WAITING • TRANSCODING • FAILED • SUCCEEDED

Status code: 400**Table 4-109** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

PUT https://{endpoint}/v1/6a6a1f8354f64dd9b9a614def7b59d83/digital-assets/93769b5a-c8c6-4692-9c95-53933a1f0c93

```
{
  "asset_name": "Sara Model",
  "asset_description": "Virtual employee",
  "asset_type": "HUMAN_MODEL",
  "tags": [ "Virtual employee" ]
}
```

Example Responses

Status code: 200

Successful.

```
{
  "asset_id": "93769b5a-c8c6-4692-9c95-53933a1f0c93",
  "asset_name": "Male Teacher",
  "asset_description": "Male teacher model.",
  "create_time": "2021-10-30T12:30:35Z",
  "asset_type": "HUMAN_MODEL",
  "asset_state": "ACTIVED",
  "files": [ {
    "file_id": "24bad716-87b1-45e5-8912-6102f7693265",
    "file_name": "male001.bin",
    "file_md5": "38b8c2c1093dd0fec383a9d9ac940515",
    "file_size": 31032142,
    "file_type": "bin",
    "asset_file_category": "MAIN",
    "download_url": "https://{endpoint}:443/05a8ae5925000fb72f83c0091083231a/ca40212e1cdb64ab5f74446bcd8eb9/model/image/24bad716-87b1-45e5-8912-6102f7693265.bin?AccessKeyId=F8DE4LGO7EOYY0CM9ERJ&Expires=1657527524&Signature=BWgSQpc4IMFFrtj2ae67fw679%2Bc%3D"
  }, {

```

```
{
  "file_id" : "6dd0c018-7b8e-46aa-8a45-3075c161c500",
  "file_name" : "male001.png",
  "file_md5" : "38b8c2c1093dd0fec383a9d9ac940515",
  "file_size" : 110321,
  "file_type" : "png",
  "asset_file_category" : "COVER",
  "download_url" : "https://{endpoint}:443/05a8ae5925000fb72f83c0091083231a/
ca40212e1cdb64ab5f74446bcd8eb9/model/image/6dd0c018-7b8e-46aa-8a45-3075c161c500.png?
AccessKeyId=F8DE4LGO7EOYY0CM9ERJ&Expires=1657527524&Signature=BWgSQpc4IMFFrtj2ae67fw679%2
Bc%3D"
}
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status Codes

Status Code	Description
200	Successful.
400	Parameters error, including the error code and its description.

Error Codes

See [Error Codes](#).

4.1.4 Deleting an Asset

Function

Deletes media assets from the asset library. When this API is called, the media asset is moved to the recycle bin and is not permanently deleted. To permanently delete the asset, add **mode=force**.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v1/{project_id}/digital-assets/{asset_id}

Table 4-110 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
asset_id	Yes	String	Asset ID.

Table 4-111 Query Parameters

Parameter	Mandatory	Type	Description
mode	No	String	Deletion mode.

Request Parameters

Table 4-112 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 4-113 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Status code: 400**Table 4-114** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
DELETE https://{endpoint}/v1/6a6a1f8354f64dd9b9a614def7b59d83/digital-assets/93769b5a-  
c8c6-4692-9c95-53933a1f0c93
```

Example Responses

Status code: 400

```
{  
  "error_code" : "MSS.00000003",  
  "error_msg" : "Invalid parameter"  
}
```

Status Codes

Status Code	Description
200	Successful.
400	Parameters error, including the error code and its description.

Error Codes

See [Error Codes](#).

4.1.5 Querying Asset Details

Function

You can query details about a specified media asset in the asset library.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/digital-assets/{asset_id}

Table 4-115 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
asset_id	Yes	String	Asset ID.

Request Parameters

Table 4-116 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 4-117 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 4-118 Response body parameters

Parameter	Type	Description
project_id	String	Tenant ID
asset_id	String	Asset ID.
asset_name	String	Asset name.
asset_description	String	Asset description.
app_user_id	String	Third-party user ID. NOTE An asset is created by specifying the value of the X-App-UserId header.
create_time	String	Time when an asset is created.
update_time	String	Time when an asset is updated.
asset_type	String	Asset types. Public asset type. Options: VOICE_MODEL: timbre model VIDEO: video file IMAGE: image file PPT: slide file MUSIC: music AUDIO: audio COMMON_FILE: common file Virtual avatar asset type. Options: HUMAN_MODEL_2D: virtual avatar model BUSINESS_CARD_TEMPLAT: business card template 3D virtual human asset type. Options: HUMAN_MODEL: 3D virtual human model SCENE: scene model ANIMATION: animated actions MATERIAL: stylized materials NORMAL_MODEL: normal model

Parameter	Type	Description
asset_state	String	Asset status. • CREATING: The asset is being created. The main file has not been uploaded. • FAILED: Main file upload failed. • UNACTIVED: The main file has been uploaded. The asset is not activated and cannot be used for other services. (Users can update the status.) • ACTIVED: The main file has been uploaded. The asset is activated and can be used for other services. (Users can update the status.) • DELETING: The asset is being deleted. The asset is unavailable but can be restored. • DELETED: The asset has been deleted. The asset is unavailable and cannot be restored. • BLOCK: The asset has been frozen. The asset is unavailable and cannot be viewed. • WAITING_DELETE: The asset will be taken offline.
fail_type	String	Failure causes: • AUTOMATIC_REVIEW_REJECT: Auto review failed. • MANUAL_REVIEW_REJECT: Manual review failed. Default value: AUTOMATIC_REVIEW_REJECT
reason	String	Freezing, unfreezing, and failure causes.
tags	Array of strings	Tags. NOTE Avatar system asset tag definition: • Field: NEWS, BUSINESS, E-COMMERCE, MARKETING, KNOWLEDGE, EDUCATION, SPORTS • Gender: MALE, FEMALE • Posture: FULL-BODY, HALF-BODY, STANDING, SITTING, WALKING • Region: ASIAN, WESTERN, MIDDLE-EASTERNER, AFRICAN, LATINO

Parameter	Type	Description
asset_extra_meta	AssetExtraMeta object	Details: Additional asset metadata. Constraints: Select a structure based on asset_type . Other unmatched structures will be ignored. • HUMAN_MODEL: Enter human_model_meta. • HUMAN_MODEL_2D: Enter human_model_2d_meta. • SCENE: Enter scene_meta. • ANIMATION: Enter animation_meta. • MATERIAL: Enter material_meta. • VOICE_MODEL: Enter voice_model_meta. • VIDEO: Enter video_meta. • IMAGE: Enter image_meta. • PPT: Enter ppt_meta. • AUDIO: Enter audio_meta.
system_properties	Array of SystemProperty objects	Sets system attributes.
files	Array of AssetFileInfo objects	Files under an asset.
asset_order	Integer	Display order Value range: 0-32767
supported_service	Array of strings	Supported service type. Options: • VIDEO_2D: virtual avatar video production • LIVE_2D: virtual avatar livestreaming • CHAT_2D: virtual avatar intelligent interaction

Table 4-119 AssetExtraMeta

Parameter	Type	Description
human_model_meta	HumanModelAssetMeta object	Virtual human model metadata.

Parameter	Type	Description
voice_model_meta	VoiceModelAssetMeta object	Timbre model metadata.
ppt_meta	PPTAssetMeta object	PPT asset metadata information.
animation_meta	AnimationAssetMeta object	Animated action asset metadata.
scene_meta	SceneAssetMeta object	Scenario metadata.
material_meta	MaterialAssetMeta object	Material metadata.
human_model_2d_meta	HumanModel2DAssetMeta object	Virtual avatar model metadata
image_meta	ImageAssetMeta object	Image metadata
video_meta	VideoAssetMeta object	Video metadata, which is automatically extracted.
audio_meta	AudioAssetMeta object	Audio metadata, which is automatically extracted.

Table 4-120 HumanModelAssetMeta

Parameter	Type	Description
style_id	String	Details: Virtual human model style ID. Constraints: Currently, only the preset styles are supported. Options: • system_male_001: male style 01 • system_female_001: female style 01 • system_male_002: male style 02 • system_female_002: female style 02 Default value: N/A

Parameter	Type	Description
modeling_type	String	Details: Virtual human modeling type. Constraints: N/A Options: ● UPLOADED: model uploaded by a tenant ● PICTURE_MODELING: model generated from a photo ● CHARACTER_CUSTOMIZATION_MODELING: model generated through face avatar creation Default value: UPLOADED
modeling_job_id	String	Details: Modeling task ID. Constraints: This parameter is automatically specified only when it is a model generated by MetaStudio. Options: The value contains 0 to 64 characters. Default value: N/A
model_properties	HumanModelMetaProperties object	Records model configuration information.
components	Array of ComponentInfo objects	Replaceable components.

Table 4-121 HumanModelMetaProperties

Parameter	Type	Description
whole_model_base_file_id	String	Details: Model file_id used to generate WHOLE_MODEL Constraints: If the recorded information is the same as the value of file_id in the main file, the model has been generated and there is no need to export the entire model. Options: The value contains 0 to 64 characters. Default value: N/A
load_model_file_id	String	Details: Model file_id used for rendering. Constraints: If the value is empty or no match is found, the main file is used. Options: The value contains 0 to 64 characters. Default value: N/A

Table 4-122 ComponentInfo

Parameter	Type	Description
component_name	String	Details: Component name. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A

Parameter	Type	Description
component_type	String	Details: Component type. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
component_desc	String	Details: Component description. Constraints: N/A Options: The value contains 0 to 512 characters. Default value: N/A

Table 4-123 VoiceModelAssetMeta

Parameter	Type	Description
order	Integer	Details: Display order. Constraints: N/A Value range: 0-32767 Default value: 999
model_type	String	Details: Voice asset type. Constraints: N/A Options: ● COMMON: general emotion model ● CLONE: voice cloning model Default value: CLONE

Parameter	Type	Description
sex	String	Details: Voice gender. Constraints: N/A Options: • UNKNOWN: voice of an unknown gender • MALE: male voice • FEMALE: female voice Default value: UNKNOWN

Parameter	Type	Description
language	String	Details: Voice language. Constraints: N/A Options: • UNKNOWN: unknown • CN: Chinese • EN: English • GER: German • fr: French • Kr: Korean • por: Portuguese • JPN: Japanese • Ita: Italian • ESP: Spanish • DBH: Northeast China dialect • GT: Hong Kong & Taiwan dialect • GXH: Guangxi dialect • HBH: Hubei dialect • SXH: Shaanxi dialect • SCH: Sichuan dialect • YY: Cantonese • Russian: Russian • Filipino: Tagalog • Dutch: Dutch • Indonesian: Indonesian • Vietnamese: Vietnamese • Arabic: Arabic • Turkish: Turkish • Malay: Malay • Thai: Thai • Finnish: Finnish Default value: UNKNOWN

Parameter	Type	Description
speed_ratio	Float	Details: Speaking speed zoom ratio. Constraints: N/A Value range: 0-100 Default value: 1
volume_ratio	Float	Details: Volume zoom ratio. Constraints: N/A Value range: 0-100 Default value: 1
is_realtime_voice	Boolean	Details: Whether the timbre supports real-time synthesis. Constraints: Timbre that supports real-time synthesis can be used for livestreaming and intelligent interaction. Timbre that does not support real-time synthesis can only be used for video production. Options: ● true: Real-time synthesis is supported. ● false: Real-time synthesis is not supported. Default value: true
style	String	Style reference
voice_capability	VoiceCapability object	Capability set supported by the timbre asset. NOTE The timbre capability set can be queried but cannot be configured.
external_voice_meta	ExternalVoiceAssetMeta object	Third-party TTS timbre metadata.

Parameter	Type	Description
is_support_vc_process	Boolean	Whether VC is supported. Default value: false
is_flexus	Boolean	Whether the voice is of the Flexus edition. Default value: false

Table 4-124 VoiceCapability

Parameter	Type	Description
is_support_phoneme_en	Boolean	Details: Whether the voice supports English phonetics. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_phoneme	Boolean	Details: Whether the voice supports Chinese multi-pronunciation words. Constraints: N/A Options: • true: supported • false: unsupported Default value: false

Parameter	Type	Description
is_support_break_time	Boolean	Details: Whether the voice supports pauses. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_break_strength	Boolean	Details: Whether the voice supports rhythm. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_speed	Boolean	Details: Whether the voice supports global speaking speed. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_prosody	Boolean	Details: Whether the voice supports local speaking speed. Constraints: N/A Options: • true: supported • false: unsupported Default value: false

Parameter	Type	Description
is_support_ssml_say_as	Boolean	Details: Whether the voice supports say-as SSML tags. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_ssml_sub	Boolean	Details: Whether the voice supports sub SSML tags. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_word	Boolean	Details: Whether the voice supports continuous reading. Constraints: N/A Options: • true: supported • false: unsupported Default value: false
is_support_voice_cache	Boolean	Whether cache is supported. Default value: false

Parameter	Type	Description
conversion_rate	Float	Details: Synthesis rate. Constraints: N/A Options: • 0-50 Value range: 0-50 Default value: 0.0
conversion_rate_en	Float	Details: Synthesis rate of English. Constraints: N/A Options: • 0-50 Value range: 0-50 Default value: 0.0
is_support_srt	Boolean	Indicates whether to generate STR subtitle files. Default value: false

Table 4-125 ExternalVoiceAssetMeta

Parameter	Type	Description
provider	String	Third-party TTS vendor. Options: • XIMALAYA: Himalaya TTS • HUAWEI_EI: Huawei Cloud EI TTS • MOBVOI: DupDub TTS • AUDIOX: AudioX TTS • SINOVOICE: SinoVoice TTS • DATABAKER: Databaker TTS • AISPEECH: AISpeech TTS

Table 4-126 PPTAssetMeta

Parameter	Type	Description
auto_analysis	Boolean	Details: Whether the PowerPoint file needs to be automatically parsed. Constraints: Parsing some complex PowerPoint files or PowerPoint files with a high compression ratio may fail. If the PowerPoint file contains more than 50 pages, only the first 50 pages will be converted. The converted images may not be completely restored. You need to confirm the restoration result. Options: • true: automatic parsing • false: automatic parsing not required Default value: false
ppt_analysis_status	String	Details: PowerPoint file parsing status. Constraints: N/A Options: • INITIALIZE: initial • WAITING: waiting for parsing • CONVERTING: parsing... • FAILED: failed • SUCCEEDED: succeeded • CANCELED: canceled Default value: N/A
error_info	ErrorResponse object	Error information

Parameter	Type	Description
page_count	Integer	Details: Total number of PowerPoint pages. Constraints: N/A Value range: 0-256 Default value: 0
pages	Array of PPTPageInfo objects	PPT page image.

Table 4-127 PPTPageInfo

Parameter	Type	Description
page_no	Integer	Details: Page number. Constraints: N/A Value range: 1-256
file_id	String	Details: ID of the image file of a specified page. Constraints: N/A Options: The value contains 1 to 64 characters. Default value: N/A
page_content	String	Details: ID of the image file of a specified page Constraints: N/A Options: The value contains 0 to 2,048 characters. Default value: N/A

Table 4-128 AnimationAssetMeta

Parameter	Type	Description
style_id	String	Virtual human model style ID.
duration	Float	Animation duration. Value range: 0-32767 Default value: 0
auto_analysis	Boolean	Indicates whether an action needs to be automatically parsed. Default value: false
voice_delay	Float	Delay duration for playing a voice. Unit: second For example, if the entry animation lasts for 3 seconds and voice_delay is set to 4 seconds, the voice is played from the fourth second on after the entry animation starts. Value range: 0-100 Default value: 0
animation_insert_restriction	String	Limit on the position where an animation is inserted. ● ONLY_BEGINNING: During video production, the animation can appear only in the beginning. ● ONLY_END: During video production, the animation can appear only in the end.

Table 4-129 SceneAssetMeta

Parameter	Type	Description
components	Array of SceneComponentInfo objects	Operable components (such as the screen, light, and camera).
default_configs	Map<String, SceneComponentInfo >	Default scene settings (camera position and initial person position).

Table 4-130 SceneComponentInfo

Parameter	Type	Description
index	Integer	Component index. Value range: 1-10
component_name	String	Component name.
component_type	String	Component type. ● CAMERA: camera ● PANEL: screen ● LIGHT: light
component_desc	String	Component description.

Table 4-131 MaterialAssetMeta

Parameter	Type	Description
components	Array of MaterialComponentInfo objects	Replaceable material components.

Table 4-132 MaterialComponentInfo

Parameter	Type	Description
component_name	String	Material component name.
component_type	String	Material component type. ● CLOTHES: clothes ● PANTS: pants ● SHOES: shoes ● HAIR: hair ● EYELASH: eyelashes ● EYEBROW: eyebrows
component_desc	String	Material component description.

Table 4-133 HumanModel2DAssetMeta

Parameter	Type	Description
is_action_editable	Boolean	Details: Whether the actions of a virtual avatar can be edited. Constraints: N/A Options: • true: editable • false: not editable Default value: false
is_real_background	Boolean	Details: Whether it is a real-scene virtual avatar. Constraints: If yes, the background does not need to be changed. Options: • true: real-scene virtual avatar • false: general virtual avatar without background Default value: false
support_live	Boolean	Details: Whether livestreaming is supported. Constraints: N/A Options: • true: supported • false: unsupported Default value: false

Parameter	Type	Description
model_version	String	Details: Virtual avatar model version Constraints: N/A Options: • V2: V2 model • V3: V3 model • V3_2: V3.2 model Default value: V2
model_resolution	String	Details: Virtual avatar model resolution. Constraints: N/A Options: • 1080P: 1080p. 1080p or 720p video can be output. • 4K: 4K. 4K, 1080p, or 720p video can be output. Default value: 1080P
device_names	Array of strings	Details: Devices for which compilation tasks have been executed. Constraints: Walking virtual avatars can be used only for video production. Options: A maximum of 16 device names are allowed. A device name contains 1 to 64 characters. Default value: false
is_with_action_library	Boolean	Whether the virtual avatar has an atomic action library. NOTE • A virtual avatar with an atomic action library supports choreography. Default value: false

Parameter	Type	Description
action_tag_map	Array of ActionTagInfo objects	Action tag mapping.
is_flexus	Boolean	Whether it is a Flexus virtual avatar. Default value: false

Table 4-134 ActionTagInfo

Parameter	Type	Description
action_name_zh	String	Atomic action name in Chinese.
action_name_en	String	Atomic action name in English.
catalog	String	Action category name.
file_name	String	Sample video file name. The value contains 1 to 256 characters.
tag	String	Action tag.

Table 4-135 ImageAssetMeta

Parameter	Type	Description
codec	String	Details: Image encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A

Parameter	Type	Description
width	Integer	Details: Image width. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196
height	Integer	Details: Image height. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196
size	Number	Details: Image size. Constraints: Automatically extracted. Default value: N/A Value range: 0-9223372036854775807
mode	String	Details: Image form. Constraints: Automatically extracted. Options: • Horizontal: horizontal • Vertical: vertical Default value: N/A
error_info	ErrorResponse object	Error message

Table 4-136 VideoAssetMeta

Parameter	Type	Description
video_codec	String	Details: Video encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A
width	Integer	Details: Video image width. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196
height	Integer	Details: Video height. Constraints: Automatically extracted. Default value: N/A Value range: 0-8196
frame_rate	String	Details: Video frame rate. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A

Parameter	Type	Description
video_bit_rate	Integer	Details: Average video bitrate, in kbit/s. Constraints: Automatically extracted. Default value: N/A Value range: 0-104857600
duration	Integer	Details: Duration, in second. Constraints: Automatically extracted. Default value: N/A Value range: 0-86400
audio_codec	String	Details: Audio encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A
audio_bit_rate	Integer	Details: Average audio bitrate, in kbit/s. Constraints: Automatically extracted. Default value: N/A Value range: 0-16384

Parameter	Type	Description
audio_channels	Integer	Details: Number of audio channels. Constraints: Automatically extracted. Default value: N/A Value range: 0-100
sample	Integer	Details: Sampling rate, in Hz. Constraints: Automatically extracted. Default value: N/A Value range: 0-100000
mode	String	Details: Horizontal or vertical display. Constraints: Automatically extracted. Options: • Horizontal: horizontal • Vertical: vertical Default value: N/A
video_transcoding_status	String	Details: Video transcoding status. Constraints: Automatically filled. Options: • WAITING: waiting for transcoding • TRANSCODING: transcoding... • FAILED: failed • SUCCEEDED: succeeded Default value: N/A

Parameter	Type	Description
error_info	ErrorResponse object	Error message

Table 4-137 AudioAssetMeta

Parameter	Type	Description
duration	Integer	Details: Duration, in second. Constraints: Automatically extracted. Default value: N/A Value range: 0-86400
audio_codec	String	Details: Audio encoding format. Constraints: Automatically extracted. Options: The value contains 0 to 32 characters. Default value: N/A
audio_bit_rate	Integer	Details: Average audio bitrate, in kbit/s. Constraints: Automatically extracted. Default value: N/A Value range: 0-16384

Parameter	Type	Description
audio_channels	Integer	Details: Number of audio channels. Constraints: Automatically extracted. Default value: N/A Value range: 0-100
sample	Integer	Details: Sampling rate, in Hz. Constraints: Automatically extracted. Default value: N/A Value range: 0-100000
error_info	ErrorResponse object	Error message

Table 4-138 ErrorResponse

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Table 4-139 SystemProperty

Parameter	Type	Description
action	String	Details: Operation. Constraints: System properties cannot be modified by common users. Options: • ADD: adding • DELETE: deleting Default value: N/A

Parameter	Type	Description
key	String	Details: System property. Constraints: System properties cannot be modified by common users. Options: Public asset property. Options: • BACKGROUND_IMG: 2D background image for video production. Set value to Yes. • CREATED_BY_PLATFORM: whether it is generated by the platform Virtual avatar asset property. Options: • MATERIAL_IMG: material image, which is used as an image layer. Set value to Yes. • MATERIAL_VIDEO: material video, which is used as a video layer. Set value to Yes. • DIGITAL_HUMAN_2D_VIDEO: virtual avatar video • DIGITAL_HUMAN_3D_VIDEO: 3D virtual human video • BUSINESS_CARD_VIDEO: business card video • BUSSINESS_CARD_VIDEO: business card video (expired) • PHOTO_VIDEO: photo-based virtual avatar video Video translation asset property. Options: • TO_BE_TRANSLATED_VIDEO: source video for translation The value can be Yes. • TRANSLATED_VIDEO: translated video 3D virtual human asset attribute. Options: • STYLE_ID: style ID • DH_ID: virtual human ID (not available yet) • PLATFORM_AVAILABLE: whether the platform is available (not available yet) • RENDER_ENGINE: engine type. Set value to UE or MetaEngine. • BACKGROUND_SCENE: 2D background scene for video production. Set value to Horizontal or Vertical. • LAYER_CONFIG_ENABLE: available foreground layer configuration

Parameter	Type	Description
		Default value: N/A
value	String	Details: System attribute value. Constraints: System properties cannot be modified by common users. Options: The value contains 1 to 1,024 characters. Default value: N/A

Table 4-140 AssetFileInfo

Parameter	Type	Description
file_id	String	File ID.
file_name	String	The file name is case-insensitive and can contain 1 to 256 characters.
file_md5	String	MD5 value of the file content. The value must contain 24 characters.
file_size	Long	Total file size. The value ranges from 1 to 5368709120. Value range: 1-5368709120
file_type	String	File type (the file name extension is extracted by default).

Parameter	Type	Description
asset_file_category	String	File category in an asset. Each type of asset has different file categories. • MAIN: main file • COVER: thumbnail file • PAGE: content page image • SAMPLE: sample audio • OTHER: other files • WHOLE_MODEL: full model • USER_MODIFIED_MODEL: model uploaded by a user. NOTE • When the asset type is SCENE, ANIMATION, VIDEO, IMAGE, or MATERIAL, categories are MAIN, COVER, and OTHER. • When the asset type is PPT, categories are MAIN, COVER, PAGE, and OTHER. • When the asset type is HUMAN_MODEL, categories are MAIN, COVER, and OTHER. • When the asset type is VOICE_MODEL, categories are MAIN, SAMPLE (sample audio file), and OTHER. • When the asset type is HUMAN_MODEL_2D, categories are MAIN, COVER, SAMPLE (sample action), and OTHER (mask file). • When the asset type is BUSINESS_CARD_TEMPLAT, categories are MAIN and COVER (business card demo).
download_url	String	File download URL, which is valid for 24 hours.
state	String	File status. Options: • CREATING: being uploaded • CREATED: uploaded (auto approved) • FAILED: upload failed • CANCELLED: upload cancelled • DELETING: being deleted • DELETED: deleted • UPLOADED: uploaded (not approved yet) • REVIEW: manual review (uploaded) • BLOCK: frozen
reason	String	Rejection reason.
file_extra_metadata	FileExtraMetadata object	File data.

Table 4-141 FileExtraMeta

Parameter	Type	Description
video_transcoding_status	String	Video transcoding status. • WAITING • TRANSCODING • FAILED • SUCCEEDED

Status code: 400**Table 4-142** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 404**Table 4-143** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
GET https://{endpoint}/v1/6a6a1f8354f64dd9b9a614def7b59d83/digital-assets/93769b5a-c8c6-4692-9c95-53933a1f0c93
```

Example Responses

Status code: 200

Successful.

```
{
  "asset_id": "93769b5a-c8c6-4692-9c95-53933a1f0c93",
  "asset_name": "Male Teacher",
  "asset_description": "Male teacher model.",
  "create_time": "2021-10-30T12:30:35Z",
  "asset_type": "HUMAN_MODEL",
  "asset_state": "ACTIVED",
  "files": [ {
    "file_id": "24bad716-87b1-45e5-8912-6102f7693265",
    "file_name": "male001.bin",
    "file_md5": "38b8c2c1093dd0fec383a9d9ac940515",
```

```
{
  "file_size" : 31032142,
  "file_type" : "bin",
  "asset_file_category" : "MAIN",
  "download_url" : "https://{endpoint}:443/05a8ae5925000fb72f83c0091083231a/
ca40212e1cdb64ab5f74446bcddb8eb9/model/image/24bad716-87b1-45e5-8912-6102f7693265.bin?
AccessKeyId=F8DE4LGO7EOYY0CM9ERJ&Expires=1657527524&Signature=BWgSQpc4IMFFrtj2ae67fw679%2
Bc%3D"
}, {
  "file_id" : "6dd0c018-7b8e-46aa-8a45-3075c161c500",
  "file_name" : "male001.png",
  "file_md5" : "38b8c2c1093dd0fec383a9d9ac940515",
  "file_size" : 110321,
  "file_type" : "png",
  "asset_file_category" : "COVER",
  "download_url" : "https://{endpoint}:443/05a8ae5925000fb72f83c0091083231a/
ca40212e1cdb64ab5f74446bcddb8eb9/model/image/6dd0c018-7b8e-46aa-8a45-3075c161c500.png?
AccessKeyId=F8DE4LGO7EOYY0CM9ERJ&Expires=1657527524&Signature=BWgSQpc4IMFFrtj2ae67fw679%2
Bc%3D"
}]
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 404

```
{
  "error_code" : "MSS.00000002",
  "error_msg" : "Not Found"
}
```

Status Codes

Status Code	Description
200	Successful.
400	Parameters error, including the error code and its description.
404	No content.

Error Codes

See [Error Codes](#).

4.1.6 Restoring a Deleted Asset

Function

You can restore media assets that are deleted from the recycle bin.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/digital-assets/{asset_id}/restore

Table 4-144 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
asset_id	Yes	String	Asset ID.

Request Parameters

Table 4-145 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 4-146 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Status code: 400**Table 4-147** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/6a6a1f8354f64dd9b9a614def7b59d83//digital-assets/8cb2f48a2cb006154794741933421100/restore
```

Example Responses

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status Codes

Status Code	Description
200	Successful.
400	Parameters error, including the error code and its description.

Error Codes

See [Error Codes](#).

4.1.7 Batch Asset Operations

Function

Performs batch asset operations.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/digital-assets/batch-action

Table 4-148 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Request Parameters

Table 4-149 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 4-150 Request body parameters

Parameter	Mandatory	Type	Description
action	Yes	String	Batch operation command. • DELETE: deletion • DELETE_FORCE: forcible deletion. An asset is deleted immediately. • RESTORE: restoration • UNACTIVE: deactivation • ACTIVE: activation • SHARE: sharing • UNSHARE: canceling sharing
asset_ids	Yes	Array of strings	Asset IDs
params	No	String	Operation parameter

Response Parameters

Status code: 200

Table 4-151 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 4-152 Response body parameters

Parameter	Type	Description
results	Array of AssetActionResult objects	Batch operation result

Table 4-153 AssetActionResult

Parameter	Type	Description
ret_status	String	Handling status. • SUCCESS • FAILED

Parameter	Type	Description
asset_ids	Array of strings	Asset IDs
error_info	ErrorResponse object	Error message

Table 4-154 ErrorResponse

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 400**Table 4-155** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 4-156** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/digital-assets/batch-action
{
  "action": "DELETED",
  "asset_ids": [ "xxxxx1", "xxxxx2", "xxxxx3", "xxxxx4" ]
}
```

Example Responses

Status code: 200

Succeeded.

```
{
  "results": [ {
    "ret_status": "SUCESS",
    "asset_ids": [ "xxxxx1", "xxxxx2" ]
  }, {
    "ret_status": "FAILED",
    "asset_ids": [ "xxxx3", "xxxx4" ],
    "error_info": {
      "error_code": "MSS.xxxxxx",
      "error_msg": "Insufficient permissions."
    }
  }
]
```

Status code: 400

```
{
  "error_code": "MSS.00000001",
  "error_msg": "Unauthorized"
}
```

Status code: 500

```
{
  "error_code": "MSS.00000004",
  "error_msg": "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.1.8 Querying Asset Summary

Function

You can query the brief information about multiple specified assets in the media asset library.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/digital-assets/summaries

Table 4-157 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Request Parameters

Table 4-158 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.

Table 4-159 Request body parameters

Parameter	Mandatory	Type	Description
asset_ids	Yes	Array of strings	Indicates the ID of the asset to be queried.

Response Parameters

Status code: 200

Table 4-160 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 4-161 Response body parameters

Parameter	Type	Description
asset_list	Array of DigitalAssetSummary objects	Assets.

Table 4-162 DigitalAssetSummary

Parameter	Type	Description
asset_id	String	Asset ID.
asset_name	String	Asset name.
asset_state	String	Asset status. ● CREATING: The asset is being created. The main file has not been uploaded. ● FAILED: Main file upload failed. ● UNACTIVED: The main file has been uploaded. The asset is not activated and cannot be used for other services. (Users can update the status.) ● ACTIVED: The main file has been uploaded. The asset is activated and can be used for other services. (Users can update the status.) ● DELETING: The asset is being deleted. The asset is unavailable but can be restored. ● DELETED: The asset has been deleted. The asset is unavailable and cannot be restored. ● BLOCK: The asset has been frozen. The asset is unavailable and cannot be viewed. ● WAITING_DELETE: The asset will be taken offline.

Parameter	Type	Description
asset_type	String	Asset types. Public asset type. Options: • VOICE_MODEL: timbre model (uploaded only by the system administrator and common tenants can only query it) • VIDEO: video file • IMAGE: image file • PPT: slide file • MUSIC: music • AUDIO: audio • COMMON_FILE: common file Virtual avatar asset. Options: • HUMAN_MODEL_2D: virtual avatar model • BUSINESS_CARD_TEMPLAT: business card template 3D virtual human asset attribute. Options: • HUMAN_MODEL: 3D virtual human model • SCENE: scene model • ANIMATION: animated actions • MATERIAL: stylized materials • NORMAL_MODEL: normal model
cover_url	String	Path of the cover image.
thumbnail_url	String	Thumbnail path.

Status code: 400

Table 4-163 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/6a6a1f8354f64dd9b9a614def7b59d83/digital-assets/summarys
{
  "asset_ids" : [ "8cb2f48a2cb006154794741933421100", "e2ba8314ebaab34d368711d118fcecba" ]
}
```

Example Responses

Status code: 200

Successful.

```
{
  "asset_list" : [ {
    "asset_id" : "93769b5a-c8c6-4692-9c95-53933a1f0c93",
    "asset_name" : "Male Teacher",
    "asset_type" : "HUMAN_MODEL",
    "cover_url" : "https://{endpoint}:443/05a8ae5925000fb72f83c0091083231a/ca40212e1cdb64ab5f74446bcddb8eb9/model/image/6dd0c018-7b8e-46aa-8a45-3075c161c500.png?AccessKeyId=F8DE4LGO7EOYY0CM9ERJ&Expires=1657527524&Signature=BWgSQpc4IMFFrtj2ae67fw679%2Bc%3D"
  } ]
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status Codes

Status Code	Description
200	Successful.
400	Parameters error, including the error code and its description.

Error Codes

See [Error Codes](#).

4.1.9 Querying Asset Copy Information

Function

Before copying assets from region A to region B, you need to call this API in region A to query asset copy information.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/digital-assets/{asset_id}/replication-info

Table 4-164 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
asset_id	Yes	String	Asset ID.

Request Parameters

Table 4-165 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 4-166 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 4-167 Response body parameters

Parameter	Type	Description
asset_id	String	Asset ID.
asset_info	String	Encrypted asset information.
encryption_info	ReplicationEncInfo object	Encryption information.
expire_time	Long	Expiration time Value range: 0-9223372036854775807

Table 4-168 ReplicationEncInfo

Parameter	Type	Description
algorithm	String	Encryption algorithm
key_id	String	Key ID
iv	String	Initialized vector

Status code: 400**Table 4-169** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
GET https://{{endpoint}}/v1/6a6a1f8354f64dd9b9a614def7b59d83/digital-assets/8cb2f48a2cb006154794741933421100/replication-info
```

Example Responses

Status code: 200

Succeeded.

```
{
  "asset_id": "8cb2f48a2cb006154794741933421100",
  "asset_info": "qKasfMo0EUrwSd7j:fR0...",
  "encryption_info": {
    "algorithm": "AES128_GCM",
    "key_id": 1,
    "iv": "qKasfMo0EUrwSd7j"
```

```
}  
}
```

Status code: 400

```
{  
  "error_code" : "MSS.00000003",  
  "error_msg" : "Invalid parameter"  
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.

Error Codes

See [Error Codes](#).

4.1.10 Copying an Asset

Function

Copies a specified asset of region A to region B.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/digital-assets-by-replication-info

Table 4-170 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Request Parameters

Table 4-171 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 4-172 Request body parameters

Parameter	Mandatory	Type	Description
asset_id	No	String	Asset ID.
asset_info	No	String	Encrypted asset information.
encryption_info	No	ReplicationEncInfo object	Encryption information.
expire_time	No	Long	Expiration time Value range: 0-9223372036854775807

Table 4-173 ReplicationEncInfo

Parameter	Mandatory	Type	Description
algorithm	No	String	Encryption algorithm

Parameter	Mandatory	Type	Description
key_id	No	String	Key ID
iv	No	String	Initialized vector

Response Parameters

Status code: 200

Table 4-174 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Status code: 400

Table 4-175 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}}/v1/6a6a1f8354f64dd9b9a614def7b59d83/digital-assets-by-replication-info
{
  "asset_id" : "8cb2f48a2cb006154794741933421100",
  "asset_info" : "qKasfMo0EUrwSd7j:fR0...",
  "encryption_info" : {
    "algorithm" : "AES128_GCM",
    "key_id" : 1,
    "iv" : "qKasfMo0EUrwSd7j"
  }
}
```

Example Responses

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.

Error Codes

See [Error Codes](#).

4.2 File Management

4.2.1 Creating a File and Obtaining the URL for File Upload

Function

You can create a file and obtain the URL for file upload.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/files

Table 4-176 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Request Parameters

Table 4-177 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 4-178 Request body parameters

Parameter	Mandatory	Type	Description
file_name	Yes	String	Details: File name. Constraints: It is case-insensitive. Options: The value contains 1 to 256 characters. Default value: N/A

Parameter	Mandatory	Type	Description
file_md5	Yes	String	Details: MD5 value of the file content. Base64-encoded 128-bit MD5 digest of the message according to RFC 1864. Constraints: N/A Options: The value contains 24 characters. Default value: N/A
file_size	Yes	Long	Details: Total size of a file. Constraints: Up to 5 GB Default value: N/A Value range: 1-5368709120
file_type	Yes	String	Details: File type Constraints: N/A Options: The value contains 1 to 64 characters. Default value: File name extension.
asset_id	Yes	String	Details: Asset ID of the platform. Constraints: N/A Options: The value contains 1 to 64 characters. Default value: N/A

Parameter	Mandatory	Type	Description
asset_file_category	Yes	String	Details: File category in an asset. Each asset type contains different file categories. • MAIN: main file • COVER: thumbnail file • PAGE: image file of the PowerPoint content page • SAMPLE: sample audio or action file • OTHER: other files • WHOLE_MODEL: file of an entire model (3D virtual human) • USER_MODIFIED_MODEL: model uploaded by a user (3D virtual human) NOTE • When the asset type is SCENE, ANIMATION, VIDEO, IMAGE, or MATERIAL, categories are MAIN, COVER, and OTHER. • When the asset type is PPT, categories are MAIN, COVER, PAGE, and OTHER. • When the asset type is HUMAN_MODEL, categories are MAIN, COVER, WHOLE_MODEL, USER_MODIFIED_MODEL and OTHER. • When the asset type is VOICE_MODEL, categories are MAIN, SAMPLE (sample audio file), and OTHER. • When the asset type is HUMAN_MODEL_2D, categories are MAIN, COVER, SAMPLE (sample action), and OTHER. • When the asset type is BUSINESS_CARD_TEMPLATE, categories are MAIN and COVER (business card demo). • When the asset type is IMAGE, category is MAIN. • When the asset type is VIDEO, categories are MAIN and COVER.

Parameter	Mandatory	Type	Description
			Constraints: An asset can have only one main file. Options: The value contains 1 to 128 characters. Default value: N/A

Response Parameters

Status code: 200

Table 4-179 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 4-180 Response body parameters

Parameter	Type	Description
file_id	String	File ID.
upload_url	String	URL for file upload. The validity period is 24 hours. NOTE - Call the OBS API Uploading an Object - PUT to upload a file. - When calling the preceding API, specify the Content-MD5 header. The value must be the same as that in file_md5.

Status code: 400

Table 4-181 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 4-182** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 4-183** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/6a6a1f8354f64dd9b9a614def7b59d83/files
```

```
{
  "file_name": "1.png",
  "file_md5": "n58IG6hfM7vql4K0vnWpog==",
  "file_size": 1048576,
  "file_type": "png",
  "asset_id": "8cb2f48a2cb006154794741933421100",
  "asset_file_category": "MAIN"
}
```

Example Responses**Status code: 200**

Successful.

```
{
  "file_id": "b2f8a9e9c39b6dc7ed4c0cfd67366c6a",
  "upload_url": "https://
{endpoint}:443/0d697589d98091f12f92c0073501cd79/8cb2f48a2cb006154794741933421100/
b2f8a9e9c39b6dc7ed4c0cfd67366c6a.jpg?
AccessKeyId=XCQKTA8IWQPCAUQS4SDA&Expires=1671154644&Signature=vXxiJTO239WZcG8sniotTe9qOc4
%3D"
}
```

Status code: 400

```
{
  "error_code": "MSS.00000003",
  "error_msg": "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code": "MSS.00000001",
}
```

```
"error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Successful.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.2 Deleting a File

Function

You can delete a specified file from the media asset library.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v1/{project_id}/files/{file_id}

Table 4-184 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
file_id	Yes	String	File ID.

Request Parameters

Table 4-185 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200**Table 4-186** Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Status code: 401**Table 4-187** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500

Table 4-188 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
DELETE https://{endpoint}/v1/6a6a1f8354f64dd9b9a614def7b59d83/files/24bad716-87b1-45e5-8912-6102f7693265
```

Example Responses

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Successful.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.3 Confirming the Upload of a File

Function

You can confirm the asset file has been uploaded.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/files/{file_id}/complete

Table 4-189 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
file_id	Yes	String	File ID.

Request Parameters

Table 4-190 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 4-191 Request body parameters

Parameter	Mandatory	Type	Description
state	Yes	String	Details: File upload status. Constraints: N/A Options: • CREATED: uploaded • FAILED: failed • CANCELLED: canceled Default value: N/A

Response Parameters

Status code: 200

Table 4-192 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Status code: 400

Table 4-193 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401

Table 4-194 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 4-195** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/6a6a1f8354f64dd9b9a614def7b59d83/files/
24bad716-87b1-45e5-8912-6102f7693265/complete

{
  "state" : "CREATED"
}
```

Example Responses**Status code: 400**

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Successful.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error CodesSee [Error Codes](#).

4.2.4 Creating a Large File

Function

Creates a large file (larger than 5 GB) and obtains the URL for multi-part upload URL.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/large-files

Table 4-196 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Request Parameters

Table 4-197 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.

Parameter	Mandatory	Type	Description
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 4-198 Request body parameters

Parameter	Mandatory	Type	Description
file_name	Yes	String	File name, which is case-insensitive. The value ranges from 1 to 256.
file_size	No	Long	Total file size. The value ranges from 1 to 536,870,912,000. Value range: 1-536870912000
file_type	Yes	String	File type (the file suffix is extracted by default).
asset_id	Yes	String	Asset ID.
asset_file_category	Yes	String	File category in an asset. Each type of asset has different file categories. • MAIN: main file • OTHER: other files
file_multipart_count	No	Integer	Number of 4K ORI file parts to be uploaded. The default value is 1. Value range: 1-100 Default value: 1

Response Parameters

Status code: 200

Table 4-199 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 4-200 Response body parameters

Parameter	Type	Description
file_id	String	File ID.
upload_urls	Array of strings	URL for uploading file parts.

Status code: 400**Table 4-201** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 4-202** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 4-203** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/6a6a1f8354f64dd9b9a614def7b59d83/files
{
  "file_name": "1.png",
  "file_type": "zip",
  "asset_id": "8cb2f48a2cb006154794741933421100",
  "asset_file_category": "OTHER"
}
```

Example Responses

Status code: 200

Succeeded.

```
{
  "file_id" : "b2f8a9e9c39b6dc7ed4c0cfd67366c6a",
  "upload_urls" : [ "https://
{endpoint}:443/0d697589d98091f12f92c0073501cd79/942e65a5fd219a2e01fb08d881cfadb9/ori4k.zip?
AccessKeyId=BHFSP0ZDGFL6BLGHCPK&Expires=1695532670&partNumber=1&uploadId=0000018AC154BC
218415213228194267&Signature=FrLhTRdhMjpAFVb%2Ff%2BcGJQgvjlw%3D", "https://
{endpoint}:443/0d697589d98091f12f92c0073501cd79/942e65a5fd219a2e01fb08d881cfadb9/ori4k.zip?
AccessKeyId=BHFSP0ZDGFL6BLGHCPK&Expires=1695532670&partNumber=2&uploadId=0000018AC154BC
218415213228194267&Signature=FrLhTRdhMjpAFVb%2Ff%2BcGJQgvjlw%3D" ]
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

5 Virtual Avatar Video Production

5.1 Video Script Management

5.1.1 Creating a Video Script

Function

Creates a video script.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/digital-human-video-scripts

Table 5-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Request Parameters

Table 5-2 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 5-3 Request body parameters

Parameter	Mandatory	Type	Description
script_name	Yes	String	Details: Script name. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A

Parameter	Mandatory	Type	Description
script_description	No	String	Details: Script description. Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A
view_mode	No	String	Details: Landscape or portrait mode. Constraints: N/A Options: • LANDSCAPE: landscape • VERTICAL: portrait Default value: LANDSCAPE
model_asset_id	No	String	Details: Virtual human model asset ID. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
model_asset_type	No	String	Details: Virtual human model type. Constraints: N/A Options: • HUMAN_MODEL_2D: virtual avatar • HUMAN_MODEL_3D: 3D virtual human Default value: N/A

Parameter	Mandatory	Type	Description
voice_config	No	VoiceConfig object	Voice configuration parameter.
video_config	No	VideoConfig object	Video output configuration.
scene_asset_id	No	String	Details: Scene asset ID. Constraints: This parameter is not required for virtual avatar video production. Options: The value contains 0 to 64 characters. Default value: N/A
priv_data	No	String	Details: Private data, which is entered by the user and then returned with the same content. Constraints: N/A Options: The value contains 0 to 8,192 characters. Default value: N/A
background_music_config	No	BackgroundMusicConfig object	Background music configuration. NOTE Background music can be set only for virtual avatar video production, but not for 3D virtual human video production.
review_config	No	ReviewConfig object	Content review configuration.
shoot_scripts	Yes	Array of ShootScriptItem objects	Video shooting scripts.

Table 5-4 VoiceConfig

Parameter	Mandatory	Type	Description
voice_asset_id	Yes	String	Details: Timbre asset ID, which can be queried from the asset library. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
speed	No	Integer	Details: Speaking speed. 50 indicates 0.5x speaking speed, 100 indicates normal speaking speed, and 200 indicates 2x speaking speed. The value 100 indicates the normal speaking speed of an adult, which is about 150 words per minute. Constraints: N/A Value range: 50-200 Default value: 100
pitch	No	Integer	Details: Pitch. Constraints: N/A Value range: 50-200 Default value: 100

Parameter	Mandatory	Type	Description
volume	No	Integer	Details: Volume. Constraints: N/A Value range: 90-240 Default value: 140

Table 5-5 VideoConfig

Parameter	Mandatory	Type	Description
clip_mode	No	String	Details: Clipping mode of the output video. Constraints: N/A Options: ● RESIZE: video scaling ● CROP: video cropping Default value: RESIZE
codec	Yes	String	Details: Video encoding format and video file format. Constraints: Only virtual avatar video production supports VP8 encoding. Options: ● H264: H.264 encoding, MP4 file output ● VP8: VP8 encoding, WebM file output Default value: N/A

Parameter	Mandatory	Type	Description
bitrate	Yes	Integer	Details: Average output bitrate. Unit: kbit/s Constraints: - Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. - Bitrate range for virtual avatar video production: [1000, 8000]. Default value: N/A Value range: 40-30000
width	Yes	Integer	Details: Video width. Unit: pixel. Constraints: - When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. 4K is available only when the virtual avatar model supports 4K. - When clip_mode is set to CROP, (dx, dy) is the origin, and the width is the actual width of the reserved video. - Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840

Parameter	Mandatory	Type	Description
height	Yes	Integer	Details: Video height. Unit: pixel. Constraints: - When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. - When clip_mode is set to CROP, (dx, dy) is the origin, and the height is the actual height of the reserved video. - Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840
frame_rate	No	String	Details: Frame rate. Unit: FPS Constraints: The virtual avatar video frame rate is fixed at 25 FPS. Default value: 25
is_subtitle_enabled	No	Boolean	Details: Whether the output video is subtitled. Constraints: Subtitles are not supported for virtual avatar livestreaming. Options: true: enable subtitling false: disable subtitling Default value: false

Parameter	Mandatory	Type	Description
subtitle_config	No	SubtitleConfig object	Subtitle configuration.
dx	No	Integer	Details: Horizontal coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dx ranges from 0 to 1920. Constraints: This parameter takes effect when clip_mode is set to CROP . Default value: N/A Value range: -1920-3840
dy	No	Integer	Details: Vertical coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dy ranges from 0 to 1080. Constraints: This parameter takes effect when clip_mode is set to CROP . Default value: N/A Value range: -1920-3840

Parameter	Mandatory	Type	Description
is_enable_super_resolution	No	Boolean	Details: Whether super resolution is enabled for a video. Constraints: This parameter is available only for virtual avatar video production. Options: • true: enable • false: do not enable Default value: false

Table 5-6 SubtitleConfig

Parameter	Mandatory	Type	Description
dx	No	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920
dy	No	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920

Parameter	Mandatory	Type	Description
font_name	No	String	Details: Font. The following fonts are supported: • HarmonyOS_Sans_SC_Black: HarmonyOS bold • HarmonyOS_Sans_SC_Regular: HarmonyOS normal • HarmonyOS_Sans_SC_Thin: HarmonyOS light Constraints: N/A Options: The value contains 0 to 64 characters. Default value: HarmonyOS_Sans_SC_Black
font_size	No	Integer	Details: Font size. The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 54
h	No	Integer	Details: Subtitle box height. Constraints: The parameter h is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920

Parameter	Mandatory	Type	Description
w	No	Integer	Details: Subtitle box width. Constraints: • The subtitle box width is fixed at 80/ %of the screen width. • The parameter w is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920

Table 5-7 BackgroundMusicConfig

Parameter	Mandatory	Type	Description
music_asset_id	No	String	Details: Music asset ID. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
volume	No	Integer	Details: Music volume. For example, 100 indicates that the volume is 100%, and 50 indicates that the volume is 50%. Constraints: N/A Value range: 0-100 Default value: 100

Table 5-8 ReviewConfig

Parameter	Mandatory	Type	Description
no_need_review	No	Boolean	Content review whitelist. This feature is available only for users in the whitelist. The auto review policies apply to other users.

Table 5-9 ShootScriptItem

Parameter	Mandatory	Type	Description
sequence_no	No	Integer	Details: Script No. Constraints: The sequence number of a script must be unique. Default value: N/A Value range: 0-2147483647
shoot_script	Yes	ShootScript object	Performance script.
subtitle_file_info	No	SubtitleFiles object	Subtitle file information.

Table 5-10 ShootScript

Parameter	Mandatory	Type	Description
script_type	No	String	Details: Script type, that is, the control mode of video production. Constraints: N/A Options: TEXT: text control, that is, using TTS AUDIO: speech control Default value: TEXT

Parameter	Mandatory	Type	Description
text_config	No	TextConfig object	Commentary configuration.
audio_drive_action_config	No	Array of AudioDriveActionConfig objects	Action configuration for speech control.
background_config	No	Array of BackgroundConfigInfo objects	Background configuration.
layer_config	No	Array of LayerConfig objects	Layer configuration.

Table 5-11 TextConfig

Parameter	Mandatory	Type	Description
text	Yes	String	Details: Script. Two modes are supported: plain text mode and tag mode. • Plain text mode, for example, "Hello, everyone, I'm a virtual streamer." • Tag mode: For details about the definition of SSML tags, see SSML Definition of Text Control. Constraints: The value can contain a maximum of 10,000 characters, excluding the SSML tag. Options: The value contains 0 to 131,072 characters. Default value: N/A

Table 5-12 AudioDriveActionConfig

Parameter	Mandatory	Type	Description
action_tag	Yes	String	Action tag
action_name	No	String	Action name
action_start_time	Yes	Float	Action start time Value range: 0-2592000

Table 5-13 BackgroundConfigInfo

Parameter	Mandatory	Type	Description
background_type	Yes	String	Details: Background type. Constraints: N/A Options: • IMAGE: image background, which is used as the virtual avatar video background • COLOR: solid color background. The RGB value of the specified color is used as the virtual avatar video background. Default value: N/A

Parameter	Mandatory	Type	Description
background_config	No	String	Details: Background file URL. Constraints: - External URLs are allowed only for livestreaming. For other services, obtain a URL from the asset library. - This parameter is mandatory when background_type is set to IMAGE. Options: The value contains 1 to 2,048 characters. Default value: N/A
background_color_config	No	String	Details: RGB color value of a solid color background. Constraints: This parameter is mandatory when background_type is set to COLOR . Options: The value contains 0 to 16 characters. Default value: #FFFFFF
background_asset_id	No	String	Details: Background asset ID. NOTE If a background image is used, enter the image asset ID. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A

Table 5-14 LayerConfig

Parameter	Mandatory	Type	Description
layer_type	Yes	String	Details: Layer type. Constraints: N/A Options: • HUMAN: person layer • IMAGE: image layer • VIDEO: video layer • TEXT: text layer Default value: N/A
asset_id	No	String	Details: ID of the asset overlaid on a video. You do not need to set this parameter for external assets. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
group_id	No	String	Details: Groups materials in multiple scenes. Materials with the same group_id share location information when they are applied globally. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
position	No	LayerPosition Config object	Layer position configuration.

Parameter	Mandatory	Type	Description
size	No	LayerSizeConfig object	Layer size configuration.
image_config	No	ImageLayerConfig object	Material image layer configuration.
video_config	No	VideoLayerConfig object	Material video layer configuration.
text_config	No	TextLayerConfig object	Material text layer configuration.

Table 5-15 LayerPositionConfig

Parameter	Mandatory	Type	Description
dx	Yes	Integer	Details: X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0

Parameter	Mandatory	Type	Description
dy	Yes	Integer	Details: Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0
layer_index	Yes	Integer	Details: Layer sequence of an image, video, or person image. NOTE The layer sequence is an integer starting from 1 and incremented by 1. Constraints: If duplicate layers exist, the overlay relationship between the duplicate layers is random. Value range: 1-100 Default value: 100

Table 5-16 LayerSizeConfig

Parameter	Mandatory	Type	Description
width	No	Integer	Details: Y axis position of the pixel in the upper left corner of the image. Width (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680
height	No	Integer	Details: Height (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Table 5-17 ImageLayerConfig

Parameter	Mandatory	Type	Description
image_url	No	String	Details: Image file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A

Table 5-18 VideoLayerConfig

Parameter	Mandatory	Type	Description
video_url	No	String	Details: Video file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A
video_cover_url	No	String	Details: Video thumbnail file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A

Parameter	Mandatory	Type	Description
loop_count	No	Integer	Details: Number of times that a video is played cyclically. Options: • 0: no • -1: yes Constraints: N/A Value range: -1-100 Default value: -1

Table 5-19 TextLayerConfig

Parameter	Mandatory	Type	Description
text_context	No	String	Details: Text of the text layer. The content must be encoded using Base64. For example, if you want to add the text watermark "Test text watermark", set text_context to 5rWL6K+V5paH5a2X5rC05Y2w . Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A

Parameter	Mandatory	Type	Description
font_name	No	String	Details: Font. The following fonts are supported: Constraints: N/A Options: For details about the supported fonts, see Supported Fonts . Default value: HarmonyOS_Sans_SC_Black
font_size	No	Integer	Details: Font size (in pixel). The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 16
font_color	No	String	Details: Font color. RGB color value. Constraints: N/A Options: The value contains 0 to 16 characters. Default value: #FFFFFF

Table 5-20 SubtitleFiles

Parameter	Mandatory	Type	Description
text_subtitle_file	No	SubtitleFileIn fo object	

Parameter	Mandatory	Type	Description
audio_subtitle_file	No	SubtitleFileInfo object	

Table 5-21 SubtitleFileInfo

Parameter	Mandatory	Type	Description
subtitle_file_download_url	No	String	URL for downloading subtitle files.
subtitle_file_upload_url	No	String	URL for uploading subtitle files.
subtitle_file_state	No	String	Subtitle file generation status. ● GENERATING: generating the subtitle file... ● GENERATE_SUCCEED: subtitle file generated ● **GENERATE_FAILED: Subtitle file generation failed.
job_id	No	String	Subtitle file generation task ID.

Response Parameters

Status code: 200

Table 5-22 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 5-23 Response body parameters

Parameter	Type	Description
script_id	String	Script ID.
audio_files	ShootScriptAudioFiles object	URLs for uploading audio files for speech control

Table 5-24 ShootScriptAudioFiles

Parameter	Type	Description
audio_file_url	Array of ShootScriptAudioFileItem objects	URLs for uploading audio files for speech control

Table 5-25 ShootScriptAudioFileItem

Parameter	Type	Description
sequence_no	Integer	Script No. Value range: 0-2147483647
audio_file_upload_url	String	URL for uploading the audio file for speech control. It is returned when a script is created or updated. The maximum size of a single file is 100 MB. MP3/WAV/M4A files can be uploaded.
audio_file_download_url	String	URL for downloading the audio file for speech control. It is returned when script details are queried.

Status code: 400**Table 5-26** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 5-27** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 5-28** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

POST https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/digital-human-video-scripts

```
{
  "script_name": "The Legend of Nature",
  "script_description": "Courseware",
  "model_asset_id": "a5d295cdb345c11bd9f36bc22ced3a7a",
  "scene_asset_id": "7ad01cf66f6cc54e45a2021558b7fbb0",
  "voice_config": {
    "voice_asset_id": "a5d295cdb345c11bd9f36bc22ced3a7a"
  },
  "video_config": {
    "codec": "H264",
    "bitrate": 4000,
    "frame_rate": "25",
    "width": 1920,
    "height": 1080
  },
  "shoot_scripts": [ {
    "sequence_no": 0,
    "shoot_script": {
      "text_config": {
        "text": "Hello, everyone. I'm Sara."
      },
      "animation_config": [ {
        "animation": "7affc1c9d10b9779957fce7d4aecbd35"
      } ],
      "background_config": [ {
        "background_type": "IMAGE",
        "background_config": "978f893e1de4553c183b7a805e6290f5"
      } ]
    }
  } ]
}
```

Example Responses**Status code: 200**

Succeeded.

```
{
  "script_id": "26f06524-4f75-4b3a-a853-b649a21aaf66"
}
```

Status code: 400

```
{
  "error_code": "MSS.00000003",
  "error_msg": "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

5.1.2 Querying Video Scripts

Function

Queries video scripts.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/digital-human-video-scripts

Table 5-29 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Table 5-30 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts. Value range: 0-2147483647 Default value: 0
limit	No	Integer	Number of items displayed on each page. Value range: 1-100 Default value: 10
name	No	String	Fuzzy search by name.
script_catalog	No	String	Script type. By default, VIDEO_DRAFT is queried. • VIDEO_DRAFT: video draft • SYSTEM_VIDEO_TEMPLAT: system video template
view_mode	No	String	Landscape or portrait mode (internal parameter). The default value is LANDSCAPE . • LANDSCAPE: landscape • VERTICAL: portrait

Request Parameters

Table 5-31 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.

Parameter	Mandatory	Type	Description
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 5-32 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 5-33 Response body parameters

Parameter	Type	Description
count	Integer	Total number of scripts. Value range: 0-2147483647
video_scripts	Array of VideoScriptBaseInfo objects	Script list.

Table 5-34 VideoScriptBaseInfo

Parameter	Type	Description
script_id	String	Script ID.

Parameter	Type	Description
script_name	String	Script name.
script_description	String	Script description.
model_asset_id	String	Virtual human model asset ID, which can be queried from the asset library.
model_asset_type	String	Virtual human model type. • HUMAN_MODEL_2D: virtual avatar • HUMAN_MODEL_3D: 3D virtual human
script_cover_url	String	URL for downloading the script thumbnail.
script_type	String	Script type, that is, the control mode of video production. The default value is TEXT . TEXT : text control, that is, voice compositing through TTS AUDIO : speech control
text	String	Script.
create_time	String	Creation time. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
update_time	String	Update time. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.

Status code: 400**Table 5-35** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 5-36** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500

Table 5-37 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

GET https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/digital-human-video-scripts

Example Responses

Status code: 200

Succeeded.

```
{
  "count" : 1,
  "video_scripts" : [ {
    "script_id" : "26f06524-4f75-4b3a-a853-b649a21aaf66",
    "script_name" : "The Legend of Nature",
    "model_asset_id" : "a5d295cdb345c11bd9f36bc22ced3a7a",
    "script_description" : "Courseware",
    "create_time" : "2022-11-30T06:59:55Z",
    "update_time" : "2022-12-05T12:30:37Z"
  } ]
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.

Status Code	Description
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

5.1.3 Querying Video Script Details

Function

Queries video script details.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/digital-human-video-scripts/{script_id}

Table 5-38 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
script_id	Yes	String	Script ID.

Request Parameters

Table 5-39 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200**Table 5-40** Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 5-41 Response body parameters

Parameter	Type	Description
script_name	String	Details: Script name. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
script_description	String	Details: Script description. Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A
view_mode	String	Details: Landscape or portrait mode. Constraints: N/A Options: • LANDSCAPE: landscape • VERTICAL: portrait Default value: LANDSCAPE
model_asset_id	String	Details: Virtual human model asset ID. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A

Parameter	Type	Description
model_asset_type	String	Details: Virtual human model type. Constraints: N/A Options: • HUMAN_MODEL_2D: virtual avatar • HUMAN_MODEL_3D: 3D virtual human Default value: N/A
voice_config	VoiceConfig object	Voice configuration parameter.
video_config	VideoConfig object	Video output configuration.
scene_asset_id	String	Details: Scene asset ID. Constraints: This parameter is not required for virtual avatar video production. Options: The value contains 0 to 64 characters. Default value: N/A
priv_data	String	Details: Private data, which is entered by the user and then returned with the same content. Constraints: N/A Options: The value contains 0 to 8,192 characters. Default value: N/A
background_music_config	BackgroundMusicConfig object	Background music configuration.
review_config	ReviewConfig object	Content review configuration.

Parameter	Type	Description
shoot_scripts	Array of ShootScripts howItem objects	Video shooting scripts.
script_id	String	Script ID.
create_time	String	Creation time. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
update_time	String	Update time. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
audio_files	ShootScriptAudioFiles object	URLs for uploading audio files for speech control
script_cover_url	String	URL for downloading the script thumbnail.

Table 5-42 VoiceConfig

Parameter	Type	Description
voice_asset_id	String	Details: Timbre asset ID, which can be queried from the asset library. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A

Parameter	Type	Description
speed	Integer	Details: Speaking speed. 50 indicates 0.5x speaking speed, 100 indicates normal speaking speed, and 200 indicates 2x speaking speed. The value 100 indicates the normal speaking speed of an adult, which is about 150 words per minute. Constraints: N/A Value range: 50-200 Default value: 100
pitch	Integer	Details: Pitch. Constraints: N/A Value range: 50-200 Default value: 100
volume	Integer	Details: Volume. Constraints: N/A Value range: 90-240 Default value: 140

Table 5-43 VideoConfig

Parameter	Type	Description
clip_mode	String	Details: Clipping mode of the output video. Constraints: N/A Options: • RESIZE: video scaling • CROP: video cropping Default value: RESIZE
codec	String	Details: Video encoding format and video file format. Constraints: Only virtual avatar video production supports VP8 encoding. Options: • H264: H.264 encoding, MP4 file output • VP8: VP8 encoding, WebM file output Default value: N/A
bitrate	Integer	Details: Average output bitrate. Unit: kbit/s Constraints: • Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. • Bitrate range for virtual avatar video production: [1000, 8000]. Default value: N/A Value range: 40-30000

Parameter	Type	Description
width	Integer	Details: Video width. Unit: pixel. Constraints: - When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. 4K is available only when the virtual avatar model supports 4K. - When clip_mode is set to CROP, (dx, dy) is the origin, and the width is the actual width of the reserved video. - Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840
height	Integer	Details: Video height. Unit: pixel. Constraints: - When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. - When clip_mode is set to CROP, (dx, dy) is the origin, and the height is the actual height of the reserved video. - Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840

Parameter	Type	Description
frame_rate	String	Details: Frame rate. Unit: FPS Constraints: The virtual avatar video frame rate is fixed at 25 FPS. Default value: 25
is_subtitle_enabled	Boolean	Details: Whether the output video is subtitled. Constraints: Subtitles are not supported for virtual avatar livestreaming. Options: • true: enable subtitling • false: disable subtitling Default value: false
subtitle_config	SubtitleConfig object	Subtitle configuration.
dx	Integer	Details: Horizontal coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dx ranges from 0 to 1920. Constraints: This parameter takes effect when clip_mode is set to CROP . Default value: N/A Value range: -1920-3840

Parameter	Type	Description
dy	Integer	Details: Vertical coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dy ranges from 0 to 1080. Constraints: This parameter takes effect when clip_mode is set to CROP . Default value: N/A Value range: -1920-3840
is_enable_super_resolution	Boolean	Details: Whether super resolution is enabled for a video. Constraints: This parameter is available only for virtual avatar video production. Options: • true: enable • false: do not enable Default value: false

Table 5-44 SubtitleConfig

Parameter	Type	Description
dx	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920

Parameter	Type	Description
dy	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920
font_name	String	Details: Font. The following fonts are supported: • HarmonyOS_Sans_SC_Black: HarmonyOS bold • HarmonyOS_Sans_SC_Regular: HarmonyOS normal • HarmonyOS_Sans_SC_Thin: HarmonyOS light Constraints: N/A Options: The value contains 0 to 64 characters. Default value: HarmonyOS_Sans_SC_Black
font_size	Integer	Details: Font size. The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 54

Parameter	Type	Description
h	Integer	Details: Subtitle box height. Constraints: The parameter h is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920
w	Integer	Details: Subtitle box width. Constraints: • The subtitle box width is fixed at 80/ %of the screen width. • The parameter w is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920

Table 5-45 BackgroundMusicConfig

Parameter	Type	Description
music_asset_id	String	Details: Music asset ID. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A

Parameter	Type	Description
volume	Integer	Details: Music volume. For example, 100 indicates that the volume is 100%, and 50 indicates that the volume is 50%. Constraints: N/A Value range: 0-100 Default value: 100

Table 5-46 ReviewConfig

Parameter	Type	Description
no_need_review	Boolean	Content review whitelist. This feature is available only for users in the whitelist. The auto review policies apply to other users.

Table 5-47 ShootScriptShowItem

Parameter	Type	Description
sequence_no	Integer	Details: Script No. Constraints: The sequence number of a script must be unique. Default value: N/A Value range: 0-2147483647
shoot_script	ShootScriptDetail object	Script configuration
subtitle_file_info	SubtitleFiles object	Subtitle file information.
preview_info	PreviewInfo object	Preview information.

Table 5-48 ShootScriptDetail

Parameter	Type	Description
script_type	String	Details: Script type, that is, the control mode of video production. Constraints: N/A Options: TEXT: text control, that is, using TTS AUDIO: speech control Default value: TEXT
text_config	TextConfig object	Commentary configuration.
audio_drive_action_config	Array of AudioDriveActionConfig objects	Action configuration for speech control.
background_config	Array of BackgroundConfigInfo objects	Background configuration.
layer_config	Array of LayerConfig objects	Layer configuration.
thumbnail_url	String	Details: Thumbnail URL of a script scene. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A

Table 5-49 TextConfig

Parameter	Type	Description
text	String	Details: Script. Two modes are supported: plain text mode and tag mode. • Plain text mode, for example, "Hello, everyone, I'm a virtual streamer." • Tag mode: For details about the definition of SSML tags, see SSML Definition of Text Control. Constraints: The value can contain a maximum of 10,000 characters, excluding the SSML tag. Options: The value contains 0 to 131,072 characters. Default value: N/A

Table 5-50 AudioDriveActionConfig

Parameter	Type	Description
action_tag	String	Action tag
action_name	String	Action name
action_start_time	Float	Action start time Value range: 0-2592000

Table 5-51 BackgroundConfigInfo

Parameter	Type	Description
background_type	String	Details: Background type. Constraints: N/A Options: • IMAGE: image background, which is used as the virtual avatar video background • COLOR: solid color background. The RGB value of the specified color is used as the virtual avatar video background. Default value: N/A
background_config	String	Details: Background file URL. Constraints: • External URLs are allowed only for livestreaming. For other services, obtain a URL from the asset library. • This parameter is mandatory when background_type is set to IMAGE. Options: The value contains 1 to 2,048 characters. Default value: N/A
background_color_config	String	Details: RGB color value of a solid color background. Constraints: This parameter is mandatory when background_type is set to COLOR . Options: The value contains 0 to 16 characters. Default value: #FFFFFF

Parameter	Type	Description
background_asset_id	String	Details: Background asset ID. NOTE If a background image is used, enter the image asset ID. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A

Table 5-52 LayerConfig

Parameter	Type	Description
layer_type	String	Details: Layer type. Constraints: N/A Options: ● HUMAN: person layer ● IMAGE: image layer ● VIDEO: video layer ● TEXT: text layer Default value: N/A
asset_id	String	Details: ID of the asset overlaid on a video. You do not need to set this parameter for external assets. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A

Parameter	Type	Description
group_id	String	Details: Groups materials in multiple scenes. Materials with the same group_id share location information when they are applied globally. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
position	LayerPositionConfig object	Layer position configuration.
size	LayerSizeConfig object	Layer size configuration.
image_config	ImageLayerConfig object	Material image layer configuration.
video_config	VideoLayerConfig object	Material video layer configuration.
text_config	TextLayerConfig object	Material text layer configuration.

Table 5-53 LayerPositionConfig

Parameter	Type	Description
dx	Integer	Details: X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0

Parameter	Type	Description
dy	Integer	Details: Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0
layer_index	Integer	Details: Layer sequence of an image, video, or person image. NOTE The layer sequence is an integer starting from 1 and incremented by 1. Constraints: If duplicate layers exist, the overlay relationship between the duplicate layers is random. Value range: 1-100 Default value: 100

Table 5-54 LayerSizeConfig

Parameter	Type	Description
width	Integer	Details: Y axis position of the pixel in the upper left corner of the image. Width (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680
height	Integer	Details: Height (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Table 5-55 ImageLayerConfig

Parameter	Type	Description
image_url	String	Details: Image file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A

Table 5-56 VideoLayerConfig

Parameter	Type	Description
video_url	String	Details: Video file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A
video_cover_url	String	Details: Video thumbnail file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A
loop_count	Integer	Details: Number of times that a video is played cyclically. Options: • 0: no • -1: yes Constraints: N/A Value range: -1-100 Default value: -1

Table 5-57 TextLayerConfig

Parameter	Type	Description
text_context	String	Details: Text of the text layer. The content must be encoded using Base64. For example, if you want to add the text watermark "Test text watermark", set text_context to 5rWL6K+V5paH5a2X5rC05Y2w . Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A
font_name	String	Details: Font. The following fonts are supported: Constraints: N/A Options: For details about the supported fonts, see Supported Fonts . Default value: HarmonyOS_Sans_SC_Black
font_size	Integer	Details: Font size (in pixel). The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 16

Parameter	Type	Description
font_color	String	Details: Font color. RGB color value. Constraints: N/A Options: The value contains 0 to 16 characters. Default value: #FFFFFF

Table 5-58 SubtitleFiles

Parameter	Type	Description
text_subtitle_file	SubtitleFileInfo object	
audio_subtitle_file	SubtitleFileInfo object	

Table 5-59 SubtitleFileInfo

Parameter	Type	Description
subtitle_file_download_url	String	URL for downloading subtitle files.
subtitle_file_upload_url	String	URL for uploading subtitle files.
subtitle_file_state	String	Subtitle file generation status. ● GENERATING: generating the subtitle file... ● GENERATE_SUCCEED: subtitle file generated ● **GENERATE_FAILED: Subtitle file generation failed.
job_id	String	Subtitle file generation task ID.

Table 5-60 PreviewInfo

Parameter	Type	Description
text_sha256	String	Text content hash value

Parameter	Type	Description
audio_file_download_url	String	Download link of the audio file corresponding to the text

Table 5-61 ShootScriptAudioFiles

Parameter	Type	Description
audio_file_url	Array of ShootScriptAudioFileItem objects	URLs for uploading audio files for speech control

Table 5-62 ShootScriptAudioFileItem

Parameter	Type	Description
sequence_no	Integer	Script No. Value range: 0-2147483647
audio_file_upload_url	String	URL for uploading the audio file for speech control. It is returned when a script is created or updated. The maximum size of a single file is 100 MB. MP3/WAV/M4A files can be uploaded.
audio_file_download_url	String	URL for downloading the audio file for speech control. It is returned when script details are queried.

Status code: 400**Table 5-63** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401

Table 5-64 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 404**Table 5-65** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 5-66** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
GET https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/digital-human-video-scripts/24bad716-87b1-45e5-8912-6102f7693265
```

Example Responses

Status code: 200

Succeeded.

```
{
  "script_name" : "The Legend of Nature",
  "script_description" : "Courseware",
  "model_asset_id" : "a5d295cdb345c11bd9f36bc22ced3a7a",
  "scene_asset_id" : "7ad01cf66f6cc54e45a2021558b7fbb0",
  "voice_config" : {
    "voice_asset_id" : "a5d295cdb345c11bd9f36bc22ced3a7a",
    "speed" : 100,
    "pitch" : 100,
    "volume" : 140
  },
  "video_config" : {
    "codec" : "H264",
    "bitrate" : 4000,
    "frame_rate" : "25",
  }
}
```

```
{
  "width" : 1920,
  "height" : 1080
},
"shoot_scripts" : [ {
  "sequence_no" : 0,
  "shoot_script" : {
    "text_config" : {
      "text" : "Hello, everyone. I'm Sara."
    },
    "animation_config" : [ {
      "animation" : "7affc1c9d10b9779957fce7d4aecbd35"
    } ],
    "background_config" : [ {
      "background_type" : "IMAGE",
      "background_config" : "978f893e1de4553c183b7a805e6290f5"
    } ]
  }
}
]
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 404

```
{
  "error_code" : "MSS.00000002",
  "error_msg" : "Not Found"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
404	No content.
500	Internal service error.

Error Codes

See [Error Codes](#).

5.1.4 Updating a Video Script

Function

Updates a video script.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v1/{project_id}/digital-human-video-scripts/{script_id}

Table 5-67 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
script_id	Yes	String	Script ID.

Request Parameters

Table 5-68 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.

Parameter	Mandatory	Type	Description
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 5-69 Request body parameters

Parameter	Mandatory	Type	Description
script_name	No	String	Details: Script name. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
script_description	No	String	Details: Script description. Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A

Parameter	Mandatory	Type	Description
view_mode	No	String	Details: Landscape or portrait mode. Constraints: N/A Options: • LANDSCAPE: landscape • VERTICAL: portrait Default value: LANDSCAPE
model_asset_id	No	String	Details: Virtual human model asset ID. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
model_asset_type	No	String	Details: Virtual human model type. Constraints: N/A Options: • HUMAN_MODEL_2D: virtual avatar • HUMAN_MODEL_3D: 3D virtual human Default value: N/A
voice_config	No	VoiceConfig object	Voice configuration parameter.
video_config	No	VideoConfig object	Video output configuration.

Parameter	Mandatory	Type	Description
scene_asset_id	No	String	Details: Scene asset ID. Constraints: This parameter is not required for virtual avatar video production. Options: The value contains 0 to 64 characters. Default value: N/A
priv_data	No	String	Details: Private data, which is entered by the user and then returned with the same content. Constraints: N/A Options: The value contains 0 to 8,192 characters. Default value: N/A
background_music_config	No	BackgroundMusicConfig object	Background music configuration. NOTE Background music can be set only for virtual avatar video production, but not for 3D virtual human video production.
review_config	No	ReviewConfig object	Content review configuration.
shoot_scripts	No	Array of ShootScriptItem objects	Video shooting scripts.

Table 5-70 VoiceConfig

Parameter	Mandatory	Type	Description
voice_asset_id	Yes	String	Details: Timbre asset ID, which can be queried from the asset library. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
speed	No	Integer	Details: Speaking speed. 50 indicates 0.5x speaking speed, 100 indicates normal speaking speed, and 200 indicates 2x speaking speed. The value 100 indicates the normal speaking speed of an adult, which is about 150 words per minute. Constraints: N/A Value range: 50-200 Default value: 100
pitch	No	Integer	Details: Pitch. Constraints: N/A Value range: 50-200 Default value: 100

Parameter	Mandatory	Type	Description
volume	No	Integer	Details: Volume. Constraints: N/A Value range: 90-240 Default value: 140

Table 5-71 VideoConfig

Parameter	Mandatory	Type	Description
clip_mode	No	String	Details: Clipping mode of the output video. Constraints: N/A Options: ● RESIZE: video scaling ● CROP: video cropping Default value: RESIZE
codec	Yes	String	Details: Video encoding format and video file format. Constraints: Only virtual avatar video production supports VP8 encoding. Options: ● H264: H.264 encoding, MP4 file output ● VP8: VP8 encoding, WebM file output Default value: N/A

Parameter	Mandatory	Type	Description
bitrate	Yes	Integer	Details: Average output bitrate. Unit: kbit/s Constraints: - Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. - Bitrate range for virtual avatar video production: [1000, 8000]. Default value: N/A Value range: 40-30000
width	Yes	Integer	Details: Video width. Unit: pixel. Constraints: - When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. 4K is available only when the virtual avatar model supports 4K. - When clip_mode is set to CROP, (dx, dy) is the origin, and the width is the actual width of the reserved video. - Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840

Parameter	Mandatory	Type	Description
height	Yes	Integer	Details: Video height. Unit: pixel. Constraints: - When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. - When clip_mode is set to CROP, (dx, dy) is the origin, and the height is the actual height of the reserved video. - Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840
frame_rate	No	String	Details: Frame rate. Unit: FPS Constraints: The virtual avatar video frame rate is fixed at 25 FPS. Default value: 25
is_subtitle_enabled	No	Boolean	Details: Whether the output video is subtitled. Constraints: Subtitles are not supported for virtual avatar livestreaming. Options: true: enable subtitling false: disable subtitling Default value: false

Parameter	Mandatory	Type	Description
subtitle_config	No	SubtitleConfig object	Subtitle configuration.
dx	No	Integer	Details: Horizontal coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dx ranges from 0 to 1920. Constraints: This parameter takes effect when clip_mode is set to CROP . Default value: N/A Value range: -1920-3840
dy	No	Integer	Details: Vertical coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dy ranges from 0 to 1080. Constraints: This parameter takes effect when clip_mode is set to CROP . Default value: N/A Value range: -1920-3840

Parameter	Mandatory	Type	Description
is_enable_super_resolution	No	Boolean	Details: Whether super resolution is enabled for a video. Constraints: This parameter is available only for virtual avatar video production. Options: • true: enable • false: do not enable Default value: false

Table 5-72 SubtitleConfig

Parameter	Mandatory	Type	Description
dx	No	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920
dy	No	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920

Parameter	Mandatory	Type	Description
font_name	No	String	Details: Font. The following fonts are supported: • HarmonyOS_Sans_SC_Black: HarmonyOS bold • HarmonyOS_Sans_SC_Regular: HarmonyOS normal • HarmonyOS_Sans_SC_Thin: HarmonyOS light Constraints: N/A Options: The value contains 0 to 64 characters. Default value: HarmonyOS_Sans_SC_Black
font_size	No	Integer	Details: Font size. The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 54
h	No	Integer	Details: Subtitle box height. Constraints: The parameter h is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920

Parameter	Mandatory	Type	Description
w	No	Integer	Details: Subtitle box width. Constraints: • The subtitle box width is fixed at 80/ %of the screen width. • The parameter w is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920

Table 5-73 BackgroundMusicConfig

Parameter	Mandatory	Type	Description
music_asset_id	No	String	Details: Music asset ID. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
volume	No	Integer	Details: Music volume. For example, 100 indicates that the volume is 100%, and 50 indicates that the volume is 50%. Constraints: N/A Value range: 0-100 Default value: 100

Table 5-74 ReviewConfig

Parameter	Mandatory	Type	Description
no_need_review	No	Boolean	Content review whitelist. This feature is available only for users in the whitelist. The auto review policies apply to other users.

Table 5-75 ShootScriptItem

Parameter	Mandatory	Type	Description
sequence_no	No	Integer	Details: Script No. Constraints: The sequence number of a script must be unique. Default value: N/A Value range: 0-2147483647
shoot_script	Yes	ShootScript object	Performance script.
subtitle_file_info	No	SubtitleFiles object	Subtitle file information.

Table 5-76 ShootScript

Parameter	Mandatory	Type	Description
script_type	No	String	Details: Script type, that is, the control mode of video production. Constraints: N/A Options: TEXT: text control, that is, using TTS AUDIO: speech control Default value: TEXT

Parameter	Mandatory	Type	Description
text_config	No	TextConfig object	Commentary configuration.
audio_drive_action_config	No	Array of AudioDriveActionConfig objects	Action configuration for speech control.
background_config	No	Array of BackgroundConfigInfo objects	Background configuration.
layer_config	No	Array of LayerConfig objects	Layer configuration.

Table 5-77 TextConfig

Parameter	Mandatory	Type	Description
text	Yes	String	Details: Script. Two modes are supported: plain text mode and tag mode. • Plain text mode, for example, "Hello, everyone, I'm a virtual streamer." • Tag mode: For details about the definition of SSML tags, see SSML Definition of Text Control. Constraints: The value can contain a maximum of 10,000 characters, excluding the SSML tag. Options: The value contains 0 to 131,072 characters. Default value: N/A

Table 5-78 AudioDriveActionConfig

Parameter	Mandatory	Type	Description
action_tag	Yes	String	Action tag
action_name	No	String	Action name
action_start_time	Yes	Float	Action start time Value range: 0-2592000

Table 5-79 BackgroundConfigInfo

Parameter	Mandatory	Type	Description
background_type	Yes	String	Details: Background type. Constraints: N/A Options: • IMAGE: image background, which is used as the virtual avatar video background • COLOR: solid color background. The RGB value of the specified color is used as the virtual avatar video background. Default value: N/A

Parameter	Mandatory	Type	Description
background_config	No	String	Details: Background file URL. Constraints: - External URLs are allowed only for livestreaming. For other services, obtain a URL from the asset library. - This parameter is mandatory when background_type is set to IMAGE. Options: The value contains 1 to 2,048 characters. Default value: N/A
background_color_config	No	String	Details: RGB color value of a solid color background. Constraints: This parameter is mandatory when background_type is set to COLOR . Options: The value contains 0 to 16 characters. Default value: #FFFFFF
background_asset_id	No	String	Details: Background asset ID. NOTE If a background image is used, enter the image asset ID. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A

Table 5-80 LayerConfig

Parameter	Mandatory	Type	Description
layer_type	Yes	String	Details: Layer type. Constraints: N/A Options: • HUMAN: person layer • IMAGE: image layer • VIDEO: video layer • TEXT: text layer Default value: N/A
asset_id	No	String	Details: ID of the asset overlaid on a video. You do not need to set this parameter for external assets. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
group_id	No	String	Details: Groups materials in multiple scenes. Materials with the same group_id share location information when they are applied globally. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
position	No	LayerPosition Config object	Layer position configuration.

Parameter	Mandatory	Type	Description
size	No	LayerSizeConfig object	Layer size configuration.
image_config	No	ImageLayerConfig object	Material image layer configuration.
video_config	No	VideoLayerConfig object	Material video layer configuration.
text_config	No	TextLayerConfig object	Material text layer configuration.

Table 5-81 LayerPositionConfig

Parameter	Mandatory	Type	Description
dx	Yes	Integer	Details: X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0

Parameter	Mandatory	Type	Description
dy	Yes	Integer	Details: Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0
layer_index	Yes	Integer	Details: Layer sequence of an image, video, or person image. NOTE The layer sequence is an integer starting from 1 and incremented by 1. Constraints: If duplicate layers exist, the overlay relationship between the duplicate layers is random. Value range: 1-100 Default value: 100

Table 5-82 LayerSizeConfig

Parameter	Mandatory	Type	Description
width	No	Integer	Details: Y axis position of the pixel in the upper left corner of the image. Width (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680
height	No	Integer	Details: Height (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Table 5-83 ImageLayerConfig

Parameter	Mandatory	Type	Description
image_url	No	String	Details: Image file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A

Table 5-84 VideoLayerConfig

Parameter	Mandatory	Type	Description
video_url	No	String	Details: Video file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A
video_cover_url	No	String	Details: Video thumbnail file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A

Parameter	Mandatory	Type	Description
loop_count	No	Integer	Details: Number of times that a video is played cyclically. Options: • 0: no • -1: yes Constraints: N/A Value range: -1-100 Default value: -1

Table 5-85 TextLayerConfig

Parameter	Mandatory	Type	Description
text_context	No	String	Details: Text of the text layer. The content must be encoded using Base64. For example, if you want to add the text watermark "Test text watermark", set text_context to 5rWL6K+V5paH5a2X5rC05Y2w . Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A

Parameter	Mandatory	Type	Description
font_name	No	String	Details: Font. The following fonts are supported: Constraints: N/A Options: For details about the supported fonts, see Supported Fonts . Default value: HarmonyOS_Sans_SC_Black
font_size	No	Integer	Details: Font size (in pixel). The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 16
font_color	No	String	Details: Font color. RGB color value. Constraints: N/A Options: The value contains 0 to 16 characters. Default value: #FFFFFF

Table 5-86 SubtitleFiles

Parameter	Mandatory	Type	Description
text_subtitle_file	No	SubtitleFileIn fo object	

Parameter	Mandatory	Type	Description
audio_subtitle_file	No	SubtitleFileInfo object	

Table 5-87 SubtitleFileInfo

Parameter	Mandatory	Type	Description
subtitle_file_download_url	No	String	URL for downloading subtitle files.
subtitle_file_upload_url	No	String	URL for uploading subtitle files.
subtitle_file_state	No	String	Subtitle file generation status. ● GENERATING: generating the subtitle file... ● GENERATE_SUCCEED: subtitle file generated ● **GENERATE_FAILED: Subtitle file generation failed.
job_id	No	String	Subtitle file generation task ID.

Response Parameters

Status code: 200

Table 5-88 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 5-89 Response body parameters

Parameter	Type	Description
script_id	String	Script ID.
audio_files	ShootScriptAudioFiles object	URLs for uploading audio files for speech control

Table 5-90 ShootScriptAudioFiles

Parameter	Type	Description
audio_file_url	Array of ShootScriptAudioFileItem objects	URLs for uploading audio files for speech control

Table 5-91 ShootScriptAudioFileItem

Parameter	Type	Description
sequence_no	Integer	Script No. Value range: 0-2147483647
audio_file_upload_url	String	URL for uploading the audio file for speech control. It is returned when a script is created or updated. The maximum size of a single file is 100 MB. MP3/WAV/M4A files can be uploaded.
audio_file_download_url	String	URL for downloading the audio file for speech control. It is returned when script details are queried.

Status code: 400**Table 5-92** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 5-93** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 5-94** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

PUT https://{endpoint}/v1/70b76xxxxx34253880af501cdxxxxx/digital-human-video-scripts/24bad716-87b1-45e5-8912-6102f7693265

```
{
  "script_name": "The Legend of Nature",
  "script_description": "Courseware",
  "model_asset_id": "a5d295cdb345c11bd9f36bc22ced3a7a",
  "scene_asset_id": "7ad01cf66f6cc54e45a2021558b7fbb0",
  "voice_config": {
    "voice_asset_id": "a5d295cdb345c11bd9f36bc22ced3a7a"
  },
  "video_config": {
    "codec": "H264",
    "bitrate": 4000,
    "frame_rate": "25",
    "width": 1920,
    "height": 1080
  },
  "shoot_scripts": [ {
    "sequence_no": 0,
    "shoot_script": {
      "text_config": {
        "text": "Hello, everyone. I'm Sara."
      },
      "animation_config": [ {
        "animation": "7affc1c9d10b9779957fce7d4aecbd35"
      } ],
      "background_config": [ {
        "background_type": "IMAGE",
        "background_config": "978f893e1de4553c183b7a805e6290f5"
      }, {
        "background_type": "AUDIO",
        "background_config": "b99ac26b53c555c5b89110256197d467"
      } ]
    }
  } ]
}
```

Example Responses**Status code: 400**

```
{
  "error_code": "MSS.00000003",
  "error_msg": "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code": "MSS.00000001",
}
```

```
"error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

5.1.5 Deleting a Video Script

Function

Deletes a video script.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v1/{project_id}/digital-human-video-scripts/{script_id}

Table 5-95 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
script_id	Yes	String	Script ID.

Request Parameters

Table 5-96 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200**Table 5-97** Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Status code: 400

Table 5-98 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 5-99** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 5-100** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
DELETE https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/digital-human-video-scripts/  
24bad716-87b1-45e5-8912-6102f7693265
```

Example Responses

Status code: 400

```
{  
  "error_code" : "MSS.00000003",  
  "error_msg" : "Invalid parameter"  
}
```

Status code: 401

```
{  
  "error_code" : "MSS.00000001",  
  "error_msg" : "Unauthorized"  
}
```

Status code: 500

```
{  
  "error_code" : "MSS.00000004",  
  "error_msg" : "Internal Error"  
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

5.1.6 Copying a Video Script

Function

Copies a video script.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/digital-human-video-scripts/{script_id}/copy

Table 5-101 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
script_id	Yes	String	Script ID.

Request Parameters

Table 5-102 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200**Table 5-103** Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 5-104 Response body parameters

Parameter	Type	Description
script_id	String	New script ID

Status code: 400**Table 5-105** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 5-106** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 5-107** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

POST https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/digital-human-video-scripts/
26f06524-4f75-4b3a-a853-b649a21aaf66/copy

```
{
  "script_name": "The Legend of Nature",
  "script_description": "Courseware",
  "model_asset_id": "a5d295cdb345c11bd9f36bc22ced3a7a",
  "scene_asset_id": "7ad01cf66f6cc54e45a2021558b7fbb0",
  "voice_config": {
    "voice_asset_id": "a5d295cdb345c11bd9f36bc22ced3a7a"
  },
  "video_config": {
    "codec": "H264",
    "bitrate": 4000,
    "frame_rate": "25",
    "width": 1920,
    "height": 1080
  },
  "shoot_scripts": [ {
    "sequence_no": 0,
    "shoot_script": {
      "text_config": {
        "text": "Hello, everyone. I'm Sara."
      }
    }
  }
]
```

```
    },
    "animation_config" : [ {
      "animation" : "7affc1c9d10b9779957fce7d4aecbd35"
    } ],
    "background_config" : [ {
      "background_type" : "IMAGE",
      "background_config" : "978f893e1de4553c183b7a805e6290f5"
    } ]
  }
}
```

Example Responses

Status code: 200

Succeeded.

```
{
  "script_id" : "26f06524-4f75-4b3a-a853-b649a21aaf66"
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

5.2 Video Production Management

5.2.1 Querying Video Production Tasks

Function

Queries video production tasks. You can query virtual avatar video production tasks and photo-based virtual human video production tasks.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/digital-human-videos

Table 5-108 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Table 5-109 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts. Value range: 0-2147483647 Default value: 0
limit	No	Integer	Number of items displayed on each page. Value range: 1-100 Default value: 10

Parameter	Mandatory	Type	Description
state	No	String	Task status. By default, all statuses are selected. Multiple statuses can be queried. Use commas (,) to separate them, for example, state=CREATING,PUBLISHED .
sort_key	No	String	Sorting field. Options: • create_time: sorting by creation time • update_time: sorting by update time • asset_order: sorting by asset
sort_dir	No	String	Sorting mode. • asc: ascending order • desc: descending order asc is used by default.
create_until	No	String	Filter the records whose creation time is not later than the entered time.
create_since	No	String	Filter the records whose creation time is not earlier than the entered time.
fuzzy_query_field	No	Array of strings	Use the field for fuzzy query.
script_id	No	String	Script ID.
asset_name	No	String	Output video asset name.
job_type	No	String	Task type. • 2D_DIGITAL_HUMAN_VIDEO: virtual avatar video production task • PHOTO_DIGITAL_HUMAN_VIDEO: photo-based virtual human video production
job_id	No	String	Task ID.

Request Parameters

Table 5-110 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200**Table 5-111** Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 5-112 Response body parameters

Parameter	Type	Description
count	Integer	Details: Total number of video production tasks. Value range: 0-2147483647
jobs	Array of DigitalHumanVideo objects	Video production task list.

Table 5-113 DigitalHumanVideo

Parameter	Type	Description
job_id	String	Task ID.
state	String	Task status. Options: ● WAITING: The task is waiting for execution. ● PROCESSING: The task is being processed. ● SUCCEED: Task execution succeeded. ● FAILED: Task execution failed. ● CANCELED: The task has been canceled. ● BLOCK: The task has been frozen.
job_type	String	Task type. ● 2D_DIGITAL_HUMAN_VIDEO: virtual avatar video production task ● PHOTO_DIGITAL_HUMAN_VIDEO: photo-based virtual human video production
start_time	String	Start time of virtual human video production.
end_time	String	End time of virtual human video production.
duration	Float	Details: Virtual avatar video duration. Value range: 0-2147483647
output_asset_config	OutputAssetInfo object	Output asset information.
error_info	ErrorResponse object	Error message.
create_time	String	Task creation time.

Parameter	Type	Description
lastupdate_time	String	Task update time.

Table 5-114 OutputAssetInfo

Parameter	Type	Description
asset_id	String	Output video asset ID.
asset_name	String	Output video asset name.
cover_url	String	Video thumbnail URL.
preview_video_url	String	URL for downloading a preview video. The validity period of the URL is 24 hours. NOTE Virtual avatar videos do not support preview.

Table 5-115 ErrorResponse

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 400**Table 5-116** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 5-117** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 404**Table 5-118** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 5-119** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
GET https://{endpoint}/v1/0d697589d98091f12f92c0073501cd79/digital-human-videos
```

Example Responses

Status code: 200

The information is returned when the request succeeds.

```
{
  "count" : 1,
  "jobs" : [ {
    "job_id" : "26f06524-4f75-4b3a-a853-b649a21aaf66",
    "state" : "SUCCEED",
    "start_time" : "2022-01-18T16:29:36Z",
    "end_time" : "2022-01-18T16:30:36Z",
    "duration" : 60,
    "output_asset_config" : {
      "asset_id" : "942e65a5fd219a2e01fb08d881cfadb9",
      "asset_name" : "One Day",
      "cover_url" : "https://{endpoint}/
0d697589d98091f12f92c0073501cd79/942e65a5fd219a2e01fb08d881cfadb9/20d367508e62d3d4ad608cedb
e81bd35.png?
AccessKeyId=XCQKTA8IWQPCAUQS4SDA&Expires=1671241457&Signature=zVGMVbI5ji9rr8epD1Cir5OGIRk
%3D"
    },
    "error_info" : null,
    "create_time" : "2022-11-30T06:59:56Z",
    "lastupdate_time" : "2022-11-30T07:00:09Z"
  } ]
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 404

```
{
  "error_code" : "MSS.00000002",
  "error_msg" : "Not Found"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	The information is returned when the request succeeds.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
404	No content.
500	Internal service error.

Error Codes

See [Error Codes](#).

5.3 Virtual Avatar Video Production Management

5.3.1 Creating a Virtual Avatar Video Production Task

Function

Creates a virtual avatar video production task.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/2d-digital-human-videos

Table 5-120 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Request Parameters

Table 5-121 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 5-122 Request body parameters

Parameter	Mandatory	Type	Description
script_id	No	String	Script ID. NOTE - If script_id is specified, model_asset_id, voice_config, scene_asset_id, video_config, and shoot_scripts are optional. Use the settings in the script. - If script_id, model_asset_id, voice_config, scene_asset_id, video_config, and shoot_scripts are specified, use the settings in the script.
model_asset_id	No	String	Virtual avatar model asset ID, which can be queried from the asset library.
voice_config	No	VoiceConfig object	Timbre configuration.
video_config	No	VideoConfig object	Video output configuration.
shoot_scripts	No	Array of ShootScriptItem objects	Shooting script list.
output_asset_config	No	OutputAssetConfig object	Output asset information configuration.
background_music_config	No	BackgroundMusicConfig object	Background music configuration.
review_config	No	ReviewConfig object	Configures content review.
callback_config	No	CallbackConfig object	Callback setting.

Table 5-123 VoiceConfig

Parameter	Mandatory	Type	Description
voice_asset_id	Yes	String	Details: Timbre asset ID, which can be queried from the asset library. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
speed	No	Integer	Details: Speaking speed. 50 indicates 0.5x speaking speed, 100 indicates normal speaking speed, and 200 indicates 2x speaking speed. The value 100 indicates the normal speaking speed of an adult, which is about 150 words per minute. Constraints: N/A Value range: 50-200 Default value: 100
pitch	No	Integer	Details: Pitch. Constraints: N/A Value range: 50-200 Default value: 100

Parameter	Mandatory	Type	Description
volume	No	Integer	Details: Volume. Constraints: N/A Value range: 90-240 Default value: 140

Table 5-124 VideoConfig

Parameter	Mandatory	Type	Description
clip_mode	No	String	Details: Clipping mode of the output video. Constraints: N/A Options: ● RESIZE: video scaling ● CROP: video cropping Default value: RESIZE
codec	Yes	String	Details: Video encoding format and video file format. Constraints: Only virtual avatar video production supports VP8 encoding. Options: ● H264: H.264 encoding, MP4 file output ● VP8: VP8 encoding, WebM file output Default value: N/A

Parameter	Mandatory	Type	Description
bitrate	Yes	Integer	Details: Average output bitrate. Unit: kbit/s Constraints: - Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. - Bitrate range for virtual avatar video production: [1000, 8000]. Default value: N/A Value range: 40-30000
width	Yes	Integer	Details: Video width. Unit: pixel. Constraints: - When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. 4K is available only when the virtual avatar model supports 4K. - When clip_mode is set to CROP, (dx, dy) is the origin, and the width is the actual width of the reserved video. - Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840

Parameter	Mandatory	Type	Description
height	Yes	Integer	Details: Video height. Unit: pixel. Constraints: - When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. - When clip_mode is set to CROP, (dx, dy) is the origin, and the height is the actual height of the reserved video. - Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840
frame_rate	No	String	Details: Frame rate. Unit: FPS Constraints: The virtual avatar video frame rate is fixed at 25 FPS. Default value: 25
is_subtitle_enabled	No	Boolean	Details: Whether the output video is subtitled. Constraints: Subtitles are not supported for virtual avatar livestreaming. Options: true: enable subtitling false: disable subtitling Default value: false

Parameter	Mandatory	Type	Description
subtitle_config	No	SubtitleConfig object	Subtitle configuration.
disable_system_watermark	No	Boolean	Details: Indicates whether the system watermark is disabled for the output video. Constraints: Currently, this parameter takes effect only for trustlisted tenants. Value range: • true • false Default value: false
dx	No	Integer	Details: Horizontal coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dx ranges from 0 to 1920. Constraints: This parameter takes effect when clip_mode is set to CROP . Default value: N/A Value range: -1920-3840

Parameter	Mandatory	Type	Description
dy	No	Integer	Details: Vertical coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dy ranges from 0 to 1080. Constraints: This parameter takes effect when clip_mode is set to CROP . Default value: N/A Value range: -1920-3840
is_enable_super_resolution	No	Boolean	Details: Whether super resolution is enabled for a video. Constraints: This parameter is available only for virtual avatar video production. Options: • true: enable • false: do not enable Default value: false

Table 5-125 SubtitleConfig

Parameter	Mandatory	Type	Description
dx	No	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920
dy	No	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920
font_name	No	String	Details: Font. The following fonts are supported: • HarmonyOS_Sans_SC_Black: HarmonyOS bold • HarmonyOS_Sans_SC_Regular: HarmonyOS normal • HarmonyOS_Sans_SC_Thin: HarmonyOS light Constraints: N/A Options: The value contains 0 to 64 characters. Default value: HarmonyOS_Sans_SC_Black

Parameter	Mandatory	Type	Description
font_size	No	Integer	Details: Font size. The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 54
h	No	Integer	Details: Subtitle box height. Constraints: The parameter h is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920
w	No	Integer	Details: Subtitle box width. Constraints: • The subtitle box width is fixed at 80/ %of the screen width. • The parameter w is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920

Table 5-126 ShootScriptItem

Parameter	Mandatory	Type	Description
sequence_no	No	Integer	Details: Script No. Constraints: The sequence number of a script must be unique. Default value: N/A Value range: 0-2147483647
start_time	No	Float	Details: Start time. The unit is second. Start time relative to the content. Constraints: Reserved field. Currently, only sequence_no needs to be set. Default value: N/A Value range: 0-2592000
end_time	No	Float	Details: End time. The unit is second. End time relative to the content. Constraints: Reserved field. Currently, only sequence_no needs to be set. Default value: N/A Value range: 0-2592000
shoot_script	Yes	ShootScript object	Performance script.
subtitle_file_info	No	SubtitleFiles object	Subtitle file information.

Table 5-127 ShootScript

Parameter	Mandatory	Type	Description
script_type	No	String	Details: Script type, that is, the control mode of video production. Constraints: N/A Options: TEXT: text control, that is, using TTS AUDIO: speech control Default value: TEXT
text_config	No	TextConfig object	Commentary configuration.
audio_drive_action_config	No	Array of AudioDriveActionConfig objects	Action configuration for speech control.
animation_config	No	Array of AnimationConfig objects	Action configuration. NOTE - You are advised to insert action tags in text_config and do not configure animation_config. - Use animation_config to configure actions. The actions are played cyclically throughout the explanation. - This parameter does not take effect for virtual avatar video production.
background_config	No	Array of BackgroundConfigInfo objects	Background configuration.
emotion_config	No	Array of EmotionConfig objects	Emotion tag configuration. NOTE - This parameter does not take effect for virtual avatar video production. - You are advised to insert emotion tags in text_config. This parameter will be discarded.

Parameter	Mandatory	Type	Description
layer_config	No	Array of LayerConfig objects	Layer configuration.

Table 5-128 TextConfig

Parameter	Mandatory	Type	Description
text	Yes	String	Details: Script. Two modes are supported: plain text mode and tag mode. • Plain text mode, for example, "Hello, everyone, I'm a virtual streamer." • Tag mode: For details about the definition of SSML tags, see SSML Definition of Text Control. Constraints: The value can contain a maximum of 10,000 characters, excluding the SSML tag. Options: The value contains 0 to 131,072 characters. Default value: N/A

Table 5-129 AudioDriveActionConfig

Parameter	Mandatory	Type	Description
action_tag	Yes	String	Action tag
action_name	No	String	Action name
action_start_time	Yes	Float	Action start time Value range: 0-2592000

Table 5-130 AnimationConfig

Parameter	Mandatory	Type	Description
animation	No	String	Action asset ID.

Table 5-131 BackgroundConfigInfo

Parameter	Mandatory	Type	Description
background_type	Yes	String	Details: Background type. Constraints: N/A Options: • IMAGE: image background, which is used as the virtual avatar video background • COLOR: solid color background. The RGB value of the specified color is used as the virtual avatar video background. Default value: N/A
background_title	No	String	Background title. NOTE • This parameter does not take effect for virtual avatar video production.
human_position_2d	No	HumanPosition2D object	Position of a virtual avatar in the background image. If this parameter is not set, the virtual avatar is in the middle of the image by default. NOTE • This parameter is discarded. The position of a virtual avatar in the background image is configured in the layer_config parameter.

Parameter	Mandatory	Type	Description
human_size_2d	No	HumanSize2D object	Size of a virtual avatar in the background image. NOTE This parameter is discarded. The size of a virtual avatar in the background image is configured in the layer_config parameter.
background_cover_url	No	String	URL for downloading the thumbnail image of a video file. This parameter is valid only when the presentation material is a video. NOTE This parameter does not take effect for virtual avatar video production.
background_config	No	String	Details: Background file URL. Constraints: - External URLs are allowed only for livestreaming. For other services, obtain a URL from the asset library. - This parameter is mandatory when background_type is set to IMAGE. Options: The value contains 1 to 2,048 characters. Default value: N/A

Parameter	Mandatory	Type	Description
background_color_config	No	String	Details: RGB color value of a solid color background. Constraints: This parameter is mandatory when background_type is set to COLOR . Options: The value contains 0 to 16 characters. Default value: #FFFFFF
background_asset_id	No	String	Details: Background asset ID. NOTE If a background image is used, enter the image asset ID. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A

Table 5-132 HumanPosition2D

Parameter	Mandatory	Type	Description
position	No	String	Position of a virtual avatar in the background image. • LEFT: left • MIDDLE: middle • RIGHT: right NOTE If the values of position_x and position_y exist, position does not take effect. Default value: MIDDLE

Parameter	Mandatory	Type	Description
position_x	No	Integer	X-axis position of the virtual avatar, that is, the X-axis pixel value of the center point at the bottom of the virtual avatar image. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: -1920-3840
position_y	No	Integer	Y-axis position of the virtual avatar, that is, the Y-axis pixel value of the center point at the bottom of the virtual avatar image. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: -1920-3840

Table 5-133 HumanSize2D

Parameter	Mandatory	Type	Description
width	No	Integer	Width (in pixel) of a virtual avatar. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: 1-7680

Parameter	Mandatory	Type	Description
height	No	Integer	Height (in pixel) of a virtual avatar. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: 1-7680

Table 5-134 EmotionConfig

Parameter	Mandatory	Type	Description
emotion	No	String	Emotion tag configuration. ● HAPPY: happy ● SAD: sad ● CALM: calm ● ANGER: angry The default value is HAPPY . Default value: HAPPY

Table 5-135 LayerConfig

Parameter	Mandatory	Type	Description
layer_type	Yes	String	Details: Layer type. Constraints: N/A Options: ● HUMAN: person layer ● IMAGE: image layer ● VIDEO: video layer ● TEXT: text layer Default value: N/A

Parameter	Mandatory	Type	Description
asset_id	No	String	Details: ID of the asset overlaid on a video. You do not need to set this parameter for external assets. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
group_id	No	String	Details: Groups materials in multiple scenes. Materials with the same group_id share location information when they are applied globally. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
position	No	LayerPositionConfig object	Layer position configuration.
size	No	LayerSizeConfig object	Layer size configuration.
image_config	No	ImageLayerConfig object	Material image layer configuration.
video_config	No	VideoLayerConfig object	Material video layer configuration.
text_config	No	TextLayerConfig object	Material text layer configuration.

Table 5-136 LayerPositionConfig

Parameter	Mandatory	Type	Description
dx	Yes	Integer	Details: X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0
dy	Yes	Integer	Details: Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0

Parameter	Mandatory	Type	Description
layer_index	Yes	Integer	Details: Layer sequence of an image, video, or person image. NOTE The layer sequence is an integer starting from 1 and incremented by 1. Constraints: If duplicate layers exist, the overlay relationship between the duplicate layers is random. Value range: 1-100 Default value: 100

Table 5-137 LayerSizeConfig

Parameter	Mandatory	Type	Description
width	No	Integer	Details: Y axis position of the pixel in the upper left corner of the image. Width (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Parameter	Mandatory	Type	Description
height	No	Integer	Details: Height (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Table 5-138 ImageLayerConfig

Parameter	Mandatory	Type	Description
image_url	No	String	Details: Image file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A

Table 5-139 VideoLayerConfig

Parameter	Mandatory	Type	Description
video_url	No	String	Details: Video file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A
video_cover_url	No	String	Details: Video thumbnail file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A
loop_count	No	Integer	Details: Number of times that a video is played cyclically. Options: 0: no -1: yes Constraints: N/A Value range: -1-100 Default value: -1

Table 5-140 TextLayerConfig

Parameter	Mandatory	Type	Description
text_context	No	String	Details: Text of the text layer. The content must be encoded using Base64. For example, if you want to add the text watermark "Test text watermark", set text_context to 5rWL6K+V5paH5a2X5rC05Y2w . Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A
font_name	No	String	Details: Font. The following fonts are supported: Constraints: N/A Options: For details about the supported fonts, see Supported Fonts . Default value: HarmonyOS_Sans_SC_Black
font_size	No	Integer	Details: Font size (in pixel). The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 16

Parameter	Mandatory	Type	Description
font_color	No	String	Details: Font color. RGB color value. Constraints: N/A Options: The value contains 0 to 16 characters. Default value: #FFFFFF

Table 5-141 SubtitleFiles

Parameter	Mandatory	Type	Description
text_subtitle_file	No	SubtitleFileInfo object	
audio_subtitle_file	No	SubtitleFileInfo object	

Table 5-142 SubtitleFileInfo

Parameter	Mandatory	Type	Description
subtitle_file_download_url	No	String	URL for downloading subtitle files.
subtitle_file_upload_url	No	String	URL for uploading subtitle files.
subtitle_file_status	No	String	Subtitle file generation status. ● GENERATING: generating the subtitle file... ● GENERATE_SUCCEEDED: subtitle file generated ● **GENERATE_FAILED: Subtitle file generation failed.
job_id	No	String	Subtitle file generation task ID.

Table 5-143 OutputAssetConfig

Parameter	Mandatory	Type	Description
asset_name	Yes	String	Details: Output video asset name. Constraints: N/A Options: The value contains 0 to 256 characters. Default value: N/A

Table 5-144 BackgroundMusicConfig

Parameter	Mandatory	Type	Description
music_asset_id	No	String	Details: Music asset ID. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
volume	No	Integer	Details: Music volume. For example, 100 indicates that the volume is 100%, and 50 indicates that the volume is 50%. Constraints: N/A Value range: 0-100 Default value: 100

Table 5-145 ReviewConfig

Parameter	Mandatory	Type	Description
no_need_review	No	Boolean	Content review whitelist. This feature is available only for users in the whitelist. The auto review policies apply to other users.

Table 5-146 CallBackConfig

Parameter	Mandatory	Type	Description
callback_url	Yes	String	Callback URL. The callback request body is in JSON format and contains the following parameters: result : SUCCEED or FAILED asset_id : asset ID job_id : task
auth_type	No	String	Authentication type. • None: The URL contains authentication. • MSS_A: In HMACSHA256 signature mode, the secret and time_stamp parameters are added to the URL. Value format: secret=hmac_sha256(key, URI (callback_url) + time_stamp)&time_stamp=hex(timestamp) Default value: NONE
key	No	String	Key

Response Parameters

Status code: 200

Table 5-147 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 5-148 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.

Status code: 400**Table 5-149** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 5-150** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 5-151** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

POST https://{endpoint}/v1/0d697589d98091f12f92c0073501cd79/2d-digital-human-videos

```
{
  "model_asset_id" : "0c7798664ee7178b3dba3bbef57c32e7",
  "voice_config" : {
    "voice_asset_id" : "394f3a27cd0b3d6164ca75c3db1edf6c",
    "speed" : 100,
    "pitch" : 100,
    "volume" : 140
  },
  "video_config" : {
    "codec" : "H264",
    "bitrate" : 5000,
```

```
"width" : 1920,
"height" : 1080,
"frame_rate" : "30"
},
"shoot_scripts" : [ {
  "sequence_no" : 0,
  "shoot_script" : {
    "text_config" : {
      "text" : "Hello, everyone. I'm Yunling."
    },
    "background_config" : [ {
      "background_type" : "IMAGE",
      "background_config" : "https://{endpoint}/0d697589d98091f12f92c0073501cd79/
c7885ffdfb347337a890208ca7fd07e3/34534f0262813a6838bdcfb8bc949af6.jpg?
AccessKeyId=WTEZCVDFUF3XHXCTPIJ8&Expires=1686872878&Signature=zXGOEQlrgZ4yAUziwIGcdbXLPIM
%3D"
    },
    "layer_config" : [ {
      "layer_type" : "HUMAN",
      "position" : {
        "dx" : "656",
        "dy" : "0",
        "layer_index" : 1
      },
      "size" : {
        "width" : 607.5,
        "height" : 1080
      }
    },
    "script_type" : "TEXT"
  }
},
"output_asset_config" : {
  "asset_name" : "Yunling's self-introduction."
}
}
```

Example Responses

Status code: 200

The information is returned when the request succeeds.

```
{
  "job_id" : "26f06524-4f75-4b3a-a853-b649a21aaf66"
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	The information is returned when the request succeeds.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

5.3.2 Querying Virtual Avatar Video Production Task Details

Function

Queries virtual avatar video production task details.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/2d-digital-human-videos/{job_id}

Table 5-152 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
job_id	Yes	String	Task ID.

Table 5-153 Query Parameters

Parameter	Mandatory	Type	Description
show_script	No	Boolean	Whether to return the script parameter configuration. Default value: false

Request Parameters

Table 5-154 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200**Table 5-155** Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 5-156 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.

Parameter	Type	Description
state	String	Task status. Options: • WAITING: The task is waiting for execution. • PROCESSING: The task is being processed. • SUCCEED: Task execution succeeded. • FAILED: Task execution failed. • CANCELED: The task has been canceled. • BLOCK: The task has been frozen.
job_type	String	Task type. • 2D_DIGITAL_HUMAN_VIDEO: virtual avatar video production task • PHOTO_DIGITAL_HUMAN_VIDEO: photo-based virtual human video production
start_time	String	Start time of virtual human video production.
end_time	String	End time of virtual human video production.
duration	Float	Details: Virtual avatar video duration. Value range: 0-2147483647
output_asset_config	OutputAssetInfo object	Output asset information.
error_info	ErrorResponse object	Error message.
create_time	String	Task creation time.
lastupdate_time	String	Task update time.
script_id	String	Script ID.
video_making_type	String	Video generation mode. If this parameter is set to MODEL , model_asset_id is mandatory. If this parameter is set to PICTURE , human_image is mandatory. • MODEL: Generates a video from a virtual avatar model. • PICTURE: Generates a video from one photo. NOTE • This parameter has been discarded. The API for creating a photo-based virtual avatar video production task will be used.

Parameter	Type	Description
human_image	String	Person photo, which must be encoded using Base64. NOTE This parameter has been discarded. The API for creating a photo-based virtual avatar video production task will be used.
model_asset_id	String	Virtual avatar model asset ID, which can be queried from the asset library.
voice_config	VoiceConfig object	Voice configuration parameter.
video_config	VideoConfig object	Video output configuration.
shoot_scripts	Array of ShootScriptItem objects	Shooting script list.
background_music_config	BackgroundMusicConfig object	Background music configuration.

Table 5-157 OutputAssetInfo

Parameter	Type	Description
asset_id	String	Output video asset ID.
asset_name	String	Output video asset name.
cover_url	String	Video thumbnail URL.
preview_video_url	String	URL for downloading a preview video. The validity period of the URL is 24 hours. NOTE Virtual avatar videos do not support preview.

Table 5-158 ErrorResponse

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Table 5-159 VoiceConfig

Parameter	Type	Description
voice_asset_id	String	Details: Timbre asset ID, which can be queried from the asset library. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
speed	Integer	Details: Speaking speed. 50 indicates 0.5x speaking speed, 100 indicates normal speaking speed, and 200 indicates 2x speaking speed. The value 100 indicates the normal speaking speed of an adult, which is about 150 words per minute. Constraints: N/A Value range: 50-200 Default value: 100
pitch	Integer	Details: Pitch. Constraints: N/A Value range: 50-200 Default value: 100
volume	Integer	Details: Volume. Constraints: N/A Value range: 90-240 Default value: 140

Table 5-160 VideoConfig

Parameter	Type	Description
clip_mode	String	Details: Clipping mode of the output video. Constraints: N/A Options: • RESIZE: video scaling • CROP: video cropping Default value: RESIZE
codec	String	Details: Video encoding format and video file format. Constraints: Only virtual avatar video production supports VP8 encoding. Options: • H264: H.264 encoding, MP4 file output • VP8: VP8 encoding, WebM file output Default value: N/A
bitrate	Integer	Details: Average output bitrate. Unit: kbit/s Constraints: • Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. • Bitrate range for virtual avatar video production: [1000, 8000]. Default value: N/A Value range: 40-30000

Parameter	Type	Description
width	Integer	Details: Video width. Unit: pixel. Constraints: - When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. 4K is available only when the virtual avatar model supports 4K. - When clip_mode is set to CROP, (dx, dy) is the origin, and the width is the actual width of the reserved video. - Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840
height	Integer	Details: Video height. Unit: pixel. Constraints: - When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. - When clip_mode is set to CROP, (dx, dy) is the origin, and the height is the actual height of the reserved video. - Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840

Parameter	Type	Description
frame_rate	String	Details: Frame rate. Unit: FPS Constraints: The virtual avatar video frame rate is fixed at 25 FPS. Default value: 25
is_subtitle_enable	Boolean	Details: Whether the output video is subtitled. Constraints: Subtitles are not supported for virtual avatar livestreaming. Options: • true: enable subtitling • false: disable subtitling Default value: false
subtitle_config	SubtitleConfig object	Subtitle configuration.
disable_system_watermark	Boolean	Details: Indicates whether the system watermark is disabled for the output video. Constraints: Currently, this parameter takes effect only for trustlisted tenants. Value range: • true • false Default value: false

Parameter	Type	Description
dx	Integer	Details: Horizontal coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dx ranges from 0 to 1920. Constraints: This parameter takes effect when clip_mode is set to CROP . Default value: N/A Value range: -1920-3840
dy	Integer	Details: Vertical coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dy ranges from 0 to 1080. Constraints: This parameter takes effect when clip_mode is set to CROP . Default value: N/A Value range: -1920-3840
is_enable_super_resolution	Boolean	Details: Whether super resolution is enabled for a video. Constraints: This parameter is available only for virtual avatar video production. Options: ● true: enable ● false: do not enable Default value: false

Table 5-161 SubtitleConfig

Parameter	Type	Description
dx	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920
dy	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920
font_name	String	Details: Font. The following fonts are supported: • HarmonyOS_Sans_SC_Black: HarmonyOS bold • HarmonyOS_Sans_SC_Regular: HarmonyOS normal • HarmonyOS_Sans_SC_Thin: HarmonyOS light Constraints: N/A Options: The value contains 0 to 64 characters. Default value: HarmonyOS_Sans_SC_Black

Parameter	Type	Description
font_size	Integer	Details: Font size. The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 54
h	Integer	Details: Subtitle box height. Constraints: The parameter h is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920
w	Integer	Details: Subtitle box width. Constraints: • The subtitle box width is fixed at 80/ %of the screen width. • The parameter w is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920

Table 5-162 ShootScriptItem

Parameter	Type	Description
sequence_no	Integer	Details: Script No. Constraints: The sequence number of a script must be unique. Default value: N/A Value range: 0-2147483647
start_time	Float	Details: Start time. The unit is second. Start time relative to the content. Constraints: Reserved field. Currently, only sequence_no needs to be set. Default value: N/A Value range: 0-2592000
end_time	Float	Details: End time. The unit is second. End time relative to the content. Constraints: Reserved field. Currently, only sequence_no needs to be set. Default value: N/A Value range: 0-2592000
shoot_script	ShootScript object	Performance script.
subtitle_file_info	SubtitleFiles object	Subtitle file information.

Table 5-163 ShootScript

Parameter	Type	Description
script_type	String	Details: Script type, that is, the control mode of video production. Constraints: N/A Options: TEXT: text control, that is, using TTS AUDIO: speech control Default value: TEXT
text_config	TextConfig object	Commentary configuration.
audio_drive_action_config	Array of AudioDriveActionConfig objects	Action configuration for speech control.
animation_config	Array of AnimationConfig objects	Action configuration. NOTE - You are advised to insert action tags in text_config and do not configure animation_config. - Use animation_config to configure actions. The actions are played cyclically throughout the explanation. - This parameter does not take effect for virtual avatar video production.
background_config	Array of BackgroundConfigInfo objects	Background configuration.
emotion_config	Array of EmotionConfig objects	Emotion tag configuration. NOTE - This parameter does not take effect for virtual avatar video production. - You are advised to insert emotion tags in text_config. This parameter will be discarded.
layer_config	Array of LayerConfig objects	Layer configuration.

Table 5-164 TextConfig

Parameter	Type	Description
text	String	Details: Script. Two modes are supported: plain text mode and tag mode. • Plain text mode, for example, "Hello, everyone, I'm a virtual streamer." • Tag mode: For details about the definition of SSML tags, see SSML Definition of Text Control. Constraints: The value can contain a maximum of 10,000 characters, excluding the SSML tag. Options: The value contains 0 to 131,072 characters. Default value: N/A

Table 5-165 AudioDriveActionConfig

Parameter	Type	Description
action_tag	String	Action tag
action_name	String	Action name
action_start_time	Float	Action start time Value range: 0-2592000

Table 5-166 AnimationConfig

Parameter	Type	Description
animation	String	Action asset ID.

Table 5-167 BackgroundConfigInfo

Parameter	Type	Description
background_type	String	Details: Background type. Constraints: N/A Options: • IMAGE: image background, which is used as the virtual avatar video background • COLOR: solid color background. The RGB value of the specified color is used as the virtual avatar video background. Default value: N/A
background_title	String	Background title. NOTE • This parameter does not take effect for virtual avatar video production.
human_position_2d	HumanPosition2D object	Position of a virtual avatar in the background image. If this parameter is not set, the virtual avatar is in the middle of the image by default. NOTE • This parameter is discarded. The position of a virtual avatar in the background image is configured in the layer_config parameter.
human_size_2d	HumanSize2D object	Size of a virtual avatar in the background image. NOTE • This parameter is discarded. The size of a virtual avatar in the background image is configured in the layer_config parameter.
background_cover_url	String	URL for downloading the thumbnail image of a video file. This parameter is valid only when the presentation material is a video. NOTE • This parameter does not take effect for virtual avatar video production.

Parameter	Type	Description
background_config	String	Details: Background file URL. Constraints: - External URLs are allowed only for livestreaming. For other services, obtain a URL from the asset library. - This parameter is mandatory when background_type is set to IMAGE. Options: The value contains 1 to 2,048 characters. Default value: N/A
background_color_config	String	Details: RGB color value of a solid color background. Constraints: This parameter is mandatory when background_type is set to COLOR . Options: The value contains 0 to 16 characters. Default value: #FFFFFF
background_asset_id	String	Details: Background asset ID. NOTE If a background image is used, enter the image asset ID. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A

Table 5-168 HumanPosition2D

Parameter	Type	Description
position	String	Position of a virtual avatar in the background image. • LEFT: left • MIDDLE: middle • RIGHT: right NOTE If the values of position_x and position_y exist, position does not take effect. Default value: MIDDLE
position_x	Integer	X-axis position of the virtual avatar, that is, the X-axis pixel value of the center point at the bottom of the virtual avatar image. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: -1920-3840
position_y	Integer	Y-axis position of the virtual avatar, that is, the Y-axis pixel value of the center point at the bottom of the virtual avatar image. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: -1920-3840

Table 5-169 HumanSize2D

Parameter	Type	Description
width	Integer	Width (in pixel) of a virtual avatar. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: 1-7680

Parameter	Type	Description
height	Integer	Height (in pixel) of a virtual avatar. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: 1-7680

Table 5-170 EmotionConfig

Parameter	Type	Description
emotion	String	Emotion tag configuration. • HAPPY: happy • SAD: sad • CALM: calm • ANGER: angry The default value is HAPPY . Default value: HAPPY

Table 5-171 LayerConfig

Parameter	Type	Description
layer_type	String	Details: Layer type. Constraints: N/A Options: • HUMAN: person layer • IMAGE: image layer • VIDEO: video layer • TEXT: text layer Default value: N/A

Parameter	Type	Description
asset_id	String	Details: ID of the asset overlaid on a video. You do not need to set this parameter for external assets. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
group_id	String	Details: Groups materials in multiple scenes. Materials with the same group_id share location information when they are applied globally. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
position	LayerPositionConfig object	Layer position configuration.
size	LayerSizeConfig object	Layer size configuration.
image_config	ImageLayerConfig object	Material image layer configuration.
video_config	VideoLayerConfig object	Material video layer configuration.
text_config	TextLayerConfig object	Material text layer configuration.

Table 5-172 LayerPositionConfig

Parameter	Type	Description
dx	Integer	Details: X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0
dy	Integer	Details: Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0

Parameter	Type	Description
layer_index	Integer	Details: Layer sequence of an image, video, or person image. NOTE The layer sequence is an integer starting from 1 and incremented by 1. Constraints: If duplicate layers exist, the overlay relationship between the duplicate layers is random. Value range: 1-100 Default value: 100

Table 5-173 LayerSizeConfig

Parameter	Type	Description
width	Integer	Details: Y axis position of the pixel in the upper left corner of the image. Width (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Parameter	Type	Description
height	Integer	Details: Height (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Table 5-174 ImageLayerConfig

Parameter	Type	Description
image_url	String	Details: Image file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A

Table 5-175 VideoLayerConfig

Parameter	Type	Description
video_url	String	Details: Video file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A

Parameter	Type	Description
video_cover_url	String	Details: Video thumbnail file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A
loop_count	Integer	Details: Number of times that a video is played cyclically. Options: • 0: no • -1: yes Constraints: N/A Value range: -1-100 Default value: -1

Table 5-176 TextLayerConfig

Parameter	Type	Description
text_context	String	Details: Text of the text layer. The content must be encoded using Base64. For example, if you want to add the text watermark "Test text watermark", set text_context to 5rWL6K+V5paH5a2X5rC05Y2w . Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A

Parameter	Type	Description
font_name	String	Details: Font. The following fonts are supported: Constraints: N/A Options: For details about the supported fonts, see Supported Fonts . Default value: HarmonyOS_Sans_SC_Black
font_size	Integer	Details: Font size (in pixel). The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 16
font_color	String	Details: Font color. RGB color value. Constraints: N/A Options: The value contains 0 to 16 characters. Default value: #FFFFFF

Table 5-177 SubtitleFiles

Parameter	Type	Description
text_subtitle_file	SubtitleFileInfo object	
audio_subtitle_file	SubtitleFileInfo object	

Table 5-178 SubtitleFileInfo

Parameter	Type	Description
subtitle_file_download_url	String	URL for downloading subtitle files.
subtitle_file_upload_url	String	URL for uploading subtitle files.
subtitle_file_state	String	Subtitle file generation status. ● GENERATING: generating the subtitle file... ● GENERATE_SUCCEED: subtitle file generated ● **GENERATE_FAILED: Subtitle file generation failed.
job_id	String	Subtitle file generation task ID.

Table 5-179 BackgroundMusicConfig

Parameter	Type	Description
music_asset_id	String	Details: Music asset ID. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
volume	Integer	Details: Music volume. For example, 100 indicates that the volume is 100%, and 50 indicates that the volume is 50%. Constraints: N/A Value range: 0-100 Default value: 100

Status code: 400

Table 5-180 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 5-181** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 404**Table 5-182** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 5-183** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
GET https://{endpoint}/v1/0d697589d98091f12f92c0073501cd79/2d-digital-human-videos/  
26f06524-4f75-4b3a-a853-b649a21aaf66
```

Example Responses

Status code: 200

The information is returned when the request succeeds.

```
{
  "job_id": "26f06524-4f75-4b3a-a853-b649a21aaf66",
  "state": "SUCCESS",
  "start_time": "2022-01-18T16:29:36Z",
  "end_time": "2022-01-18T16:30:36Z",
  "duration": 60,
  "output_asset_config": {
    "asset_id": "942e65a5fd219a2e01fb08d881cfadb9",
    "asset_name": "One Day",
    "cover_url": "https://{endpoint}/0d697589d98091f12f92c0073501cd79/942e65a5fd219a2e01fb08d881cfadb9/20d367508e62d3d4ad608cedb
e81bd35.png?
AccessKeyId=XCQKTA8IWQPCAUQS4SDA&Expires=1671241457&Signature=zVGMVbl5ji9rr8epD1Cir5OGIRk
%3D"
  },
  "error_info": null,
  "create_time": "2022-11-30T06:59:56Z",
  "lastupdate_time": "2022-11-30T07:00:09Z",
  "script_id": "4b5b6effcf3b4c72a0baccb265111765",
  "model_asset_id": "cda7e9a469ee9cf3ffc1ad62794a12ff",
  "voice_config": {
    "voice_asset_id": "f5e6a13eab4443fa85421191ad061780",
    "speed": 100,
    "pitch": 100,
    "volume": 140
  },
  "video_config": {
    "codec": "H264",
    "bitrate": 5000,
    "width": 720,
    "height": 1280,
    "frame_rate": 30
  },
  "shoot_scripts": [ {
    "sequence_no": 0,
    "shoot_script": {
      "text_config": {
        "text": "Hello, everyone. I'm Yunling."
      },
      "background_config": {
        "background_type": "IMAGE",
        "background_config": "https://{endpoint}/0d697589d98091f12f92c0073501cd79/
c7885ffdfb347337a890208ca7fd07e3/34534f0262813a6838bdcfb8bc949af6.jpg?
AccessKeyId=WTEZCVDFUF3XHXTPIJ8&Expires=1686901332&Signature=2E7Y7joo2NopBsU8u3iDnf2P9p8%
3D"
      },
      "layer_config": [ {
        "layer_type": "HUMAN",
        "position": {
          "dx": "656,",
          "dy": "0,",
          "layer_index": 1
        },
        "size": {
          "width": 607.5,
          "height": 1080
        }
      } ],
      "script_type": "TEXT"
    }
  ]
}
```

Status code: 400

```
{
  "error_code": "MSS.00000003",
  "error_msg": "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 404

```
{
  "error_code" : "MSS.00000002",
  "error_msg" : "Not Found"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	The information is returned when the request succeeds.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
404	No content.
500	Internal service error.

Error Codes

See [Error Codes](#).

5.3.3 Canceling a Virtual Avatar Video Production Task in the Waiting Status

Function

Cancels a virtual avatar video production task in the **Waiting** status.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/2d-digital-human-videos/{job_id}/cancel

Table 5-184 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
job_id	Yes	String	Task ID.

Request Parameters

Table 5-185 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 5-186 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Status code: 400**Table 5-187** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 5-188** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 5-189** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/0d697589d98091f12f92c0073501cd79/2d-digital-human-videos/26f06524-4f75-4b3a-a853-b649a21aaf66/cancel
```

Example Responses

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	The information is returned when the request succeeds.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

6 Virtual Avatar Livestreaming

6.1 Intelligent Livestreaming Room Management

6.1.1 Creating an Intelligent Livestreaming Room

Function

Creates an intelligent livestreaming room.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/smart-live-rooms

Table 6-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Request Parameters

Table 6-2 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 6-3 Request body parameters

Parameter	Mandatory	Type	Description
room_name	Yes	String	Details: Name of a live broadcast room. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A

Parameter	Mandatory	Type	Description
room_description	No	String	Details: Description of the live broadcast room. Constraints: N/A Options: The value contains 1 to 1024 characters. Default value: N/A
room_type	No	String	Details: Type of a live broadcast room. Constraints: N/A Options: • NORMAL: common live broadcast room. The live broadcast room always exists and can be started repeatedly. • TEMP: temporary live broadcast room. After a live broadcast task is complete, the live broadcast room is automatically cleared. • TEMPLATE: template for a live broadcast room. Default value: NORMAL
scene_scripts	No	Array of LiveVideoScriptInfo objects	Default live TV script list.
interaction_config	No	LiveRoomInteractionConfig object	Interactive Configuration
interaction_rules	No	Array of LiveRoomInteractionRuleInfo objects	Interaction rule list
play_policy	No	PlayPolicy object	Script Playing Strategy

Parameter	Mandatory	Type	Description
video_config	No	VideoConfig object	Video output configuration.
output_urls	No	Array of strings	Details: URL of the third-party live broadcast platform for RTMP video streaming. NOTE To update the URL during live broadcast, invoke the COMMAND command Refresh_OUTPUT_URL. Constraints: N/A Options: Currently, only one RTMP stream output address is supported. Default value: N/A
stream_keys	No	Array of strings	Details: Stream key of the third-party live TV platform for pushing RTMP videos, which corresponds to the stream pushing address. NOTE To update the URL during live broadcast, invoke the COMMAND command Refresh_OUTPUT_URL. Constraints: N/A Options: Currently, only one RTMP stream output address is supported. Default value: N/A

Parameter	Mandatory	Type	Description
backup_mode l_asset_ids	No	Array of strings	Details: Asset ID of the alternate anchor digital person during anchor rotation (only image assets, excluding sound assets). Constraints: N/A Options: Currently, a maximum of five alternative anchors are supported. Asset ID of a digital person. The value contains 0 to 64 characters. Default value: N/A
live_event_callback_config	No	LiveEventCallbackConfig object	Live event HTTPS callback notification configuration
rtc_callback_config	No	RTCLiveEventCallbackConfig object	RTC callback event configuration. Compatible processing. If the configuration is not carried, LIVE_PROGRESS is subscribed by default.
review_config	No	ReviewConfig object	Content Moderation Configuration
shared_config	No	SharedConfig object	Shared Configuration

Parameter	Mandatory	Type	Description
view_mode	No	String	Details: Landscape/portrait screen type. Constraints: You do not need to set this parameter. The value is determined based on the resolution in video_config. Options: • LANDSCAPE • VERTICAL Default value: VERTICAL
co_streamer_config	No	CoStreamerConfig object	Co-streamer configuration
priv_data	No	String	Details: Private data of the matching value, which is entered by the user and returned as it is. Constraints: N/A Options: Character length: 0-8192 Default value: N/A
relation_live_platform_info	No	PlatformLiveInfo object	Platform live broadcast information.

Table 6-4 LiveVideoScriptInfo

Parameter	Mandatory	Type	Description
script_id	No	String	Details: Script ID. Constraints: Leave this field blank. Options: The value contains 1 to 64 characters. Default value: N/A
script_name	Yes	String	Details: Script name. Constraints: This field is mandatory. Options: The value contains 1 to 256 characters. Default value: N/A
script_description	No	String	Details: Script description. Constraints: Leave this field blank. Options: The value contains 0 to 1,024 characters. Default value: N/A

Parameter	Mandatory	Type	Description
dh_id	No	String	Details: Virtual avatar ID, which corresponds to the combination of image and timbre. Constraints: This field is not used currently and does not need to be specified. Options: The value contains 0 to 64 characters. Default value: N/A
model_asset_id	No	String	Details: Virtual human model asset ID, which can be queried from the asset library. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
voice_config	No	VoiceConfig object	Voice configuration parameter.
background_config	No	Array of BackgroundConfigInfo objects	Background configuration.
layer_config	No	Array of LayerConfig objects	Layer configuration.
shoot_scripts	Yes	Array of LiveShootScriptItem objects	Shooting script list.

Table 6-5 BackgroundConfigInfo

Parameter	Mandatory	Type	Description
background_type	Yes	String	Details: Background type. Constraints: N/A Options: • IMAGE: image background, which is used as the virtual avatar video background • COLOR: solid color background. The RGB value of the specified color is used as the virtual avatar video background. Default value: N/A
background_title	No	String	Background title. NOTE • This parameter does not take effect for virtual avatar video production.
human_position_2d	No	HumanPosition2D object	Position of a virtual avatar in the background image. If this parameter is not set, the virtual avatar is in the middle of the image by default. NOTE • This parameter is discarded. The position of a virtual avatar in the background image is configured in the layer_config parameter.
human_size_2d	No	HumanSize2D object	Size of a virtual avatar in the background image. NOTE • This parameter is discarded. The size of a virtual avatar in the background image is configured in the layer_config parameter.

Parameter	Mandatory	Type	Description
background_cover_url	No	String	URL for downloading the thumbnail image of a video file. This parameter is valid only when the presentation material is a video. NOTE This parameter does not take effect for virtual avatar video production.
background_config	No	String	Details: Background file URL. Constraints: - External URLs are allowed only for livestreaming. For other services, obtain a URL from the asset library. - This parameter is mandatory when background_type is set to IMAGE. Options: The value contains 1 to 2,048 characters. Default value: N/A
background_color_config	No	String	Details: RGB color value of a solid color background. Constraints: This parameter is mandatory when background_type is set to COLOR. Options: The value contains 0 to 16 characters. Default value: #FFFFFF

Parameter	Mandatory	Type	Description
background_asset_id	No	String	Details: Background asset ID. NOTE If a background image is used, enter the image asset ID. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A

Table 6-6 HumanPosition2D

Parameter	Mandatory	Type	Description
position	No	String	Position of a virtual avatar in the background image. • LEFT: left • MIDDLE: middle • RIGHT: right NOTE If the values of position_x and position_y exist, position does not take effect. Default value: MIDDLE
position_x	No	Integer	X-axis position of the virtual avatar, that is, the X-axis pixel value of the center point at the bottom of the virtual avatar image. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: -1920-3840

Parameter	Mandatory	Type	Description
position_y	No	Integer	Y-axis position of the virtual avatar, that is, the Y-axis pixel value of the center point at the bottom of the virtual avatar image. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: -1920-3840

Table 6-7 HumanSize2D

Parameter	Mandatory	Type	Description
width	No	Integer	Width (in pixel) of a virtual avatar. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: 1-7680
height	No	Integer	Height (in pixel) of a virtual avatar. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: 1-7680

Table 6-8 LayerConfig

Parameter	Mandatory	Type	Description
layer_type	Yes	String	Details: Layer type. Constraints: N/A Options: • HUMAN: person layer • IMAGE: image layer • VIDEO: video layer • TEXT: text layer Default value: N/A
asset_id	No	String	Details: ID of the asset overlaid on a video. You do not need to set this parameter for external assets. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
group_id	No	String	Details: Groups materials in multiple scenes. Materials with the same group_id share location information when they are applied globally. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
position	No	LayerPosition Config object	Layer position configuration.

Parameter	Mandatory	Type	Description
size	No	LayerSizeConfig object	Layer size configuration.
image_config	No	ImageLayerConfig object	Material image layer configuration.
video_config	No	VideoLayerConfig object	Material video layer configuration.
text_config	No	TextLayerConfig object	Material text layer configuration.

Table 6-9 LayerPositionConfig

Parameter	Mandatory	Type	Description
dx	Yes	Integer	Details: X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0

Parameter	Mandatory	Type	Description
dy	Yes	Integer	Details: Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0
layer_index	Yes	Integer	Details: Layer sequence of an image, video, or person image. NOTE The layer sequence is an integer starting from 1 and incremented by 1. Constraints: If duplicate layers exist, the overlay relationship between the duplicate layers is random. Value range: 1-100 Default value: 100

Table 6-10 LayerSizeConfig

Parameter	Mandatory	Type	Description
width	No	Integer	Details: Y axis position of the pixel in the upper left corner of the image. Width (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680
height	No	Integer	Details: Height (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Table 6-11 ImageLayerConfig

Parameter	Mandatory	Type	Description
image_url	No	String	Details: Image file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A

Table 6-12 VideoLayerConfig

Parameter	Mandatory	Type	Description
video_url	No	String	Details: Video file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A
video_cover_url	No	String	Details: Video thumbnail file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A

Parameter	Mandatory	Type	Description
loop_count	No	Integer	Details: Number of times that a video is played cyclically. Options: • 0: no • -1: yes Constraints: N/A Value range: -1-100 Default value: -1

Table 6-13 TextLayerConfig

Parameter	Mandatory	Type	Description
text_context	No	String	Details: Text of the text layer. The content must be encoded using Base64. For example, if you want to add the text watermark "Test text watermark", set text_context to 5rWL6K+V5paH5a2X5rC05Y2w . Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A

Parameter	Mandatory	Type	Description
font_name	No	String	Details: Font. The following fonts are supported: Constraints: N/A Options: For details about the supported fonts, see Supported Fonts . Default value: HarmonyOS_Sans_SC_Black
font_size	No	Integer	Details: Font size (in pixel). The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 16
font_color	No	String	Details: Font color. RGB color value. Constraints: N/A Options: The value contains 0 to 16 characters. Default value: #FFFFFF

Table 6-14 LiveShootScriptItem

Parameter	Mandatory	Type	Description
sequence_no	No	Integer	Details: Script No. Constraints: N/A Value range: 0-2147483647
title	No	String	Details: Paragraph title. Constraints: N/A Options: The value contains 0 to 256 characters. Default value: N/A
text_config	No	TextConfig object	Script configuration.
audio_config	No	LiveAudioConfig object	Live audio configuration.
relation_product	No	RelationProductInfo object	Associated Offering

Table 6-15 TextConfig

Parameter	Mandatory	Type	Description
text	Yes	String	Details: Script. Two modes are supported: plain text mode and tag mode. • Plain text mode, for example, "Hello, everyone, I'm a virtual streamer." • Tag mode: For details about the definition of SSML tags, see SSML Definition of Text Control. Constraints: The value can contain a maximum of 10,000 characters, excluding the SSML tag. Options: The value contains 0 to 131,072 characters. Default value: N/A

Table 6-16 LiveAudioConfig

Parameter	Mandatory	Type	Description
asset_id	No	String	Details: ID of the inserted audio asset. You do not need to set this parameter for external assets. If you enter a value, you can query it from the asset library. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A

Parameter	Mandatory	Type	Description
audio_url	No	String	Details: Audio URL. Constraints: Only the MP3 format is supported. The size is less than 100 MB. The output is automatically converted to mono 16 kHz for sampling. Options: The value contains 0 to 2,048 characters. Default value: N/A
subtitle_url	No	String	Details: URL of the subtitle file of the audio. Constraints: Only the SRT format is supported. The size is less than 1 MB. Options: The value contains 0 to 2,048 characters. Default value: N/A

Table 6-17 RelationProductInfo

Parameter	Mandatory	Type	Description
product_id	No	String	Associated offering ID. If this parameter is set, this information is carried in the paragraph switchback callback. GoodsId corresponding to the US Regiment platform

Parameter	Mandatory	Type	Description
product_title	No	String	Associated product title/name. If this parameter is set, this information is carried in the paragraph switchback callback. US Regiment Platform Corresponding to GoodsTitle

Table 6-18 LiveRoomInteractionConfig

Parameter	Mandatory	Type	Description
play_type	No	String	Playback mode: ● APPEND: added to the end of the playback queue in the scene ● INSERT: inserted to the end of two audio files or a text sentence ● PLAY_NOW: inserted immediately. After the instruction is received, the media file is played immediately without waiting till the end of the sentence. Default value: INSERT
ignore_current_sentence	No	Boolean	The second half of a sentence is not read for reply. It is used for immediate interruption. By default, it is not ignored. Default value: false

Table 6-19 LiveRoomInteractionRuleInfo

Parameter	Mandatory	Type	Description
rule_index	No	String	Details: Rule index. It is used to index a specific rule when the rule is triggered. Constraints: You do not need to specify it. Options: 0 to 64 characters Default value: N/A
rule_name	No	String	Details: Rule name. Constraints: N/A Options: 0 to 256 characters Default value: N/A
enabled	No	Boolean	Details: Whether to enable. Constraints: N/A Options: • true: enabled • false: disabled Default value: true

Parameter	Mandatory	Type	Description
event_type	No	Integer	Details: Livestreaming event type matched by the rule. The value range is 0 to 100. Options: 1: On-screen comments 2: User joining a room 3: Giving likes 4: Sending gifts 10: Preset script events Use the actual value. NOTE 1, 2, 3, 4: corresponds to event.type in LiveEventReport 10: matches the preset script Constraints: N/A Default value: N/A Value range: 0-100
hit_condition	No	HitCondition object	Rule matching condition
trigger	No	TriggerProcesses object	Processing after rule matching
review_config	No	ReviewConfig object	Content review configuration.
group_id	No	String	Details: Interaction rule library ID, which is carried when a rule is imported from the interaction rule library. Constraints: N/A Options: The value contains 1 to 64 characters. Default value: N/A

Parameter	Mandatory	Type	Description
group_name	No	String	Details: Interaction rule library name, which is carried when a rule is imported from the interaction rule library. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
enabled_scenes	No	Array of strings	Details: Scenario where a rule is enabled. Set this parameter when some scenarios are enabled. If this field is not specified, it applies to all scenarios. Constraints: N/A Options: Livestreaming scenes. A maximum of 100 scenes are allowed. Enter a scene name, which contains 1 to 256 characters. Default value: N/A

Table 6-20 HitCondition

Parameter	Mandatory	Type	Description
relation	No	String	Details: Condition relationship, specifically, the logical operation relationship between multiple conditions. Constraints: N/A Options: • AND: Multiple conditions are met. • OR: One of the conditions is met. • RESERVED: The general reply does not check other matching conditions. Default value: N/A
priority	No	Integer	Details: Priority. A smaller value indicates a higher priority. The value ranges from 0 to 999. The default value is 500 . This parameter is optional. Constraints: N/A Value range: 0-999 Default value: 500
tags	No	Array of HitCondition Tag objects	Matching relationship configuration

Table 6-21 HitConditionTag

Parameter	Mandatory	Type	Description
tag	No	String	Details: Key fields in the event content. NOTE - When event_type is set to 1, 2, 3, or 4, the value corresponds to the JSON field deserialized from event.content in LiveEventReport. The following is an on-screen comment event report. { "timestamp": 1694481224245, "type": 1, "content": "{ \"user\": { \"userId\": \"2027271526\", \"name\": \"\", \"level\": 17, \"badge\": \"\", \"badgeLevel\": 0 }, \"content\": \"\" } }" To match the on-screen comment content, enter content. To match the user platform level, enter level. 10: Set this field to content. Constraints: N/A Options: The value contains 0 to 256 characters. Default value: N/A
operation	No	String	Details: Field value processing Constraints: N/A Options: SUM: accumulation AVG: average COUNT: count NONE: no processing Default value: NONE

Parameter	Mandatory	Type	Description
match	No	String	Details: Match type. You are advised to use REGEX for keyword matching. Constraints: N/A Options: • EQUAL: completely equal • REGEX: regular expression match • MATH_GT: greater than • MATH_GE: greater than or equal to • MATH_LT: less than • MATH_LE: less than or equal to • MATH_EQ: numerically equal Default value: N/A
value	No	String	Details: Matched value. Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A

Table 6-22 TriggerProcess

Parameter	Mandatory	Type	Description
time_window	No	Integer	Details: Processing suppression duration, in second. • -1: triggered only once throughout the livestream • 0: no suppression. It is triggered each time. • <i>n</i>: triggered only once within <i>n</i> seconds Constraints: N/A Default value: N/A Value range: -1-7200
reply_mode	No	String	Details: Reply type. Constraints: N/A Options: • SYSTEM_REPLY: automatic reply based on the preset script • CALLBACK: callback to other services, with the preset script • SHOW_LAYER: display of only overlaid layers, which does not affect the script • INTELLIGENT_REPLY: use the configured large model to generate reply scripts Default value: N/A
layer_config	No	SmartLayerConfig object	Intelligent layer configuration.
extra_layer_config	No	SmartLayerConfig object	Additional layer, which is used together with the second layer when dynamic text needs to be displayed for products.

Parameter	Mandatory	Type	Description
reply_texts	No	Array of strings	Details: Reply scripts. Constraints: N/A Options: A maximum of five preset scripts are allowed. A single script contains 0 to 1,024 characters. Default value: N/A
reply_audios	No	Array of ReplyAudioInfo objects	Details: Reply audio set. Set audio_url . Constraints: N/A Options: A maximum of five preset audio files are allowed. Default value: N/A
reply_order	No	String	Details: Sequence of reading reply scripts. Constraints: N/A Options: • RANDOM: randomly • ORDER: sequential loop Default value: N/A

Parameter	Mandatory	Type	Description
reply_role	No	String	Details: Reply role. Constraints: N/A Options: • STREAMER: streamer • CO_STREAMER: co-streamer, audio-only Default value: STREAMER
robot_id	No	String	Details: Bot ID. Constraints: ID of the large model robot configured for intelligent interaction. This parameter is mandatory when reply_mode is set to INTELLIGENT_REPLY . For details about how to obtain the ID. Options: The value contains 0 to 64 characters. Default value: N/A
play_type	No	String	Reply playback type. • APPEND: added to the end of the playback queue in the scene • INSERT: inserted to the end of two audio files or a text sentence • PLAY_NOW: inserted immediately. After the instruction is received, the media file is played immediately without waiting till the end of the sentence. Default value: PLAY_NOW

Table 6-23 SmartLayerConfig

Parameter	Mandatory	Type	Description
layer_type	Yes	String	Layer type. • IMAGE: image layer • VIDEO: video layer • TEXT: text layer
asset_id	No	String	ID of the asset overlaid on a video. You do not need to set this parameter for external assets.
position	No	LayerPositionConfig object	Layer position configuration.
size	No	LayerSizeConfig object	Layer size configuration.
image_config	No	SmartImageLayerConfig object	Image layer configuration.
video_config	No	SmartVideoLayerConfig object	Video layer configuration.
text_config	No	SmartTextLayerConfig object	Video layer configuration.

Table 6-24 SmartImageLayerConfig

Parameter	Mandatory	Type	Description
image_url	Yes	String	Image file URL.

Parameter	Mandatory	Type	Description
display_duration	No	Integer	Details: Image display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-25 SmartVideoLayerConfig

Parameter	Mandatory	Type	Description
video_url	Yes	String	Video file URL.
video_cover_url	No	String	Video thumbnail file URL.
display_duration	No	Integer	Details: Image display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-26 SmartTextLayerConfig

Parameter	Mandatory	Type	Description
text_type	No	String	Details: Text type. • DYNAMIC: dynamic text, which requires keyword replacement • STATIC: static text Default value: DYNAMIC
text_context	No	String	Text.
font_name	No	String	Details: Font. The following fonts are supported: • HarmonyOS_Sans_SC_Black: HarmonyOS bold • HarmonyOS_Sans_SC_Regular: HarmonyOS normal • HarmonyOS_Sans_SC_Thin: HarmonyOS light • fzyouh: Square & lean Default value: HarmonyOS_Sans_SC_Black
font_size	No	Integer	Details: Font size (in pixel). Value range: [4, 120]. The value range is subject to the actual service. Value range: 0-120 Default value: 16
font_color	No	String	Details: Font color. RGB color value. Default value: #FFFFFF

Parameter	Mandatory	Type	Description
display_duration	No	Integer	Details: Text display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-27 ReplyAudioInfo

Parameter	Mandatory	Type	Description
audio_url	No	String	Audio URL.
audio_name	No	String	Audio name.

Table 6-28 PlayPolicy

Parameter	Mandatory	Type	Description
repeat_count	No	Integer	Details: Number of times that a script is played repeatedly. • -1: The playback is repeated until it is stopped manually. • 0: It is played only once. • n: It is played $n + 1$ times. Constraints: N/A Value range: -1-100 Default value: 0
auto_play_script	No	Boolean	Details: Indicates whether to automatically play a script. Constraints: N/A Options: • true: The script is automatically played after the task is initialized. • false: After the task is initialized, the script is not played until signal appears. Default value: true

Parameter	Mandatory	Type	Description
play_mode	No	String	Details: Virtual avatar control method. Constraints: N/A Options: TEXT: text control, that is, using TTS AUDIO: speech control NO_PRESET: no preset script, manual control Default value: TEXT
random_play_mode	No	String	Details: Method of random script reading. Constraints: Random script reading starts from the second round of reading. Options: • NONE: Random script reading is disabled. • SCENE: Random script reading based on scenes is enabled. Paragraphs in a scene are read in sequence. • SCRIPT_ITEM: Random script reading based on paragraphs is enabled. Script of each scene is read in sequence. • SCENE_AND_SCRIPT_ITEM: Script of both scenes and paragraphs is read randomly. Default value: SCRIPT_ITEM

Parameter	Mandatory	Type	Description
need_independent_capture_client	No	Boolean	Details: Whether an independent data collection device is required. This parameter is used when the client playback is separated from the command. Constraints: N/A Options: • true: Devices are allocated to RTC users CAPTURE and PLAYER. • false: Devices are allocated only to the RTC user PLAYER. Default value: false

Table 6-29 VideoConfig

Parameter	Mandatory	Type	Description
clip_mode	No	String	Details: Clipping mode of the output video. Constraints: N/A Options: • RESIZE: video scaling • CROP: video cropping Default value: RESIZE

Parameter	Mandatory	Type	Description
codec	Yes	String	Details: Video encoding format and video file format. Constraints: Only virtual avatar video production supports VP8 encoding. Options: • H264: H.264 encoding, MP4 file output • VP8: VP8 encoding, WebM file output Default value: N/A
bitrate	Yes	Integer	Details: Average output bitrate. Unit: kbit/s Constraints: • Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. • Bitrate range for virtual avatar video production: [1000, 8000]. Default value: N/A Value range: 40-30000

Parameter	Mandatory	Type	Description
width	Yes	Integer	Details: Video width. Unit: pixel. Constraints: • When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. 4K is available only when the virtual avatar model supports 4K. • When clip_mode is set to CROP, (dx, dy) is the origin, and the width is the actual width of the reserved video. • Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840

Parameter	Mandatory	Type	Description
height	Yes	Integer	Details: Video height. Unit: pixel. Constraints: - When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. - When clip_mode is set to CROP, (dx, dy) is the origin, and the height is the actual height of the reserved video. - Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840
frame_rate	No	String	Details: Frame rate. Unit: FPS Constraints: The virtual avatar video frame rate is fixed at 25 FPS. Default value: 25
is_subtitle_enabled	No	Boolean	Details: Whether the output video is subtitled. Constraints: Subtitles are not supported for virtual avatar livestreaming. Options: true: enable subtitling false: disable subtitling Default value: false

Parameter	Mandatory	Type	Description
subtitle_config	No	SubtitleConfig object	Subtitle configuration.
disable_system_watermark	No	Boolean	Details: Indicates whether the system watermark is disabled for the output video. Constraints: Currently, this parameter takes effect only for trustlisted tenants. Value range: • true • false Default value: false
dx	No	Integer	Details: Horizontal coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dx ranges from 0 to 1920. Constraints: This parameter takes effect when clip_mode is set to CROP . Default value: N/A Value range: -1920-3840

Parameter	Mandatory	Type	Description
dy	No	Integer	Details: Vertical coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dy ranges from 0 to 1080. Constraints: This parameter takes effect when clip_mode is set to CROP. Default value: N/A Value range: -1920-3840
is_enable_super_resolution	No	Boolean	Details: Whether super resolution is enabled for a video. Constraints: This parameter is available only for virtual avatar video production. Options: • true: enable • false: do not enable Default value: false

Table 6-30 SubtitleConfig

Parameter	Mandatory	Type	Description
dx	No	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920
dy	No	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920
font_name	No	String	Details: Font. The following fonts are supported: • HarmonyOS_Sans_SC_Black: HarmonyOS bold • HarmonyOS_Sans_SC_Regular: HarmonyOS normal • HarmonyOS_Sans_SC_Thin: HarmonyOS light Constraints: N/A Options: The value contains 0 to 64 characters. Default value: HarmonyOS_Sans_SC_Black

Parameter	Mandatory	Type	Description
font_size	No	Integer	Details: Font size. The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 54
h	No	Integer	Details: Subtitle box height. Constraints: The parameter h is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920
w	No	Integer	Details: Subtitle box width. Constraints: • The subtitle box width is fixed at 80/ %of the screen width. • The parameter w is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920

Table 6-31 LiveEventCallBackConfig

Parameter	Mandatory	Type	Description
live_event_type_callback_url	No	String	Details: Live event callback address, which is an HTTPS address. Constraints: N/A Options: The value contains 0 to 2,048 characters. Default value: N/A

Parameter	Mandatory	Type	Description
auth_type	No	String	Details: Authentication type. Constraints: N/A Options: • NONE: The URL contains authentication. • MSS_A: In HMACSHA256 signature mode, the hwSecret and hwTime parameters are added to the URL. Value format: hwSecret=hmac_sha256(Key, URI (live_event_callback_url) + hwTime)&hwTime=hex(timestamp) • MSS_A_HEAD: In HMACSHA256 signature mode, the hwSecret and hwTime parameters are placed in Head. Value format: x-hw-mss-secret=hmac_sha256(Key, URI (live_event_callback_url) + hwTime) x-hw-mss-time=hex(timestamp) • MEITUAN_DEFAULT: This parameter is used only for Meituan's API callback. Default value: NONE
key	No	String	Details: Key. Constraints: N/A Options: The value contains 0 to 32 characters. Default value: N/A

Parameter	Mandatory	Type	Description
callback_event_type	No	Array of strings	Details: Live event types in callbacks. Constraints: N/A Options: Currently, only the following options are supported: • SHOOT_SCRIPT_SWITCH: script paragraph switching event • RTMP_STREAM_STATE_CHANGE: RTMP link change callback event • REPLY_COMMAND_FINISH: Playback is complete. The callback event structure is defined as follows: • event_type: event type • message: event description – The SHOOT_SCRIPT_SWITCH event callback is defined as follows:<pre>{ "event_type": "SHOOT_SCRIPT_SWITCH", "message":{"\room_id \":"26f065244f754b3aa853b649 a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b 04c49c3c\","scene_script_name \":"Product 1\","shoot_script_sequence_no \":"2\","shoot_script_title \":"Paragraph 2\"}" }</pre> – The RTMP_STREAM_STATE_CHANGE callback is defined as follows:<pre>{ "event_type": "RTMP_STREAM_STATE_CHANGE", "message":{"\room_id \":"26f065244f754b3aa853b649 a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b 04c49c3c\","output_url \":"rtmp://xxx/xx/xx \","stream_key\":"xxxxx</pre>

Parameter	Mandatory	Type	Description
			<pre>\",\"state\": \"CONNECTED\"}]\"}</pre> The value of state can be CONNECTING, CONNECTED, DISCONNECTED, RECONNECTING, or END. - The REPLY_COMMAND_FINISH callback is defined as follows: <pre>{ \"event_type\": \"REPLY_COMMAND_FINISH\", \"message\": \"{ \"room_id \": \"26f065244f754b3aa853b649a21aaf66\", \"job_id \": \"e87104f76d7546ce8a46ac6b04c49c3c\", \"reply_id \": \"e87104f76d7546ce8a46ac6b04c49c3c\" }\"}</pre>

Table 6-32 RTCLiveEventCallBackConfig

Parameter	Mandatory	Type	Description
rtc_callback_event_type	No	Array of strings	Live event types in RTC callbacks. Currently, only the following options are supported: • LIVE_PROGRESS: live script progress notification • REPLY_COMMAND_FINISH: Playback is complete. The callback event structure is defined as follows: • message_type: message type • data: message description – The LIVE_PROGRESS event callback is defined as follows:<pre>{ "message_type": "live_progress_notify", "data": { "script_name": "Scene 1", "shoot_script_sequence_no": 2, "shoot_script_title": "Greeting", "offset": "247", "reply_id": "e87104f76d7546ce8a46ac6b04c49c3c" } }</pre> – The REPLY_COMMAND_FINISH callback is defined as follows:<pre>{ "message_type": "reply_command_finish_notify", "data": "{ "reply_id": "e87104f76d7546ce8a46ac6b04c49c3c" }" }</pre>

Table 6-33 ReviewConfig

Parameter	Mandatory	Type	Description
no_need_review	No	Boolean	Content review whitelist. This feature is available only for users in the whitelist. The auto review policies apply to other users.

Table 6-34 SharedConfig

Parameter	Mandatory	Type	Description
shared_type	No	String	Details: Sharing type. Constraints: This configuration applies only to templates. Options: • PRIVATE: accessible only to the current tenant • PUBLIC: accessible to all tenants. Currently, only system assets are accessible to all tenants. • SHARED: accessible to specified tenants, who are specified by the owner. Default value: N/A

Parameter	Mandatory	Type	Description
shared_state	No	String	Details: Sharing status. Constraints: This configuration applies only to templates whose shared_type is SHARED . Options: • PUBLISHED: published. The template is available. • DRAFT: draft. The template is being edited and can be viewed only by the owner. • REVIEW: The template is being reviewed. The template cannot be edited and can be viewed only by the owner/reviewer. Default value: N/A
expire_time	No	String	Details: Time when the sharing expires. If this parameter is left blank, the sharing never expires. Constraints: This configuration applies only to templates whose shared_type is SHARED . The format complies with RFC 3339, for example, 20210710T08:43:17Z. Options: The value contains 0 to 20 characters. Default value: N/A

Parameter	Mandatory	Type	Description
allowed_project_ids	No	Array of strings	Details: Tenants allowed to access the asset. Constraints: This configuration applies only to templates whose shared_type is SHARED . Options: A maximum of 100 tenants are allowed. Duplicate records will be ignored. Enter a project ID containing 1 to 64 characters. Default value: N/A

Table 6-35 CoStreamerConfig

Parameter	Mandatory	Type	Description
voice_config	No	VoiceConfig object	Voice configuration parameter.
streamer_action	No	String	Details: Behavior of the streamer when the co-streamer speaks. Constraints: N/A Options: • SILENCE: silent • VOLUME_DOWN: decreased volume Default value: N/A

Table 6-36 VoiceConfig

Parameter	Mandatory	Type	Description
voice_asset_id	Yes	String	Details: Timbre asset ID, which can be queried from the asset library. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
speed	No	Integer	Details: Speaking speed. 50 indicates 0.5x speaking speed, 100 indicates normal speaking speed, and 200 indicates 2x speaking speed. The value 100 indicates the normal speaking speed of an adult, which is about 150 words per minute. Constraints: N/A Value range: 50-200 Default value: 100
pitch	No	Integer	Details: Pitch. Constraints: N/A Value range: 50-200 Default value: 100

Parameter	Mandatory	Type	Description
volume	No	Integer	Details: Volume. Constraints: N/A Value range: 90-240 Default value: 140

Table 6-37 PlatformLiveInfo

Parameter	Mandatory	Type	Description
platform_id	Yes	String	Live TV platform ID.
live_id	Yes	String	Live TV channel ID. If this parameter is set, the live TV channel ID is carried in the segment switchback callback. The value can contain only letters, digits, hyphens (-), and underscores (_). LiveId corresponding to the Meituan.

Response Parameters

Status code: 200

Table 6-38 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 6-39 Response body parameters

Parameter	Type	Description
room_id	String	Livestreaming room ID.

Status code: 400

Table 6-40 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 6-41** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-42** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

POST https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/smart-live-rooms

```
{
  "room_name": "The Legend of Nature",
  "room_description": "Courseware",
  "scene_scripts": [ {
    "script_name": "The Legend of Nature —",
    "model_asset_id": "a5d295cdb345c11bd9f36bc22ced3a7a",
    "voice_config": {
      "voice_asset_id": "a5d295cdb345c11bd9f36bc22ced3a7a"
    }
  },
  "background_config": [ {
    "background_type": "IMAGE",
    "background_config": "978f893e1de4553c183b7a805e6290f5"
  } ],
  "shoot_scripts": [ {
    "sequence_no": 1,
    "text_config": {
      "text": "Hello, everyone. I'm Sara."
    }
  } ],
  "live_event_callback_config": {
    "live_event_type_callback_url": "https://xxx/xxx/xxx?xxx=xxx",
    "auth_type": "NONE",
    "callback_event_type": [ "SHOOT_SCRIPT_SWITCH" ]
  }
}
```

```
}  
}
```

Example Responses

Status code: 200

Succeeded.

```
{  
  "room_id" : "26f06524-4f75-4b3a-a853-b649a21aaf66"  
}
```

Status code: 400

```
{  
  "error_code" : "MSS.00000003",  
  "error_msg" : "Invalid parameter"  
}
```

Status code: 401

```
{  
  "error_code" : "MSS.00000001",  
  "error_msg" : "Unauthorized"  
}
```

Status code: 500

```
{  
  "error_code" : "MSS.00000004",  
  "error_msg" : "Internal Error"  
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.1.2 Querying Intelligent Livestreaming Rooms

Function

Queries intelligent livestreaming rooms.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/smart-live-rooms

Table 6-43 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Table 6-44 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts. Value range: 0-2147483647 Default value: 0
limit	No	Integer	Number of items displayed on each page. Value range: 1-100 Default value: 10
room_name	No	String	Fuzzy search by livestreaming room name.
dh_id	No	String	Search by virtual human image ID.
model_name	No	String	Fuzzy search by image name.

Parameter	Mandatory	Type	Description
live_state	No	String	Live room status. The status can be WAITING , PROCESSING , SUCCESS , FAILED , or CANCELED . NULL indicates that there is no livestreaming task. Multiple statuses can be queried. Use commas (,) to separate them.
start_time	No	String	Start time of the latest livestreaming task. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
end_time	No	String	End time. The format complies with RFC 3339, for example, 2021-01-10T10:43:17Z.
room_type	No	String	Query by live room type. Options: • NORMAL: general live room. The room always exists and can start and stop livestreaming at any time. • TEMP: temporary live room. After a livestreaming task is complete, the live room is automatically cleared. • TEMPLATE: live room template
template_own_type	No	String	Users can query information based on their own templates, templates shared with others, and public templates. • Owned: templates owned by a user and not shared yet • SHARED_TO_OTHERS: templates shared with others • SHARED_FROM_OTHERS: templates shared by others • Public: public templates

Request Parameters

Table 6-45 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200**Table 6-46** Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 6-47 Response body parameters

Parameter	Type	Description
count	Integer	Total number of livestreaming rooms. Value range: 0-2147483647
smart_live_rooms	Array of SmartLiveRoomBaseInfo objects	Livestreaming room list.

Table 6-48 SmartLiveRoomBaseInfo

Parameter	Type	Description
room_id	String	Livestreaming room ID.
project_id	String	Tenant ID
room_name	String	Livestreaming room name.
room_type	String	Options: ● NORMAL: general live room. The room always exists and can start and stop livestreaming at any time. ● TEMP: temporary live room. After a livestreaming task is complete, the live room is automatically cleared. ● TEMPLATE: live room template Default value: NORMAL
room_state	String	Live room status. ● ENABLE: The live room is available. ● DISABLE: The live room is unavailable. The cause is described in error_info. ● BLOCKED: The live room has been blocked. The cause is described in error_info.
view_mode	String	Landscape or portrait mode. Default value: VERTICAL ● LANDSCAPE: landscape ● VERTICAL: portrait Default value: VERTICAL

Parameter	Type	Description
error_info	ErrorResponse object	Error messages of a virtual human live room.
shared_config	SharedConfig object	Template sharing information between live rooms. This parameter is specified only when the live room type is template .
room_description	String	Livestreaming room description.
cover_url	String	Livestreaming room thumbnail URL.
thumbnail	String	Live room thumbnail URL
model_infos	Array of ModelInfo objects	Virtual human model information.
create_time	String	Creation time. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
update_time	String	Update time. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
last_job_start_time	String	Time when livestreaming starts. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
last_job_end_time	String	Time when livestreaming ends. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
last_job_statuses	String	Current livestreaming status. ● WAITING: The task is waiting for execution. ● PROCESSING: The task is being executed. ● SUCCEED: The task is completed. ● FAILED: The task failed. ● CANCELED: The task has been canceled. ● BLOCKED: The task has been frozen.
priv_data	String	Private data, which is entered by the user and then returned with the same content.

Table 6-49 ErrorResponse

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Table 6-50 SharedConfig

Parameter	Type	Description
shared_type	String	Details: Sharing type. Constraints: This configuration applies only to templates. Options: • PRIVATE: accessible only to the current tenant • PUBLIC: accessible to all tenants. Currently, only system assets are accessible to all tenants. • SHARED: accessible to specified tenants, who are specified by the owner. Default value: N/A
shared_state	String	Details: Sharing status. Constraints: This configuration applies only to templates whose shared_type is SHARED . Options: • PUBLISHED: published. The template is available. • DRAFT: draft. The template is being edited and can be viewed only by the owner. • REVIEW: The template is being reviewed. The template cannot be edited and can be viewed only by the owner/reviewer. Default value: N/A

Parameter	Type	Description
expire_time	String	Details: Time when the sharing expires. If this parameter is left blank, the sharing never expires. Constraints: This configuration applies only to templates whose shared_type is SHARED . The format complies with RFC 3339, for example, 20210710T08:43:17Z. Options: The value contains 0 to 20 characters. Default value: N/A
allowed_project_ids	Array of strings	Details: Tenants allowed to access the asset. Constraints: This configuration applies only to templates whose shared_type is SHARED . Options: A maximum of 100 tenants are allowed. Duplicate records will be ignored. Enter a project ID containing 1 to 64 characters. Default value: N/A

Table 6-51 ModelInfo

Parameter	Type	Description
model_asset_id	String	Model asset ID, which can be queried from the asset library.
asset_name	String	Asset name.
backup_model_asset_ids	Array of strings	ID of the alternative virtual streamer asset (image asset only) during streamer rotation, which can be queried from the asset library.

Status code: 400

Table 6-52 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 6-53** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-54** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
GET https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/smart-live-rooms
```

Example Responses

Status code: 200

Succeeded.

```
{
  "count" : 1,
  "smart_live_rooms" : [ {
    "room_id" : "26f06524-4f75-4b3a-a853-b649a21aaf66",
    "room_name" : "The Legend of Nature",
    "room_description" : "Courseware",
    "create_time" : "2022-11-30T06:59:55Z",
    "update_time" : "2022-12-05T12:30:37Z"
  } ]
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.1.3 Querying Intelligent Livestreaming Script Details

Function

Queries intelligent livestreaming script details.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/smart-live-rooms/{room_id}

Table 6-55 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
room_id	Yes	String	Script ID.

Request Parameters

Table 6-56 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200**Table 6-57** Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 6-58 Response body parameters

Parameter	Type	Description
room_name	String	Details: Name of a live broadcast room. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
room_description	String	Details: Description of the live broadcast room. Constraints: N/A Options: The value contains 1 to 1024 characters. Default value: N/A
room_type	String	Details: Type of a live broadcast room. Constraints: N/A Options: • NORMAL: common live broadcast room. The live broadcast room always exists and can be started repeatedly. • TEMP: temporary live broadcast room. After a live broadcast task is complete, the live broadcast room is automatically cleared. • TEMPLATE: template for a live broadcast room. Default value: NORMAL
scene_scripts	Array of LiveVideoScriptInfo objects	Default live TV script list.
interaction_config	LiveRoomInteractionConfig object	Interactive Configuration

Parameter	Type	Description
interaction_rules	Array of LiveRoomInteractionRuleInfo objects	Interaction rule list
play_policy	PlayPolicy object	Script Playing Strategy
video_config	VideoConfig object	Video output configuration.
output_urls	Array of strings	Details: URL of the third-party live broadcast platform for RTMP video streaming. NOTE To update the URL during live broadcast, invoke the COMMAND command Refresh_OUTPUT_URL. Constraints: N/A Options: Currently, only one RTMP stream output address is supported. Default value: N/A
stream_keys	Array of strings	Details: Stream key of the third-party live TV platform for pushing RTMP videos, which corresponds to the stream pushing address. NOTE To update the URL during live broadcast, invoke the COMMAND command Refresh_OUTPUT_URL. Constraints: N/A Options: Currently, only one RTMP stream output address is supported. Default value: N/A

Parameter	Type	Description
backup_mode l_asset_ids	Array of strings	Details: Asset ID of the alternate anchor digital person during anchor rotation (only image assets, excluding sound assets). Constraints: N/A Options: Currently, a maximum of five alternative anchors are supported. Asset ID of a digital person. The value contains 0 to 64 characters. Default value: N/A
live_event_call back_config	LiveEventCall BackConfig object	Live event HTTPS callback notification configuration
rtc_callback_c onfig	RTCLiveEvent CallBackConf ig object	RTC callback event configuration. Compatible processing. If the configuration is not carried, LIVE_PROGRESS is subscribed by default.
review_config	ReviewConf ig object	Content Moderation Configuration
shared_config	SharedConfig object	Shared Configuration
view_mode	String	Details: Landscape/portrait screen type. Constraints: You do not need to set this parameter. The value is determined based on the resolution in video_config. Options: • LANDSCAPE • VERTICAL Default value: VERTICAL
co_streamer_c onfig	CoStreamerC onfig object	Co-streamer configuration

Parameter	Type	Description
priv_data	String	Details: Private data of the matching value, which is entered by the user and returned as it is. Constraints: N/A Options: Character length: 0-8192 Default value: N/A
room_id	String	Livestreaming room ID.
relation_live_platform_info	PlatformLiveDetailInfo object	Platform live broadcast information.
create_time	String	Time when a livestreaming room is created. The value is in RFC 3339 format, for example, 2021-01-10T08:43:17Z.
update_time	String	Time when a livestreaming room is updated. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
cover_url	String	Livestreaming room thumbnail URL.
thumbnail	String	New URL of the live room thumbnail
room_state	String	Live room status. ● ENABLE: The live room is available. ● DISABLE: The live room is unavailable. The cause is described in error_info. ● BLOCKED: The live room has been blocked. The cause is described in error_info.
error_info	ErrorResponse object	Error messages of a virtual human live room.

Table 6-59 LiveVideoScriptInfo

Parameter	Type	Description
script_id	String	Details: Script ID. Constraints: Leave this field blank. Options: The value contains 1 to 64 characters. Default value: N/A
script_name	String	Details: Script name. Constraints: This field is mandatory. Options: The value contains 1 to 256 characters. Default value: N/A
script_description	String	Details: Script description. Constraints: Leave this field blank. Options: The value contains 0 to 1,024 characters. Default value: N/A
dh_id	String	Details: Virtual avatar ID, which corresponds to the combination of image and timbre. Constraints: This field is not used currently and does not need to be specified. Options: The value contains 0 to 64 characters. Default value: N/A

Parameter	Type	Description
model_asset_id	String	Details: Virtual human model asset ID, which can be queried from the asset library. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
voice_config	VoiceConfig object	Voice configuration parameter.
background_config	Array of BackgroundConfigInfo objects	Background configuration.
layer_config	Array of LayerConfig objects	Layer configuration.
shoot_scripts	Array of LiveShootScriptItem objects	Shooting script list.

Table 6-60 BackgroundConfigInfo

Parameter	Type	Description
background_type	String	Details: Background type. Constraints: N/A Options: • IMAGE: image background, which is used as the virtual avatar video background • COLOR: solid color background. The RGB value of the specified color is used as the virtual avatar video background. Default value: N/A

Parameter	Type	Description
background_title	String	Background title. NOTE This parameter does not take effect for virtual avatar video production.
human_position_2d	HumanPosition2D object	Position of a virtual avatar in the background image. If this parameter is not set, the virtual avatar is in the middle of the image by default. NOTE This parameter is discarded. The position of a virtual avatar in the background image is configured in the layer_config parameter.
human_size_2d	HumanSize2D object	Size of a virtual avatar in the background image. NOTE This parameter is discarded. The size of a virtual avatar in the background image is configured in the layer_config parameter.
background_cover_url	String	URL for downloading the thumbnail image of a video file. This parameter is valid only when the presentation material is a video. NOTE This parameter does not take effect for virtual avatar video production.
background_config	String	Details: Background file URL. Constraints: - External URLs are allowed only for livestreaming. For other services, obtain a URL from the asset library. - This parameter is mandatory when background_type is set to IMAGE. Options: The value contains 1 to 2,048 characters. Default value: N/A

Parameter	Type	Description
background_color_config	String	Details: RGB color value of a solid color background. Constraints: This parameter is mandatory when background_type is set to COLOR . Options: The value contains 0 to 16 characters. Default value: #FFFFFF
background_asset_id	String	Details: Background asset ID. NOTE If a background image is used, enter the image asset ID. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A

Table 6-61 HumanPosition2D

Parameter	Type	Description
position	String	Position of a virtual avatar in the background image. • LEFT: left • MIDDLE: middle • RIGHT: right NOTE If the values of position_x and position_y exist, position does not take effect. Default value: MIDDLE

Parameter	Type	Description
position_x	Integer	X-axis position of the virtual avatar, that is, the X-axis pixel value of the center point at the bottom of the virtual avatar image. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: -1920-3840
position_y	Integer	Y-axis position of the virtual avatar, that is, the Y-axis pixel value of the center point at the bottom of the virtual avatar image. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: -1920-3840

Table 6-62 HumanSize2D

Parameter	Type	Description
width	Integer	Width (in pixel) of a virtual avatar. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: 1-7680
height	Integer	Height (in pixel) of a virtual avatar. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: 1-7680

Table 6-63 LayerConfig

Parameter	Type	Description
layer_type	String	Details: Layer type. Constraints: N/A Options: • HUMAN: person layer • IMAGE: image layer • VIDEO: video layer • TEXT: text layer Default value: N/A
asset_id	String	Details: ID of the asset overlaid on a video. You do not need to set this parameter for external assets. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
group_id	String	Details: Groups materials in multiple scenes. Materials with the same group_id share location information when they are applied globally. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
position	LayerPositionConfig object	Layer position configuration.
size	LayerSizeConfig object	Layer size configuration.
image_config	ImageLayerConfig object	Material image layer configuration.

Parameter	Type	Description
video_config	VideoLayerConfig object	Material video layer configuration.
text_config	TextLayerConfig object	Material text layer configuration.

Table 6-64 LayerPositionConfig

Parameter	Type	Description
dx	Integer	Details: X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0
dy	Integer	Details: Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0

Parameter	Type	Description
layer_index	Integer	Details: Layer sequence of an image, video, or person image. NOTE The layer sequence is an integer starting from 1 and incremented by 1. Constraints: If duplicate layers exist, the overlay relationship between the duplicate layers is random. Value range: 1-100 Default value: 100

Table 6-65 LayerSizeConfig

Parameter	Type	Description
width	Integer	Details: Y axis position of the pixel in the upper left corner of the image. Width (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Parameter	Type	Description
height	Integer	Details: Height (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Table 6-66 ImageLayerConfig

Parameter	Type	Description
image_url	String	Details: Image file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A

Table 6-67 VideoLayerConfig

Parameter	Type	Description
video_url	String	Details: Video file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A

Parameter	Type	Description
video_cover_url	String	Details: Video thumbnail file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A
loop_count	Integer	Details: Number of times that a video is played cyclically. Options: • 0: no • -1: yes Constraints: N/A Value range: -1-100 Default value: -1

Table 6-68 TextLayerConfig

Parameter	Type	Description
text_context	String	Details: Text of the text layer. The content must be encoded using Base64. For example, if you want to add the text watermark "Test text watermark", set text_context to 5rWL6K+V5paH5a2X5rC05Y2w . Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A

Parameter	Type	Description
font_name	String	Details: Font. The following fonts are supported: Constraints: N/A Options: For details about the supported fonts, see Supported Fonts . Default value: HarmonyOS_Sans_SC_Black
font_size	Integer	Details: Font size (in pixel). The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 16
font_color	String	Details: Font color. RGB color value. Constraints: N/A Options: The value contains 0 to 16 characters. Default value: #FFFFFF

Table 6-69 LiveShootScriptItem

Parameter	Type	Description
sequence_no	Integer	Details: Script No. Constraints: N/A Value range: 0-2147483647

Parameter	Type	Description
title	String	Details: Paragraph title. Constraints: N/A Options: The value contains 0 to 256 characters. Default value: N/A
text_config	TextConfig object	Script configuration.
audio_config	LiveAudioConfig object	Live audio configuration.
relation_product	RelationProductInfo object	Associated Offering

Table 6-70 TextConfig

Parameter	Type	Description
text	String	Details: Script. Two modes are supported: plain text mode and tag mode. • Plain text mode, for example, "Hello, everyone, I'm a virtual streamer." • Tag mode: For details about the definition of SSML tags, see SSML Definition of Text Control. Constraints: The value can contain a maximum of 10,000 characters, excluding the SSML tag. Options: The value contains 0 to 131,072 characters. Default value: N/A

Table 6-71 LiveAudioConfig

Parameter	Type	Description
asset_id	String	Details: ID of the inserted audio asset. You do not need to set this parameter for external assets. If you enter a value, you can query it from the asset library. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
audio_url	String	Details: Audio URL. Constraints: Only the MP3 format is supported. The size is less than 100 MB. The output is automatically converted to mono 16 kHz for sampling. Options: The value contains 0 to 2,048 characters. Default value: N/A
subtitle_url	String	Details: URL of the subtitle file of the audio. Constraints: Only the SRT format is supported. The size is less than 1 MB. Options: The value contains 0 to 2,048 characters. Default value: N/A

Table 6-72 RelationProductInfo

Parameter	Type	Description
product_id	String	Associated offering ID. If this parameter is set, this information is carried in the paragraph switchback callback. GoodsId corresponding to the US Regiment platform

Parameter	Type	Description
product_title	String	Associated product title/name. If this parameter is set, this information is carried in the paragraph switchback callback. US Regiment Platform Corresponding to GoodsTitle

Table 6-73 LiveRoomInteractionConfig

Parameter	Type	Description
play_type	String	Playback mode: • APPEND: added to the end of the playback queue in the scene • INSERT: inserted to the end of two audio files or a text sentence • PLAY_NOW: inserted immediately. After the instruction is received, the media file is played immediately without waiting till the end of the sentence. Default value: INSERT
ignore_current_sentence	Boolean	The second half of a sentence is not read for reply. It is used for immediate interruption. By default, it is not ignored. Default value: false

Table 6-74 LiveRoomInteractionRuleInfo

Parameter	Type	Description
rule_index	String	Details: Rule index. It is used to index a specific rule when the rule is triggered. Constraints: You do not need to specify it. Options: 0 to 64 characters Default value: N/A

Parameter	Type	Description
rule_name	String	Details: Rule name. Constraints: N/A Options: 0 to 256 characters Default value: N/A
enabled	Boolean	Details: Whether to enable. Constraints: N/A Options: • true: enabled • false: disabled Default value: true
event_type	Integer	Details: Livestreaming event type matched by the rule. The value range is 0 to 100. Options: 1: On-screen comments 2: User joining a room 3: Giving likes 4: Sending gifts 10: Preset script events Use the actual value. NOTE • 1, 2, 3, 4: corresponds to event.type in LiveEventReport • 10: matches the preset script Constraints: N/A Default value: N/A Value range: 0-100
hit_condition	HitCondition object	Rule matching condition

Parameter	Type	Description
trigger	TriggerProcesses object	Processing after rule matching
review_config	ReviewConfig object	Content review configuration.
group_id	String	Details: Interaction rule library ID, which is carried when a rule is imported from the interaction rule library. Constraints: N/A Options: The value contains 1 to 64 characters. Default value: N/A
group_name	String	Details: Interaction rule library name, which is carried when a rule is imported from the interaction rule library. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
enabled_scenes	Array of strings	Details: Scenario where a rule is enabled. Set this parameter when some scenarios are enabled. If this field is not specified, it applies to all scenarios. Constraints: N/A Options: Livestreaming scenes. A maximum of 100 scenes are allowed. Enter a scene name, which contains 1 to 256 characters. Default value: N/A

Table 6-75 HitCondition

Parameter	Type	Description
relation	String	Details: Condition relationship, specifically, the logical operation relationship between multiple conditions. Constraints: N/A Options: • AND: Multiple conditions are met. • OR: One of the conditions is met. • RESERVED: The general reply does not check other matching conditions. Default value: N/A
priority	Integer	Details: Priority. A smaller value indicates a higher priority. The value ranges from 0 to 999. The default value is 500 . This parameter is optional. Constraints: N/A Value range: 0-999 Default value: 500
tags	Array of HitCondition Tag objects	Matching relationship configuration

Table 6-76 HitConditionTag

Parameter	Type	Description
tag	String	Details: Key fields in the event content. NOTE - When event_type is set to 1, 2, 3, or 4, the value corresponds to the JSON field deserialized from event.content in LiveEventReport. The following is an on-screen comment event report. <pre>{ "timestamp": 1694481224245, "type": 1, "content": "{ \"user\": {\"userId\":\"2027271526\",\"name\":\"\",\"level\":\"17\",\"ba dge\":\"\",\"badgeLevel\":\"0\"},\"content\":\"\"} }"</pre> To match the on-screen comment content, enter content. To match the user platform level, enter level. 10: Set this field to content. Constraints: N/A Options: The value contains 0 to 256 characters. Default value: N/A
operation	String	Details: Field value processing Constraints: N/A Options: SUM: accumulation AVG: average COUNT: count NONE: no processing Default value: NONE

Parameter	Type	Description
match	String	Details: Match type. You are advised to use REGEX for keyword matching. Constraints: N/A Options: • EQUAL: completely equal • REGEX: regular expression match • MATH_GT: greater than • MATH_GE: greater than or equal to • MATH_LT: less than • MATH_LE: less than or equal to • MATH_EQ: numerically equal Default value: N/A
value	String	Details: Matched value. Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A

Table 6-77 TriggerProcess

Parameter	Type	Description
time_window	Integer	Details: Processing suppression duration, in second. • -1: triggered only once throughout the livestream • 0: no suppression. It is triggered each time. • <i>n</i>: triggered only once within <i>n</i> seconds Constraints: N/A Default value: N/A Value range: -1-7200
reply_mode	String	Details: Reply type. Constraints: N/A Options: • SYSTEM_REPLY: automatic reply based on the preset script • CALLBACK: callback to other services, with the preset script • SHOW_LAYER: display of only overlaid layers, which does not affect the script • INTELLIGENT_REPLY: use the configured large model to generate reply scripts Default value: N/A
layer_config	SmartLayerConfig object	Intelligent layer configuration.
extra_layer_config	SmartLayerConfig object	Additional layer, which is used together with the second layer when dynamic text needs to be displayed for products.

Parameter	Type	Description
reply_texts	Array of strings	Details: Reply scripts. Constraints: N/A Options: A maximum of five preset scripts are allowed. A single script contains 0 to 1,024 characters. Default value: N/A
reply_audios	Array of ReplyAudioInfo objects	Details: Reply audio set. Set audio_url . Constraints: N/A Options: A maximum of five preset audio files are allowed. Default value: N/A
reply_order	String	Details: Sequence of reading reply scripts. Constraints: N/A Options: • RANDOM: randomly • ORDER: sequential loop Default value: N/A
reply_role	String	Details: Reply role. Constraints: N/A Options: • STREAMER: streamer • CO_STREAMER: co-streamer, audio-only Default value: STREAMER

Parameter	Type	Description
robot_id	String	Details: Bot ID. Constraints: ID of the large model robot configured for intelligent interaction. This parameter is mandatory when reply_mode is set to INTELLIGENT_REPLY . For details about how to obtain the ID. Options: The value contains 0 to 64 characters. Default value: N/A
play_type	String	Reply playback type. • APPEND: added to the end of the playback queue in the scene • INSERT: inserted to the end of two audio files or a text sentence • PLAY_NOW: inserted immediately. After the instruction is received, the media file is played immediately without waiting till the end of the sentence. Default value: PLAY_NOW

Table 6-78 SmartLayerConfig

Parameter	Type	Description
layer_type	String	Layer type. • IMAGE: image layer • VIDEO: video layer • TEXT: text layer
asset_id	String	ID of the asset overlaid on a video. You do not need to set this parameter for external assets.
position	LayerPositionConfig object	Layer position configuration.
size	LayerSizeConfig object	Layer size configuration.

Parameter	Type	Description
image_config	SmartImageLayerConfig object	Image layer configuration.
video_config	SmartVideoLayerConfig object	Video layer configuration.
text_config	SmartTextLayerConfig object	Video layer configuration.

Table 6-79 SmartImageLayerConfig

Parameter	Type	Description
image_url	String	Image file URL.
display_duration	Integer	Details: Image display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-80 SmartVideoLayerConfig

Parameter	Type	Description
video_url	String	Video file URL.
video_cover_url	String	Video thumbnail file URL.

Parameter	Type	Description
display_duration	Integer	Details: Image display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-81 SmartTextLayerConfig

Parameter	Type	Description
text_type	String	Details: Text type. • DYNAMIC: dynamic text, which requires keyword replacement • STATIC: static text Default value: DYNAMIC
text_context	String	Text.
font_name	String	Details: Font. The following fonts are supported: • HarmonyOS_Sans_SC_Black: HarmonyOS bold • HarmonyOS_Sans_SC_Regular: HarmonyOS normal • HarmonyOS_Sans_SC_Thin: HarmonyOS light • fzyouh: Square & lean Default value: HarmonyOS_Sans_SC_Black

Parameter	Type	Description
font_size	Integer	Details: Font size (in pixel). Value range: [4, 120]. The value range is subject to the actual service. Value range: 0-120 Default value: 16
font_color	String	Details: Font color. RGB color value. Default value: #FFFFFF
display_duration	Integer	Details: Text display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-82 ReplyAudioInfo

Parameter	Type	Description
audio_url	String	Audio URL.
audio_name	String	Audio name.

Table 6-83 PlayPolicy

Parameter	Type	Description
repeat_count	Integer	Details: Number of times that a script is played repeatedly. • -1: The playback is repeated until it is stopped manually. • 0: It is played only once. • <i>n</i>: It is played $n + 1$ times. Constraints: N/A Value range: -1-100 Default value: 0
auto_play_script	Boolean	Details: Indicates whether to automatically play a script. Constraints: N/A Options: • true: The script is automatically played after the task is initialized. • false: After the task is initialized, the script is not played until signal appears. Default value: true
play_mode	String	Details: Virtual avatar control method. Constraints: N/A Options: TEXT: text control, that is, using TTS AUDIO: speech control NO_PRESET: no preset script, manual control Default value: TEXT

Parameter	Type	Description
random_play_mode	String	Details: Method of random script reading. Constraints: Random script reading starts from the second round of reading. Options: • NONE: Random script reading is disabled. • SCENE: Random script reading based on scenes is enabled. Paragraphs in a scene are read in sequence. • SCRIPT_ITEM: Random script reading based on paragraphs is enabled. Script of each scene is read in sequence. • SCENE_AND_SCRIPT_ITEM: Script of both scenes and paragraphs is read randomly. Default value: SCRIPT_ITEM
need_independent_capture_client	Boolean	Details: Whether an independent data collection device is required. This parameter is used when the client playback is separated from the command. Constraints: N/A Options: • true: Devices are allocated to RTC users CAPTURE and PLAYER. • false: Devices are allocated only to the RTC user PLAYER. Default value: false

Table 6-84 VideoConfig

Parameter	Type	Description
clip_mode	String	Details: Clipping mode of the output video. Constraints: N/A Options: ● RESIZE: video scaling ● CROP: video cropping Default value: RESIZE
codec	String	Details: Video encoding format and video file format. Constraints: Only virtual avatar video production supports VP8 encoding. Options: ● H264: H.264 encoding, MP4 file output ● VP8: VP8 encoding, WebM file output Default value: N/A
bitrate	Integer	Details: Average output bitrate. Unit: kbit/s Constraints: ● Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. ● Bitrate range for virtual avatar video production: [1000, 8000]. Default value: N/A Value range: 40-30000

Parameter	Type	Description
width	Integer	Details: Video width. Unit: pixel. Constraints: - When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. 4K is available only when the virtual avatar model supports 4K. - When clip_mode is set to CROP, (dx, dy) is the origin, and the width is the actual width of the reserved video. - Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840
height	Integer	Details: Video height. Unit: pixel. Constraints: - When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. - When clip_mode is set to CROP, (dx, dy) is the origin, and the height is the actual height of the reserved video. - Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840

Parameter	Type	Description
frame_rate	String	Details: Frame rate. Unit: FPS Constraints: The virtual avatar video frame rate is fixed at 25 FPS. Default value: 25
is_subtitle_enable	Boolean	Details: Whether the output video is subtitled. Constraints: Subtitles are not supported for virtual avatar livestreaming. Options: • true: enable subtitling • false: disable subtitling Default value: false
subtitle_config	SubtitleConfig object	Subtitle configuration.
disable_system_watermark	Boolean	Details: Indicates whether the system watermark is disabled for the output video. Constraints: Currently, this parameter takes effect only for trustlisted tenants. Value range: • true • false Default value: false

Parameter	Type	Description
dx	Integer	Details: Horizontal coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dx ranges from 0 to 1920. Constraints: This parameter takes effect when clip_mode is set to CROP. Default value: N/A Value range: -1920-3840
dy	Integer	Details: Vertical coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dy ranges from 0 to 1080. Constraints: This parameter takes effect when clip_mode is set to CROP. Default value: N/A Value range: -1920-3840
is_enable_super_resolution	Boolean	Details: Whether super resolution is enabled for a video. Constraints: This parameter is available only for virtual avatar video production. Options: • true: enable • false: do not enable Default value: false

Table 6-85 SubtitleConfig

Parameter	Type	Description
dx	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920
dy	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920
font_name	String	Details: Font. The following fonts are supported: • HarmonyOS_Sans_SC_Black: HarmonyOS bold • HarmonyOS_Sans_SC_Regular: HarmonyOS normal • HarmonyOS_Sans_SC_Thin: HarmonyOS light Constraints: N/A Options: The value contains 0 to 64 characters. Default value: HarmonyOS_Sans_SC_Black

Parameter	Type	Description
font_size	Integer	Details: Font size. The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 54
h	Integer	Details: Subtitle box height. Constraints: The parameter h is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920
w	Integer	Details: Subtitle box width. Constraints: • The subtitle box width is fixed at 80/ %of the screen width. • The parameter w is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920

Table 6-86 LiveEventCallBackConfig

Parameter	Type	Description
live_event_type_callback_url	String	Details: Live event callback address, which is an HTTPS address. Constraints: N/A Options: The value contains 0 to 2,048 characters. Default value: N/A
auth_type	String	Details: Authentication type. Constraints: N/A Options: • NONE: The URL contains authentication. • MSS_A: In HMACSHA256 signature mode, the hwSecret and hwTime parameters are added to the URL. Value format: hwSecret=hmac_sha256(Key, URI (live_event_callback_url) + hwTime)&hwTime=hex(timestamp) • MSS_A_HEAD: In HMACSHA256 signature mode, the hwSecret and hwTime parameters are placed in Head. Value format: x-hw-mss-secret=hmac_sha256(Key, URI (live_event_callback_url) + hwTime) x-hw-mss-time=hex(timestamp) • MEITUAN_DEFAULT: This parameter is used only for Meituan's API callback. Default value: NONE
key	String	Details: Key. Constraints: N/A Options: The value contains 0 to 32 characters. Default value: N/A

Parameter	Type	Description
callback_event_type	Array of strings	Details: Live event types in callbacks. Constraints: N/A Options: Currently, only the following options are supported: • SHOOT_SCRIPT_SWITCH: script paragraph switching event • RTMP_STREAM_STATE_CHANGE: RTMP link change callback event • REPLY_COMMAND_FINISH: Playback is complete. The callback event structure is defined as follows: • event_type: event type • message: event description – The SHOOT_SCRIPT_SWITCH event callback is defined as follows:<pre>{ "event_type": "SHOOT_SCRIPT_SWITCH", "message": {"room_id \":"26f065244f754b3aa853b649a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b04c49c3c \","scene_script_name\":"Product 1\","shoot_script_sequence_no \":"2\","shoot_script_title\":"Paragraph 2\"}" }</pre> – The RTMP_STREAM_STATE_CHANGE callback is defined as follows:<pre>{ "event_type": "RTMP_STREAM_STATE_CHANGE", "message": {"room_id \":"26f065244f754b3aa853b649a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b04c49c3c \","output_url\":"rtmp://xx/xx/xx\","stream_key \":"xxxx\","state\":"CONNECTED\"}" }</pre>The value of state can be CONNECTING, CONNECTED, DISCONNECTED, RECONNECTING, or END. – The REPLY_COMMAND_FINISH callback is defined as follows:<pre>{ "event_type": "REPLY_COMMAND_FINISH", "message": {"room_id \":"26f065244f754b3aa853b649a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b04c49c3c\","reply_id \":"e87104f76d7546ce8a46ac6b04c49c3c\"}" }</pre>

Table 6-87 RTCLiveEventCallBackConfig

Parameter	Type	Description
rtc_callback_event_type	Array of strings	Live event types in RTC callbacks. Currently, only the following options are supported: • LIVE_PROGRESS: live script progress notification • REPLY_COMMAND_FINISH: Playback is complete. The callback event structure is defined as follows: • message_type: message type • data: message description – The LIVE_PROGRESS event callback is defined as follows:<pre>{ "message_type": "live_progress_notify", "data": { "script_name": "Scene 1", "shoot_script_sequence_no": 2, "shoot_script_title": "Greeting", "offset": "247", "reply_id": "e87104f76d7546ce8a46ac6b04c49c3c" } }</pre> – The REPLY_COMMAND_FINISH callback is defined as follows:<pre>{ "message_type": "reply_command_finish_notify", "data": { "reply_id": "e87104f76d7546ce8a46ac6b04c49c3c" } }</pre>

Table 6-88 ReviewConfig

Parameter	Type	Description
no_need_review	Boolean	Content review whitelist. This feature is available only for users in the whitelist. The auto review policies apply to other users.

Table 6-89 SharedConfig

Parameter	Type	Description
shared_type	String	Details: Sharing type. Constraints: This configuration applies only to templates. Options: • PRIVATE: accessible only to the current tenant • PUBLIC: accessible to all tenants. Currently, only system assets are accessible to all tenants. • SHARED: accessible to specified tenants, who are specified by the owner. Default value: N/A
shared_state	String	Details: Sharing status. Constraints: This configuration applies only to templates whose shared_type is SHARED . Options: • PUBLISHED: published. The template is available. • DRAFT: draft. The template is being edited and can be viewed only by the owner. • REVIEW: The template is being reviewed. The template cannot be edited and can be viewed only by the owner/reviewer. Default value: N/A

Parameter	Type	Description
expire_time	String	Details: Time when the sharing expires. If this parameter is left blank, the sharing never expires. Constraints: This configuration applies only to templates whose shared_type is SHARED . The format complies with RFC 3339, for example, 20210710T08:43:17Z. Options: The value contains 0 to 20 characters. Default value: N/A
allowed_project_ids	Array of strings	Details: Tenants allowed to access the asset. Constraints: This configuration applies only to templates whose shared_type is SHARED . Options: A maximum of 100 tenants are allowed. Duplicate records will be ignored. Enter a project ID containing 1 to 64 characters. Default value: N/A

Table 6-90 CoStreamerConfig

Parameter	Type	Description
voice_config	VoiceConfig object	Voice configuration parameter.

Parameter	Type	Description
streamer_action	String	Details: Behavior of the streamer when the co-streamer speaks. Constraints: N/A Options: • SILENCE: silent • VOLUME_DOWN: decreased volume Default value: N/A

Table 6-91 VoiceConfig

Parameter	Type	Description
voice_asset_id	String	Details: Timbre asset ID, which can be queried from the asset library. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
speed	Integer	Details: Speaking speed. 50 indicates 0.5x speaking speed, 100 indicates normal speaking speed, and 200 indicates 2x speaking speed. The value 100 indicates the normal speaking speed of an adult, which is about 150 words per minute. Constraints: N/A Value range: 50-200 Default value: 100

Parameter	Type	Description
pitch	Integer	Details: Pitch. Constraints: N/A Value range: 50-200 Default value: 100
volume	Integer	Details: Volume. Constraints: N/A Value range: 90-240 Default value: 140

Table 6-92 PlatformLiveDetailInfo

Parameter	Type	Description
platform_id	String	Live TV platform ID.
platform	String	Live broadcast platform. Meituan fills in meituan
account	String	Authorization account information. Meituan platform: opBizCode
live_id	String	Live TV channel ID. If this parameter is set, the live TV channel ID is carried in the segment switchback callback. Liveld corresponding to the Meituan.

Table 6-93 ErrorResponse

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 400**Table 6-94** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 6-95** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 404**Table 6-96** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-97** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
GET https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/smart-live-rooms/  
24bad716-87b1-45e5-8912-6102f7693265
```

Example Responses

Status code: 200

Succeeded.

```
{
  "room_id": "24bad716-87b1-45e5-8912-6102f7693265",
  "room_name": "The Legend of Nature",
  "room_description": "Courseware",
  "scene_scripts": [ {
    "script_name": "The Legend of Nature —",
    "model_asset_id": "a5d295cdb345c11bd9f36bc22ced3a7a",
    "voice_config": {
      "voice_asset_id": "a5d295cdb345c11bd9f36bc22ced3a7a"
    }
  },
  "background_config": [ {
    "background_type": "IMAGE",
    "background_config": "978f893e1de4553c183b7a805e6290f5"
  } ],
  "shoot_scripts": [ {
    "sequence_no": 1,
    "text_config": {
      "text": "Hello, everyone. I'm Sara."
    }
  } ]
} ] }
```

Status code: 400

```
{
  "error_code": "MSS.00000003",
  "error_msg": "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code": "MSS.00000001",
  "error_msg": "Unauthorized"
}
```

Status code: 404

```
{
  "error_code": "MSS.00000002",
  "error_msg": "Not Found"
}
```

Status code: 500

```
{
  "error_code": "MSS.00000004",
  "error_msg": "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
404	No content.

Status Code	Description
500	Internal service error.

Error Codes

See [Error Codes](#).

6.1.4 Updating Intelligent Livestreaming Room Information

Function

Updates intelligent livestreaming room information.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v1/{project_id}/smart-live-rooms/{room_id}

Table 6-98 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
room_id	Yes	String	Script ID.

Request Parameters

Table 6-99 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.

Parameter	Mandatory	Type	Description
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 6-100 Request body parameters

Parameter	Mandatory	Type	Description
room_name	Yes	String	Details: Name of a live broadcast room. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
room_description	No	String	Details: Description of the live broadcast room. Constraints: N/A Options: The value contains 1 to 1024 characters. Default value: N/A

Parameter	Mandatory	Type	Description
room_type	No	String	Details: Type of a live broadcast room. Constraints: N/A Options: • NORMAL: common live broadcast room. The live broadcast room always exists and can be started repeatedly. • TEMP: temporary live broadcast room. After a live broadcast task is complete, the live broadcast room is automatically cleared. • TEMPLATE: template for a live broadcast room. Default value: NORMAL
scene_scripts	No	Array of LiveVideoScriptInfo objects	Default live TV script list.
interaction_config	No	LiveRoomInteractionConfig object	Interactive Configuration
interaction_rules	No	Array of LiveRoomInteractionRuleInfo objects	Interaction rule list
play_policy	No	PlayPolicy object	Script Playing Strategy
video_config	No	VideoConfig object	Video output configuration.

Parameter	Mandatory	Type	Description
output_urls	No	Array of strings	Details: URL of the third-party live broadcast platform for RTMP video streaming. NOTE To update the URL during live broadcast, invoke the COMMAND command Refresh_OUTPUT_URL. Constraints: N/A Options: Currently, only one RTMP stream output address is supported. Default value: N/A
stream_keys	No	Array of strings	Details: Stream key of the third-party live TV platform for pushing RTMP videos, which corresponds to the stream pushing address. NOTE To update the URL during live broadcast, invoke the COMMAND command Refresh_OUTPUT_URL. Constraints: N/A Options: Currently, only one RTMP stream output address is supported. Default value: N/A

Parameter	Mandatory	Type	Description
backup_mode l_asset_ids	No	Array of strings	Details: Asset ID of the alternate anchor digital person during anchor rotation (only image assets, excluding sound assets). Constraints: N/A Options: Currently, a maximum of five alternative anchors are supported. Asset ID of a digital person. The value contains 0 to 64 characters. Default value: N/A
live_event_callback_config	No	LiveEventCallbackConfig object	Live event HTTPS callback notification configuration
rtc_callback_config	No	RTCLiveEventCallbackConfig object	RTC callback event configuration. Compatible processing. If the configuration is not carried, LIVE_PROGRESS is subscribed by default.
review_config	No	ReviewConfig object	Content Moderation Configuration
shared_config	No	SharedConfig object	Shared Configuration

Parameter	Mandatory	Type	Description
view_mode	No	String	Details: Landscape/portrait screen type. Constraints: You do not need to set this parameter. The value is determined based on the resolution in video_config. Options: • LANDSCAPE • VERTICAL Default value: VERTICAL
co_streamer_config	No	CoStreamerConfig object	Co-streamer configuration
priv_data	No	String	Details: Private data of the matching value, which is entered by the user and returned as it is. Constraints: N/A Options: Character length: 0-8192 Default value: N/A
relation_live_platform_info	No	PlatformLiveInfo object	Platform live broadcast information.

Table 6-101 LiveVideoScriptInfo

Parameter	Mandatory	Type	Description
script_id	No	String	Details: Script ID. Constraints: Leave this field blank. Options: The value contains 1 to 64 characters. Default value: N/A
script_name	Yes	String	Details: Script name. Constraints: This field is mandatory. Options: The value contains 1 to 256 characters. Default value: N/A
script_description	No	String	Details: Script description. Constraints: Leave this field blank. Options: The value contains 0 to 1,024 characters. Default value: N/A

Parameter	Mandatory	Type	Description
dh_id	No	String	Details: Virtual avatar ID, which corresponds to the combination of image and timbre. Constraints: This field is not used currently and does not need to be specified. Options: The value contains 0 to 64 characters. Default value: N/A
model_asset_id	No	String	Details: Virtual human model asset ID, which can be queried from the asset library. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
voice_config	No	VoiceConfig object	Voice configuration parameter.
background_config	No	Array of BackgroundConfigInfo objects	Background configuration.
layer_config	No	Array of LayerConfig objects	Layer configuration.
shoot_scripts	Yes	Array of LiveShootScriptItem objects	Shooting script list.

Table 6-102 BackgroundConfigInfo

Parameter	Mandatory	Type	Description
background_type	Yes	String	Details: Background type. Constraints: N/A Options: • IMAGE: image background, which is used as the virtual avatar video background • COLOR: solid color background. The RGB value of the specified color is used as the virtual avatar video background. Default value: N/A
background_title	No	String	Background title. NOTE • This parameter does not take effect for virtual avatar video production.
human_position_2d	No	HumanPosition2D object	Position of a virtual avatar in the background image. If this parameter is not set, the virtual avatar is in the middle of the image by default. NOTE • This parameter is discarded. The position of a virtual avatar in the background image is configured in the layer_config parameter.
human_size_2d	No	HumanSize2D object	Size of a virtual avatar in the background image. NOTE • This parameter is discarded. The size of a virtual avatar in the background image is configured in the layer_config parameter.

Parameter	Mandatory	Type	Description
background_cover_url	No	String	URL for downloading the thumbnail image of a video file. This parameter is valid only when the presentation material is a video. NOTE This parameter does not take effect for virtual avatar video production.
background_config	No	String	Details: Background file URL. Constraints: - External URLs are allowed only for livestreaming. For other services, obtain a URL from the asset library. - This parameter is mandatory when background_type is set to IMAGE. Options: The value contains 1 to 2,048 characters. Default value: N/A
background_color_config	No	String	Details: RGB color value of a solid color background. Constraints: This parameter is mandatory when background_type is set to COLOR. Options: The value contains 0 to 16 characters. Default value: #FFFFFF

Parameter	Mandatory	Type	Description
background_asset_id	No	String	Details: Background asset ID. NOTE If a background image is used, enter the image asset ID. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A

Table 6-103 HumanPosition2D

Parameter	Mandatory	Type	Description
position	No	String	Position of a virtual avatar in the background image. • LEFT: left • MIDDLE: middle • RIGHT: right NOTE If the values of position_x and position_y exist, position does not take effect. Default value: MIDDLE
position_x	No	Integer	X-axis position of the virtual avatar, that is, the X-axis pixel value of the center point at the bottom of the virtual avatar image. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: -1920-3840

Parameter	Mandatory	Type	Description
position_y	No	Integer	Y-axis position of the virtual avatar, that is, the Y-axis pixel value of the center point at the bottom of the virtual avatar image. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: -1920-3840

Table 6-104 HumanSize2D

Parameter	Mandatory	Type	Description
width	No	Integer	Width (in pixel) of a virtual avatar. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: 1-7680
height	No	Integer	Height (in pixel) of a virtual avatar. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: 1-7680

Table 6-105 LayerConfig

Parameter	Mandatory	Type	Description
layer_type	Yes	String	Details: Layer type. Constraints: N/A Options: • HUMAN: person layer • IMAGE: image layer • VIDEO: video layer • TEXT: text layer Default value: N/A
asset_id	No	String	Details: ID of the asset overlaid on a video. You do not need to set this parameter for external assets. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
group_id	No	String	Details: Groups materials in multiple scenes. Materials with the same group_id share location information when they are applied globally. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
position	No	LayerPosition Config object	Layer position configuration.

Parameter	Mandatory	Type	Description
size	No	LayerSizeConfig object	Layer size configuration.
image_config	No	ImageLayerConfig object	Material image layer configuration.
video_config	No	VideoLayerConfig object	Material video layer configuration.
text_config	No	TextLayerConfig object	Material text layer configuration.

Table 6-106 LayerPositionConfig

Parameter	Mandatory	Type	Description
dx	Yes	Integer	Details: X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0

Parameter	Mandatory	Type	Description
dy	Yes	Integer	Details: Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0
layer_index	Yes	Integer	Details: Layer sequence of an image, video, or person image. NOTE The layer sequence is an integer starting from 1 and incremented by 1. Constraints: If duplicate layers exist, the overlay relationship between the duplicate layers is random. Value range: 1-100 Default value: 100

Table 6-107 LayerSizeConfig

Parameter	Mandatory	Type	Description
width	No	Integer	Details: Y axis position of the pixel in the upper left corner of the image. Width (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680
height	No	Integer	Details: Height (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Table 6-108 ImageLayerConfig

Parameter	Mandatory	Type	Description
image_url	No	String	Details: Image file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A

Table 6-109 VideoLayerConfig

Parameter	Mandatory	Type	Description
video_url	No	String	Details: Video file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A
video_cover_url	No	String	Details: Video thumbnail file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A

Parameter	Mandatory	Type	Description
loop_count	No	Integer	Details: Number of times that a video is played cyclically. Options: • 0: no • -1: yes Constraints: N/A Value range: -1-100 Default value: -1

Table 6-110 TextLayerConfig

Parameter	Mandatory	Type	Description
text_context	No	String	Details: Text of the text layer. The content must be encoded using Base64. For example, if you want to add the text watermark "Test text watermark", set text_context to 5rWL6K+V5paH5a2X5rC05Y2w . Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A

Parameter	Mandatory	Type	Description
font_name	No	String	Details: Font. The following fonts are supported: Constraints: N/A Options: For details about the supported fonts, see Supported Fonts . Default value: HarmonyOS_Sans_SC_Black
font_size	No	Integer	Details: Font size (in pixel). The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 16
font_color	No	String	Details: Font color. RGB color value. Constraints: N/A Options: The value contains 0 to 16 characters. Default value: #FFFFFF

Table 6-111 LiveShootScriptItem

Parameter	Mandatory	Type	Description
sequence_no	No	Integer	Details: Script No. Constraints: N/A Value range: 0-2147483647
title	No	String	Details: Paragraph title. Constraints: N/A Options: The value contains 0 to 256 characters. Default value: N/A
text_config	No	TextConfig object	Script configuration.
audio_config	No	LiveAudioConfig object	Live audio configuration.
relation_product	No	RelationProductInfo object	Associated Offering

Table 6-112 TextConfig

Parameter	Mandatory	Type	Description
text	Yes	String	Details: Script. Two modes are supported: plain text mode and tag mode. • Plain text mode, for example, "Hello, everyone, I'm a virtual streamer." • Tag mode: For details about the definition of SSML tags, see SSML Definition of Text Control. Constraints: The value can contain a maximum of 10,000 characters, excluding the SSML tag. Options: The value contains 0 to 131,072 characters. Default value: N/A

Table 6-113 LiveAudioConfig

Parameter	Mandatory	Type	Description
asset_id	No	String	Details: ID of the inserted audio asset. You do not need to set this parameter for external assets. If you enter a value, you can query it from the asset library. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A

Parameter	Mandatory	Type	Description
audio_url	No	String	Details: Audio URL. Constraints: Only the MP3 format is supported. The size is less than 100 MB. The output is automatically converted to mono 16 kHz for sampling. Options: The value contains 0 to 2,048 characters. Default value: N/A
subtitle_url	No	String	Details: URL of the subtitle file of the audio. Constraints: Only the SRT format is supported. The size is less than 1 MB. Options: The value contains 0 to 2,048 characters. Default value: N/A

Table 6-114 RelationProductInfo

Parameter	Mandatory	Type	Description
product_id	No	String	Associated offering ID. If this parameter is set, this information is carried in the paragraph switchback callback. GoodsId corresponding to the US Regiment platform

Parameter	Mandatory	Type	Description
product_title	No	String	Associated product title/name. If this parameter is set, this information is carried in the paragraph switchback callback. US Regiment Platform Corresponding to GoodsTitle

Table 6-115 LiveRoomInteractionConfig

Parameter	Mandatory	Type	Description
play_type	No	String	Playback mode: ● APPEND: added to the end of the playback queue in the scene ● INSERT: inserted to the end of two audio files or a text sentence ● PLAY_NOW: inserted immediately. After the instruction is received, the media file is played immediately without waiting till the end of the sentence. Default value: INSERT
ignore_current_sentence	No	Boolean	The second half of a sentence is not read for reply. It is used for immediate interruption. By default, it is not ignored. Default value: false

Table 6-116 LiveRoomInteractionRuleInfo

Parameter	Mandatory	Type	Description
rule_index	No	String	Details: Rule index. It is used to index a specific rule when the rule is triggered. Constraints: You do not need to specify it. Options: 0 to 64 characters Default value: N/A
rule_name	No	String	Details: Rule name. Constraints: N/A Options: 0 to 256 characters Default value: N/A
enabled	No	Boolean	Details: Whether to enable. Constraints: N/A Options: • true: enabled • false: disabled Default value: true

Parameter	Mandatory	Type	Description
event_type	No	Integer	Details: Livestreaming event type matched by the rule. The value range is 0 to 100. Options: 1: On-screen comments 2: User joining a room 3: Giving likes 4: Sending gifts 10: Preset script events Use the actual value. NOTE 1, 2, 3, 4: corresponds to event.type in LiveEventReport 10: matches the preset script Constraints: N/A Default value: N/A Value range: 0-100
hit_condition	No	HitCondition object	Rule matching condition
trigger	No	TriggerProcesses object	Processing after rule matching
review_config	No	ReviewConfig object	Content review configuration.
group_id	No	String	Details: Interaction rule library ID, which is carried when a rule is imported from the interaction rule library. Constraints: N/A Options: The value contains 1 to 64 characters. Default value: N/A

Parameter	Mandatory	Type	Description
group_name	No	String	Details: Interaction rule library name, which is carried when a rule is imported from the interaction rule library. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
enabled_scenes	No	Array of strings	Details: Scenario where a rule is enabled. Set this parameter when some scenarios are enabled. If this field is not specified, it applies to all scenarios. Constraints: N/A Options: Livestreaming scenes. A maximum of 100 scenes are allowed. Enter a scene name, which contains 1 to 256 characters. Default value: N/A

Table 6-117 HitCondition

Parameter	Mandatory	Type	Description
relation	No	String	Details: Condition relationship, specifically, the logical operation relationship between multiple conditions. Constraints: N/A Options: • AND: Multiple conditions are met. • OR: One of the conditions is met. • RESERVED: The general reply does not check other matching conditions. Default value: N/A
priority	No	Integer	Details: Priority. A smaller value indicates a higher priority. The value ranges from 0 to 999. The default value is 500 . This parameter is optional. Constraints: N/A Value range: 0-999 Default value: 500
tags	No	Array of HitCondition Tag objects	Matching relationship configuration

Table 6-118 HitConditionTag

Parameter	Mandatory	Type	Description
tag	No	String	Details: Key fields in the event content. NOTE - When event_type is set to 1, 2, 3, or 4, the value corresponds to the JSON field deserialized from event.content in LiveEventReport. The following is an on-screen comment event report. { "timestamp": 1694481224245, "type": 1, "content": "{ \"user\": { \"userId\": \"2027271526\", \"name\": \"\", \"level\": 17, \"badge\": \"\", \"badgeLevel\": 0 }, \"content\": \"\" } }" } To match the on-screen comment content, enter content. To match the user platform level, enter level. 10: Set this field to content. Constraints: N/A Options: The value contains 0 to 256 characters. Default value: N/A
operation	No	String	Details: Field value processing Constraints: N/A Options: SUM: accumulation AVG: average COUNT: count NONE: no processing Default value: NONE

Parameter	Mandatory	Type	Description
match	No	String	Details: Match type. You are advised to use REGEX for keyword matching. Constraints: N/A Options: • EQUAL: completely equal • REGEX: regular expression match • MATH_GT: greater than • MATH_GE: greater than or equal to • MATH_LT: less than • MATH_LE: less than or equal to • MATH_EQ: numerically equal Default value: N/A
value	No	String	Details: Matched value. Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A

Table 6-119 TriggerProcess

Parameter	Mandatory	Type	Description
time_window	No	Integer	Details: Processing suppression duration, in second. • -1: triggered only once throughout the livestream • 0: no suppression. It is triggered each time. • <i>n</i>: triggered only once within <i>n</i> seconds Constraints: N/A Default value: N/A Value range: -1-7200
reply_mode	No	String	Details: Reply type. Constraints: N/A Options: • SYSTEM_REPLY: automatic reply based on the preset script • CALLBACK: callback to other services, with the preset script • SHOW_LAYER: display of only overlaid layers, which does not affect the script • INTELLIGENT_REPLY: use the configured large model to generate reply scripts Default value: N/A
layer_config	No	SmartLayerConfig object	Intelligent layer configuration.
extra_layer_config	No	SmartLayerConfig object	Additional layer, which is used together with the second layer when dynamic text needs to be displayed for products.

Parameter	Mandatory	Type	Description
reply_texts	No	Array of strings	Details: Reply scripts. Constraints: N/A Options: A maximum of five preset scripts are allowed. A single script contains 0 to 1,024 characters. Default value: N/A
reply_audios	No	Array of ReplyAudioInfo objects	Details: Reply audio set. Set audio_url . Constraints: N/A Options: A maximum of five preset audio files are allowed. Default value: N/A
reply_order	No	String	Details: Sequence of reading reply scripts. Constraints: N/A Options: • RANDOM: randomly • ORDER: sequential loop Default value: N/A

Parameter	Mandatory	Type	Description
reply_role	No	String	Details: Reply role. Constraints: N/A Options: • STREAMER: streamer • CO_STREAMER: co-streamer, audio-only Default value: STREAMER
robot_id	No	String	Details: Bot ID. Constraints: ID of the large model robot configured for intelligent interaction. This parameter is mandatory when reply_mode is set to INTELLIGENT_REPLY . For details about how to obtain the ID. Options: The value contains 0 to 64 characters. Default value: N/A
play_type	No	String	Reply playback type. • APPEND: added to the end of the playback queue in the scene • INSERT: inserted to the end of two audio files or a text sentence • PLAY_NOW: inserted immediately. After the instruction is received, the media file is played immediately without waiting till the end of the sentence. Default value: PLAY_NOW

Table 6-120 SmartLayerConfig

Parameter	Mandatory	Type	Description
layer_type	Yes	String	Layer type. • IMAGE: image layer • VIDEO: video layer • TEXT: text layer
asset_id	No	String	ID of the asset overlaid on a video. You do not need to set this parameter for external assets.
position	No	LayerPositionConfig object	Layer position configuration.
size	No	LayerSizeConfig object	Layer size configuration.
image_config	No	SmartImageLayerConfig object	Image layer configuration.
video_config	No	SmartVideoLayerConfig object	Video layer configuration.
text_config	No	SmartTextLayerConfig object	Video layer configuration.

Table 6-121 SmartImageLayerConfig

Parameter	Mandatory	Type	Description
image_url	Yes	String	Image file URL.

Parameter	Mandatory	Type	Description
display_duration	No	Integer	Details: Image display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-122 SmartVideoLayerConfig

Parameter	Mandatory	Type	Description
video_url	Yes	String	Video file URL.
video_cover_url	No	String	Video thumbnail file URL.
display_duration	No	Integer	Details: Image display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-123 SmartTextLayerConfig

Parameter	Mandatory	Type	Description
text_type	No	String	Details: Text type. • DYNAMIC: dynamic text, which requires keyword replacement • STATIC: static text Default value: DYNAMIC
text_context	No	String	Text.
font_name	No	String	Details: Font. The following fonts are supported: • HarmonyOS_Sans_SC_Black: HarmonyOS bold • HarmonyOS_Sans_SC_Regular: HarmonyOS normal • HarmonyOS_Sans_SC_Thin: HarmonyOS light • fzyouh: Square & lean Default value: HarmonyOS_Sans_SC_Black
font_size	No	Integer	Details: Font size (in pixel). Value range: [4, 120]. The value range is subject to the actual service. Value range: 0-120 Default value: 16
font_color	No	String	Details: Font color. RGB color value. Default value: #FFFFFF

Parameter	Mandatory	Type	Description
display_duration	No	Integer	Details: Text display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-124 ReplyAudioInfo

Parameter	Mandatory	Type	Description
audio_url	No	String	Audio URL.
audio_name	No	String	Audio name.

Table 6-125 PlayPolicy

Parameter	Mandatory	Type	Description
repeat_count	No	Integer	Details: Number of times that a script is played repeatedly. • -1: The playback is repeated until it is stopped manually. • 0: It is played only once. • n: It is played $n + 1$ times. Constraints: N/A Value range: -1-100 Default value: 0
auto_play_script	No	Boolean	Details: Indicates whether to automatically play a script. Constraints: N/A Options: • true: The script is automatically played after the task is initialized. • false: After the task is initialized, the script is not played until signal appears. Default value: true

Parameter	Mandatory	Type	Description
play_mode	No	String	Details: Virtual avatar control method. Constraints: N/A Options: TEXT: text control, that is, using TTS AUDIO: speech control NO_PRESET: no preset script, manual control Default value: TEXT
random_play_mode	No	String	Details: Method of random script reading. Constraints: Random script reading starts from the second round of reading. Options: • NONE: Random script reading is disabled. • SCENE: Random script reading based on scenes is enabled. Paragraphs in a scene are read in sequence. • SCRIPT_ITEM: Random script reading based on paragraphs is enabled. Script of each scene is read in sequence. • SCENE_AND_SCRIPT_ITEM: Script of both scenes and paragraphs is read randomly. Default value: SCRIPT_ITEM

Parameter	Mandatory	Type	Description
need_independent_capture_client	No	Boolean	Details: Whether an independent data collection device is required. This parameter is used when the client playback is separated from the command. Constraints: N/A Options: • true: Devices are allocated to RTC users CAPTURE and PLAYER. • false: Devices are allocated only to the RTC user PLAYER. Default value: false

Table 6-126 VideoConfig

Parameter	Mandatory	Type	Description
clip_mode	No	String	Details: Clipping mode of the output video. Constraints: N/A Options: • RESIZE: video scaling • CROP: video cropping Default value: RESIZE

Parameter	Mandatory	Type	Description
codec	Yes	String	Details: Video encoding format and video file format. Constraints: Only virtual avatar video production supports VP8 encoding. Options: • H264: H.264 encoding, MP4 file output • VP8: VP8 encoding, WebM file output Default value: N/A
bitrate	Yes	Integer	Details: Average output bitrate. Unit: kbit/s Constraints: • Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. • Bitrate range for virtual avatar video production: [1000, 8000]. Default value: N/A Value range: 40-30000

Parameter	Mandatory	Type	Description
width	Yes	Integer	Details: Video width. Unit: pixel. Constraints: • When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. 4K is available only when the virtual avatar model supports 4K. • When clip_mode is set to CROP, (dx, dy) is the origin, and the width is the actual width of the reserved video. • Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840

Parameter	Mandatory	Type	Description
height	Yes	Integer	Details: Video height. Unit: pixel. Constraints: - When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. - When clip_mode is set to CROP, (dx, dy) is the origin, and the height is the actual height of the reserved video. - Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840
frame_rate	No	String	Details: Frame rate. Unit: FPS Constraints: The virtual avatar video frame rate is fixed at 25 FPS. Default value: 25
is_subtitle_enabled	No	Boolean	Details: Whether the output video is subtitled. Constraints: Subtitles are not supported for virtual avatar livestreaming. Options: true: enable subtitling false: disable subtitling Default value: false

Parameter	Mandatory	Type	Description
subtitle_config	No	SubtitleConfig object	Subtitle configuration.
disable_system_watermark	No	Boolean	Details: Indicates whether the system watermark is disabled for the output video. Constraints: Currently, this parameter takes effect only for trustlisted tenants. Value range: • true • false Default value: false
dx	No	Integer	Details: Horizontal coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dx ranges from 0 to 1920. Constraints: This parameter takes effect when clip_mode is set to CROP . Default value: N/A Value range: -1920-3840

Parameter	Mandatory	Type	Description
dy	No	Integer	Details: Vertical coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dy ranges from 0 to 1080. Constraints: This parameter takes effect when clip_mode is set to CROP. Default value: N/A Value range: -1920-3840
is_enable_super_resolution	No	Boolean	Details: Whether super resolution is enabled for a video. Constraints: This parameter is available only for virtual avatar video production. Options: • true: enable • false: do not enable Default value: false

Table 6-127 SubtitleConfig

Parameter	Mandatory	Type	Description
dx	No	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920
dy	No	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920
font_name	No	String	Details: Font. The following fonts are supported: • HarmonyOS_Sans_SC_Black: HarmonyOS bold • HarmonyOS_Sans_SC_Regular: HarmonyOS normal • HarmonyOS_Sans_SC_Thin: HarmonyOS light Constraints: N/A Options: The value contains 0 to 64 characters. Default value: HarmonyOS_Sans_SC_Black

Parameter	Mandatory	Type	Description
font_size	No	Integer	Details: Font size. The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 54
h	No	Integer	Details: Subtitle box height. Constraints: The parameter h is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920
w	No	Integer	Details: Subtitle box width. Constraints: • The subtitle box width is fixed at 80/ %of the screen width. • The parameter w is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920

Table 6-128 LiveEventCallBackConfig

Parameter	Mandatory	Type	Description
live_event_type_callback_url	No	String	Details: Live event callback address, which is an HTTPS address. Constraints: N/A Options: The value contains 0 to 2,048 characters. Default value: N/A

Parameter	Mandatory	Type	Description
auth_type	No	String	Details: Authentication type. Constraints: N/A Options: • NONE: The URL contains authentication. • MSS_A: In HMACSHA256 signature mode, the hwSecret and hwTime parameters are added to the URL. Value format: hwSecret=hmac_sha256(Key, URI (live_event_callback_url) + hwTime)&hwTime=hex(timestamp) • MSS_A_HEAD: In HMACSHA256 signature mode, the hwSecret and hwTime parameters are placed in Head. Value format: x-hw-mss-secret=hmac_sha256(Key, URI (live_event_callback_url) + hwTime) x-hw-mss-time=hex(timestamp) • MEITUAN_DEFAULT: This parameter is used only for Meituan's API callback. Default value: NONE
key	No	String	Details: Key. Constraints: N/A Options: The value contains 0 to 32 characters. Default value: N/A

Parameter	Mandatory	Type	Description
callback_event_type	No	Array of strings	Details: Live event types in callbacks. Constraints: N/A Options: Currently, only the following options are supported: • SHOOT_SCRIPT_SWITCH: script paragraph switching event • RTMP_STREAM_STATE_CHANGE: RTMP link change callback event • REPLY_COMMAND_FINISH: Playback is complete. The callback event structure is defined as follows: • event_type: event type • message: event description – The SHOOT_SCRIPT_SWITCH event callback is defined as follows:<pre>{ "event_type": "SHOOT_SCRIPT_SWITCH", "message":{"room_id \":"26f065244f754b3aa853b649 a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b 04c49c3c\","scene_script_name \":"Product 1\","shoot_script_sequence_no \":"2\","shoot_script_title \":"Paragraph 2\"} }</pre> – The RTMP_STREAM_STATE_CHANGE callback is defined as follows:<pre>{ "event_type": "RTMP_STREAM_STATE_CHANGE", "message":{"room_id \":"26f065244f754b3aa853b649 a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b 04c49c3c\","output_url \":"rtmp://xxx/xx/xx \","stream_key\":"xxxxx</pre>

Parameter	Mandatory	Type	Description
			<pre>\",\"state\": \"CONNECTED\"}"} }</pre> The value of state can be CONNECTING, CONNECTED, DISCONNECTED, RECONNECTING, or END. - The REPLY_COMMAND_FINISH callback is defined as follows:<pre>{ "event_type": "REPLY_COMMAND_FINISH", "message": {"room_id \": \"26f065244f754b3aa853b649 a21aaf66\", \"job_id \": \"e87104f76d7546ce8a46ac6b 04c49c3c\", \"reply_id \": \"e87104f76d7546ce8a46ac6b 04c49c3c\"}"} }</pre>

Table 6-129 RTCLiveEventCallBackConfig

Parameter	Mandatory	Type	Description
rtc_callback_event_type	No	Array of strings	Live event types in RTC callbacks. Currently, only the following options are supported: • LIVE_PROGRESS: live script progress notification • REPLY_COMMAND_FINISH: Playback is complete. The callback event structure is defined as follows: • message_type: message type • data: message description – The LIVE_PROGRESS event callback is defined as follows:<pre>{ "message_type": "live_progress_notify", "data": { "script_name": "Scene 1", "shoot_script_sequence_no": 2, "shoot_script_title": "Greeting", "offset": "247", "reply_id": "e87104f76d7546ce8a46ac6b04c49c3c" } }</pre> – The REPLY_COMMAND_FINISH callback is defined as follows:<pre>{ "message_type": "reply_command_finish_notify", "data": "{ "reply_id": "e87104f76d7546ce8a46ac6b04c49c3c" }" }</pre>

Table 6-130 ReviewConfig

Parameter	Mandatory	Type	Description
no_need_review	No	Boolean	Content review whitelist. This feature is available only for users in the whitelist. The auto review policies apply to other users.

Table 6-131 SharedConfig

Parameter	Mandatory	Type	Description
shared_type	No	String	Details: Sharing type. Constraints: This configuration applies only to templates. Options: • PRIVATE: accessible only to the current tenant • PUBLIC: accessible to all tenants. Currently, only system assets are accessible to all tenants. • SHARED: accessible to specified tenants, who are specified by the owner. Default value: N/A

Parameter	Mandatory	Type	Description
shared_state	No	String	Details: Sharing status. Constraints: This configuration applies only to templates whose shared_type is SHARED . Options: • PUBLISHED: published. The template is available. • DRAFT: draft. The template is being edited and can be viewed only by the owner. • REVIEW: The template is being reviewed. The template cannot be edited and can be viewed only by the owner/reviewer. Default value: N/A
expire_time	No	String	Details: Time when the sharing expires. If this parameter is left blank, the sharing never expires. Constraints: This configuration applies only to templates whose shared_type is SHARED . The format complies with RFC 3339, for example, 20210710T08:43:17Z. Options: The value contains 0 to 20 characters. Default value: N/A

Parameter	Mandatory	Type	Description
allowed_project_ids	No	Array of strings	Details: Tenants allowed to access the asset. Constraints: This configuration applies only to templates whose shared_type is SHARED . Options: A maximum of 100 tenants are allowed. Duplicate records will be ignored. Enter a project ID containing 1 to 64 characters. Default value: N/A

Table 6-132 CoStreamerConfig

Parameter	Mandatory	Type	Description
voice_config	No	VoiceConfig object	Voice configuration parameter.
streamer_action	No	String	Details: Behavior of the streamer when the co-streamer speaks. Constraints: N/A Options: • SILENCE: silent • VOLUME_DOWN: decreased volume Default value: N/A

Table 6-133 VoiceConfig

Parameter	Mandatory	Type	Description
voice_asset_id	Yes	String	Details: Timbre asset ID, which can be queried from the asset library. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
speed	No	Integer	Details: Speaking speed. 50 indicates 0.5x speaking speed, 100 indicates normal speaking speed, and 200 indicates 2x speaking speed. The value 100 indicates the normal speaking speed of an adult, which is about 150 words per minute. Constraints: N/A Value range: 50-200 Default value: 100
pitch	No	Integer	Details: Pitch. Constraints: N/A Value range: 50-200 Default value: 100

Parameter	Mandatory	Type	Description
volume	No	Integer	Details: Volume. Constraints: N/A Value range: 90-240 Default value: 140

Table 6-134 PlatformLiveInfo

Parameter	Mandatory	Type	Description
platform_id	Yes	String	Live TV platform ID.
live_id	Yes	String	Live TV channel ID. If this parameter is set, the live TV channel ID is carried in the segment switchback callback. The value can contain only letters, digits, hyphens (-), and underscores (_). LiveId corresponding to the Meituan.

Response Parameters

Status code: 200

Table 6-135 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 6-136 Response body parameters

Parameter	Type	Description
room_name	String	Details: Name of a live broadcast room. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
room_description	String	Details: Description of the live broadcast room. Constraints: N/A Options: The value contains 1 to 1024 characters. Default value: N/A
room_type	String	Details: Type of a live broadcast room. Constraints: N/A Options: • NORMAL: common live broadcast room. The live broadcast room always exists and can be started repeatedly. • TEMP: temporary live broadcast room. After a live broadcast task is complete, the live broadcast room is automatically cleared. • TEMPLATE: template for a live broadcast room. Default value: NORMAL
scene_scripts	Array of LiveVideoScriptInfo objects	Default live TV script list.
interaction_config	LiveRoomInteractionConfig object	Interactive Configuration

Parameter	Type	Description
interaction_rules	Array of LiveRoomInteractionRuleInfo objects	Interaction rule list
play_policy	PlayPolicy object	Script Playing Strategy
video_config	VideoConfig object	Video output configuration.
output_urls	Array of strings	Details: URL of the third-party live broadcast platform for RTMP video streaming. NOTE To update the URL during live broadcast, invoke the COMMAND command Refresh_OUTPUT_URL. Constraints: N/A Options: Currently, only one RTMP stream output address is supported. Default value: N/A
stream_keys	Array of strings	Details: Stream key of the third-party live TV platform for pushing RTMP videos, which corresponds to the stream pushing address. NOTE To update the URL during live broadcast, invoke the COMMAND command Refresh_OUTPUT_URL. Constraints: N/A Options: Currently, only one RTMP stream output address is supported. Default value: N/A

Parameter	Type	Description
backup_mode l_asset_ids	Array of strings	Details: Asset ID of the alternate anchor digital person during anchor rotation (only image assets, excluding sound assets). Constraints: N/A Options: Currently, a maximum of five alternative anchors are supported. Asset ID of a digital person. The value contains 0 to 64 characters. Default value: N/A
live_event_call back_config	LiveEventCall BackConfig object	Live event HTTPS callback notification configuration
rtc_callback_c onfig	RTCLiveEvent CallBackConf ig object	RTC callback event configuration. Compatible processing. If the configuration is not carried, LIVE_PROGRESS is subscribed by default.
review_config	ReviewConf ig object	Content Moderation Configuration
shared_config	SharedConfig object	Shared Configuration
view_mode	String	Details: Landscape/portrait screen type. Constraints: You do not need to set this parameter. The value is determined based on the resolution in video_config. Options: • LANDSCAPE • VERTICAL Default value: VERTICAL
co_streamer_c onfig	CoStreamerC onfig object	Co-streamer configuration

Parameter	Type	Description
priv_data	String	Details: Private data of the matching value, which is entered by the user and returned as it is. Constraints: N/A Options: Character length: 0-8192 Default value: N/A
room_id	String	Livestreaming room ID.
relation_live_platform_info	PlatformLiveDetailInfo object	Platform live broadcast information.
create_time	String	Time when a livestreaming room is created. The value is in RFC 3339 format, for example, 2021-01-10T08:43:17Z.
update_time	String	Time when a livestreaming room is updated. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
cover_url	String	Livestreaming room thumbnail URL.
thumbnail	String	New URL of the live room thumbnail
room_state	String	Live room status. ● ENABLE: The live room is available. ● DISABLE: The live room is unavailable. The cause is described in error_info. ● BLOCKED: The live room has been blocked. The cause is described in error_info.
error_info	ErrorResponse object	Error messages of a virtual human live room.

Table 6-137 LiveVideoScriptInfo

Parameter	Type	Description
script_id	String	Details: Script ID. Constraints: Leave this field blank. Options: The value contains 1 to 64 characters. Default value: N/A
script_name	String	Details: Script name. Constraints: This field is mandatory. Options: The value contains 1 to 256 characters. Default value: N/A
script_description	String	Details: Script description. Constraints: Leave this field blank. Options: The value contains 0 to 1,024 characters. Default value: N/A
dh_id	String	Details: Virtual avatar ID, which corresponds to the combination of image and timbre. Constraints: This field is not used currently and does not need to be specified. Options: The value contains 0 to 64 characters. Default value: N/A

Parameter	Type	Description
model_asset_id	String	Details: Virtual human model asset ID, which can be queried from the asset library. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
voice_config	VoiceConfig object	Voice configuration parameter.
background_config	Array of BackgroundConfigInfo objects	Background configuration.
layer_config	Array of LayerConfig objects	Layer configuration.
shoot_scripts	Array of LiveShootScriptItem objects	Shooting script list.

Table 6-138 BackgroundConfigInfo

Parameter	Type	Description
background_type	String	Details: Background type. Constraints: N/A Options: • IMAGE: image background, which is used as the virtual avatar video background • COLOR: solid color background. The RGB value of the specified color is used as the virtual avatar video background. Default value: N/A

Parameter	Type	Description
background_title	String	Background title. NOTE This parameter does not take effect for virtual avatar video production.
human_position_2d	HumanPosition2D object	Position of a virtual avatar in the background image. If this parameter is not set, the virtual avatar is in the middle of the image by default. NOTE This parameter is discarded. The position of a virtual avatar in the background image is configured in the layer_config parameter.
human_size_2d	HumanSize2D object	Size of a virtual avatar in the background image. NOTE This parameter is discarded. The size of a virtual avatar in the background image is configured in the layer_config parameter.
background_cover_url	String	URL for downloading the thumbnail image of a video file. This parameter is valid only when the presentation material is a video. NOTE This parameter does not take effect for virtual avatar video production.
background_config	String	Details: Background file URL. Constraints: - External URLs are allowed only for livestreaming. For other services, obtain a URL from the asset library. - This parameter is mandatory when background_type is set to IMAGE. Options: The value contains 1 to 2,048 characters. Default value: N/A

Parameter	Type	Description
background_color_config	String	Details: RGB color value of a solid color background. Constraints: This parameter is mandatory when background_type is set to COLOR . Options: The value contains 0 to 16 characters. Default value: #FFFFFF
background_asset_id	String	Details: Background asset ID. NOTE If a background image is used, enter the image asset ID. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A

Table 6-139 HumanPosition2D

Parameter	Type	Description
position	String	Position of a virtual avatar in the background image. • LEFT: left • MIDDLE: middle • RIGHT: right NOTE If the values of position_x and position_y exist, position does not take effect. Default value: MIDDLE

Parameter	Type	Description
position_x	Integer	X-axis position of the virtual avatar, that is, the X-axis pixel value of the center point at the bottom of the virtual avatar image. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: -1920-3840
position_y	Integer	Y-axis position of the virtual avatar, that is, the Y-axis pixel value of the center point at the bottom of the virtual avatar image. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: -1920-3840

Table 6-140 HumanSize2D

Parameter	Type	Description
width	Integer	Width (in pixel) of a virtual avatar. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: 1-7680
height	Integer	Height (in pixel) of a virtual avatar. The resolution of the landscape (16:9) background image is 1920 x 1080 pixels. The resolution of the portrait (9:16) background image is 1080 x 1920 pixels. Value range: 1-7680

Table 6-141 LayerConfig

Parameter	Type	Description
layer_type	String	Details: Layer type. Constraints: N/A Options: • HUMAN: person layer • IMAGE: image layer • VIDEO: video layer • TEXT: text layer Default value: N/A
asset_id	String	Details: ID of the asset overlaid on a video. You do not need to set this parameter for external assets. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
group_id	String	Details: Groups materials in multiple scenes. Materials with the same group_id share location information when they are applied globally. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
position	LayerPositionConfig object	Layer position configuration.
size	LayerSizeConfig object	Layer size configuration.
image_config	ImageLayerConfig object	Material image layer configuration.

Parameter	Type	Description
video_config	VideoLayerConfig object	Material video layer configuration.
text_config	TextLayerConfig object	Material text layer configuration.

Table 6-142 LayerPositionConfig

Parameter	Type	Description
dx	Integer	Details: X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0
dy	Integer	Details: Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0

Parameter	Type	Description
layer_index	Integer	Details: Layer sequence of an image, video, or person image. NOTE The layer sequence is an integer starting from 1 and incremented by 1. Constraints: If duplicate layers exist, the overlay relationship between the duplicate layers is random. Value range: 1-100 Default value: 100

Table 6-143 LayerSizeConfig

Parameter	Type	Description
width	Integer	Details: Y axis position of the pixel in the upper left corner of the image. Width (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Parameter	Type	Description
height	Integer	Details: Height (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Table 6-144 ImageLayerConfig

Parameter	Type	Description
image_url	String	Details: Image file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A

Table 6-145 VideoLayerConfig

Parameter	Type	Description
video_url	String	Details: Video file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A

Parameter	Type	Description
video_cover_url	String	Details: Video thumbnail file URL. Constraints: N/A Options: The value contains 1 to 2,048 characters. Default value: N/A
loop_count	Integer	Details: Number of times that a video is played cyclically. Options: • 0: no • -1: yes Constraints: N/A Value range: -1-100 Default value: -1

Table 6-146 TextLayerConfig

Parameter	Type	Description
text_context	String	Details: Text of the text layer. The content must be encoded using Base64. For example, if you want to add the text watermark "Test text watermark", set text_context to 5rWL6K+V5paH5a2X5rC05Y2w . Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A

Parameter	Type	Description
font_name	String	Details: Font. The following fonts are supported: Constraints: N/A Options: For details about the supported fonts, see Supported Fonts . Default value: HarmonyOS_Sans_SC_Black
font_size	Integer	Details: Font size (in pixel). The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 16
font_color	String	Details: Font color. RGB color value. Constraints: N/A Options: The value contains 0 to 16 characters. Default value: #FFFFFF

Table 6-147 LiveShootScriptItem

Parameter	Type	Description
sequence_no	Integer	Details: Script No. Constraints: N/A Value range: 0-2147483647

Parameter	Type	Description
title	String	Details: Paragraph title. Constraints: N/A Options: The value contains 0 to 256 characters. Default value: N/A
text_config	TextConfig object	Script configuration.
audio_config	LiveAudioConfig object	Live audio configuration.
relation_product	RelationProductInfo object	Associated Offering

Table 6-148 TextConfig

Parameter	Type	Description
text	String	Details: Script. Two modes are supported: plain text mode and tag mode. • Plain text mode, for example, "Hello, everyone, I'm a virtual streamer." • Tag mode: For details about the definition of SSML tags, see SSML Definition of Text Control. Constraints: The value can contain a maximum of 10,000 characters, excluding the SSML tag. Options: The value contains 0 to 131,072 characters. Default value: N/A

Table 6-149 LiveAudioConfig

Parameter	Type	Description
asset_id	String	Details: ID of the inserted audio asset. You do not need to set this parameter for external assets. If you enter a value, you can query it from the asset library. Constraints: N/A Options: The value contains 0 to 64 characters. Default value: N/A
audio_url	String	Details: Audio URL. Constraints: Only the MP3 format is supported. The size is less than 100 MB. The output is automatically converted to mono 16 kHz for sampling. Options: The value contains 0 to 2,048 characters. Default value: N/A
subtitle_url	String	Details: URL of the subtitle file of the audio. Constraints: Only the SRT format is supported. The size is less than 1 MB. Options: The value contains 0 to 2,048 characters. Default value: N/A

Table 6-150 RelationProductInfo

Parameter	Type	Description
product_id	String	Associated offering ID. If this parameter is set, this information is carried in the paragraph switchback callback. GoodsId corresponding to the US Regiment platform

Parameter	Type	Description
product_title	String	Associated product title/name. If this parameter is set, this information is carried in the paragraph switchback callback. US Regiment Platform Corresponding to GoodsTitle

Table 6-151 LiveRoomInteractionConfig

Parameter	Type	Description
play_type	String	Playback mode: • APPEND: added to the end of the playback queue in the scene • INSERT: inserted to the end of two audio files or a text sentence • PLAY_NOW: inserted immediately. After the instruction is received, the media file is played immediately without waiting till the end of the sentence. Default value: INSERT
ignore_current_sentence	Boolean	The second half of a sentence is not read for reply. It is used for immediate interruption. By default, it is not ignored. Default value: false

Table 6-152 LiveRoomInteractionRuleInfo

Parameter	Type	Description
rule_index	String	Details: Rule index. It is used to index a specific rule when the rule is triggered. Constraints: You do not need to specify it. Options: 0 to 64 characters Default value: N/A

Parameter	Type	Description
rule_name	String	Details: Rule name. Constraints: N/A Options: 0 to 256 characters Default value: N/A
enabled	Boolean	Details: Whether to enable. Constraints: N/A Options: • true: enabled • false: disabled Default value: true
event_type	Integer	Details: Livestreaming event type matched by the rule. The value range is 0 to 100. Options: 1: On-screen comments 2: User joining a room 3: Giving likes 4: Sending gifts 10: Preset script events Use the actual value. NOTE • 1, 2, 3, 4: corresponds to event.type in LiveEventReport • 10: matches the preset script Constraints: N/A Default value: N/A Value range: 0-100
hit_condition	HitCondition object	Rule matching condition

Parameter	Type	Description
trigger	TriggerProcesses object	Processing after rule matching
review_config	ReviewConfig object	Content review configuration.
group_id	String	Details: Interaction rule library ID, which is carried when a rule is imported from the interaction rule library. Constraints: N/A Options: The value contains 1 to 64 characters. Default value: N/A
group_name	String	Details: Interaction rule library name, which is carried when a rule is imported from the interaction rule library. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
enabled_scenes	Array of strings	Details: Scenario where a rule is enabled. Set this parameter when some scenarios are enabled. If this field is not specified, it applies to all scenarios. Constraints: N/A Options: Livestreaming scenes. A maximum of 100 scenes are allowed. Enter a scene name, which contains 1 to 256 characters. Default value: N/A

Table 6-153 HitCondition

Parameter	Type	Description
relation	String	Details: Condition relationship, specifically, the logical operation relationship between multiple conditions. Constraints: N/A Options: • AND: Multiple conditions are met. • OR: One of the conditions is met. • RESERVED: The general reply does not check other matching conditions. Default value: N/A
priority	Integer	Details: Priority. A smaller value indicates a higher priority. The value ranges from 0 to 999. The default value is 500 . This parameter is optional. Constraints: N/A Value range: 0-999 Default value: 500
tags	Array of HitCondition Tag objects	Matching relationship configuration

Table 6-154 HitConditionTag

Parameter	Type	Description
tag	String	Details: Key fields in the event content. NOTE - When event_type is set to 1, 2, 3, or 4, the value corresponds to the JSON field deserialized from event.content in LiveEventReport. The following is an on-screen comment event report. <pre>{ "timestamp": 1694481224245, "type": 1, "content": "{ \"user\": {\"userId\":\"2027271526\",\"name\":\"\",\"level\":\"17\",\"badge\":\"\",\"badgeLevel\":\"0\"}, \"content\":\"\" }"</pre> To match the on-screen comment content, enter content. To match the user platform level, enter level. 10: Set this field to content. Constraints: N/A Options: The value contains 0 to 256 characters. Default value: N/A
operation	String	Details: Field value processing Constraints: N/A Options: SUM: accumulation AVG: average COUNT: count NONE: no processing Default value: NONE

Parameter	Type	Description
match	String	Details: Match type. You are advised to use REGEX for keyword matching. Constraints: N/A Options: • EQUAL: completely equal • REGEX: regular expression match • MATH_GT: greater than • MATH_GE: greater than or equal to • MATH_LT: less than • MATH_LE: less than or equal to • MATH_EQ: numerically equal Default value: N/A
value	String	Details: Matched value. Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A

Table 6-155 TriggerProcess

Parameter	Type	Description
time_window	Integer	Details: Processing suppression duration, in second. • -1: triggered only once throughout the livestream • 0: no suppression. It is triggered each time. • <i>n</i>: triggered only once within <i>n</i> seconds Constraints: N/A Default value: N/A Value range: -1-7200
reply_mode	String	Details: Reply type. Constraints: N/A Options: • SYSTEM_REPLY: automatic reply based on the preset script • CALLBACK: callback to other services, with the preset script • SHOW_LAYER: display of only overlaid layers, which does not affect the script • INTELLIGENT_REPLY: use the configured large model to generate reply scripts Default value: N/A
layer_config	SmartLayerConfig object	Intelligent layer configuration.
extra_layer_config	SmartLayerConfig object	Additional layer, which is used together with the second layer when dynamic text needs to be displayed for products.

Parameter	Type	Description
reply_texts	Array of strings	Details: Reply scripts. Constraints: N/A Options: A maximum of five preset scripts are allowed. A single script contains 0 to 1,024 characters. Default value: N/A
reply_audios	Array of ReplyAudioInfo objects	Details: Reply audio set. Set audio_url . Constraints: N/A Options: A maximum of five preset audio files are allowed. Default value: N/A
reply_order	String	Details: Sequence of reading reply scripts. Constraints: N/A Options: • RANDOM: randomly • ORDER: sequential loop Default value: N/A
reply_role	String	Details: Reply role. Constraints: N/A Options: • STREAMER: streamer • CO_STREAMER: co-streamer, audio-only Default value: STREAMER

Parameter	Type	Description
robot_id	String	Details: Bot ID. Constraints: ID of the large model robot configured for intelligent interaction. This parameter is mandatory when reply_mode is set to INTELLIGENT_REPLY . For details about how to obtain the ID. Options: The value contains 0 to 64 characters. Default value: N/A
play_type	String	Reply playback type. • APPEND: added to the end of the playback queue in the scene • INSERT: inserted to the end of two audio files or a text sentence • PLAY_NOW: inserted immediately. After the instruction is received, the media file is played immediately without waiting till the end of the sentence. Default value: PLAY_NOW

Table 6-156 SmartLayerConfig

Parameter	Type	Description
layer_type	String	Layer type. • IMAGE: image layer • VIDEO: video layer • TEXT: text layer
asset_id	String	ID of the asset overlaid on a video. You do not need to set this parameter for external assets.
position	LayerPositionConfig object	Layer position configuration.
size	LayerSizeConfig object	Layer size configuration.

Parameter	Type	Description
image_config	SmartImageLayerConfig object	Image layer configuration.
video_config	SmartVideoLayerConfig object	Video layer configuration.
text_config	SmartTextLayerConfig object	Video layer configuration.

Table 6-157 SmartImageLayerConfig

Parameter	Type	Description
image_url	String	Image file URL.
display_duration	Integer	Details: Image display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-158 SmartVideoLayerConfig

Parameter	Type	Description
video_url	String	Video file URL.
video_cover_url	String	Video thumbnail file URL.

Parameter	Type	Description
display_duration	Integer	Details: Image display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-159 SmartTextLayerConfig

Parameter	Type	Description
text_type	String	Details: Text type. • DYNAMIC: dynamic text, which requires keyword replacement • STATIC: static text Default value: DYNAMIC
text_context	String	Text.
font_name	String	Details: Font. The following fonts are supported: • HarmonyOS_Sans_SC_Black: HarmonyOS bold • HarmonyOS_Sans_SC_Regular: HarmonyOS normal • HarmonyOS_Sans_SC_Thin: HarmonyOS light • fzyouh: Square & lean Default value: HarmonyOS_Sans_SC_Black

Parameter	Type	Description
font_size	Integer	Details: Font size (in pixel). Value range: [4, 120]. The value range is subject to the actual service. Value range: 0-120 Default value: 16
font_color	String	Details: Font color. RGB color value. Default value: #FFFFFF
display_duration	Integer	Details: Text display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-160 ReplyAudioInfo

Parameter	Type	Description
audio_url	String	Audio URL.
audio_name	String	Audio name.

Table 6-161 PlayPolicy

Parameter	Type	Description
repeat_count	Integer	Details: Number of times that a script is played repeatedly. • -1: The playback is repeated until it is stopped manually. • 0: It is played only once. • <i>n</i>: It is played $n + 1$ times. Constraints: N/A Value range: -1-100 Default value: 0
auto_play_script	Boolean	Details: Indicates whether to automatically play a script. Constraints: N/A Options: • true: The script is automatically played after the task is initialized. • false: After the task is initialized, the script is not played until signal appears. Default value: true
play_mode	String	Details: Virtual avatar control method. Constraints: N/A Options: TEXT: text control, that is, using TTS AUDIO: speech control NO_PRESET: no preset script, manual control Default value: TEXT

Parameter	Type	Description
random_play_mode	String	Details: Method of random script reading. Constraints: Random script reading starts from the second round of reading. Options: • NONE: Random script reading is disabled. • SCENE: Random script reading based on scenes is enabled. Paragraphs in a scene are read in sequence. • SCRIPT_ITEM: Random script reading based on paragraphs is enabled. Script of each scene is read in sequence. • SCENE_AND_SCRIPT_ITEM: Script of both scenes and paragraphs is read randomly. Default value: SCRIPT_ITEM
need_independent_capture_client	Boolean	Details: Whether an independent data collection device is required. This parameter is used when the client playback is separated from the command. Constraints: N/A Options: • true: Devices are allocated to RTC users CAPTURE and PLAYER. • false: Devices are allocated only to the RTC user PLAYER. Default value: false

Table 6-162 VideoConfig

Parameter	Type	Description
clip_mode	String	Details: Clipping mode of the output video. Constraints: N/A Options: • RESIZE: video scaling • CROP: video cropping Default value: RESIZE
codec	String	Details: Video encoding format and video file format. Constraints: Only virtual avatar video production supports VP8 encoding. Options: • H264: H.264 encoding, MP4 file output • VP8: VP8 encoding, WebM file output Default value: N/A
bitrate	Integer	Details: Average output bitrate. Unit: kbit/s Constraints: • Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. • Bitrate range for virtual avatar video production: [1000, 8000]. Default value: N/A Value range: 40-30000

Parameter	Type	Description
width	Integer	Details: Video width. Unit: pixel. Constraints: - When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. 4K is available only when the virtual avatar model supports 4K. - When clip_mode is set to CROP, (dx, dy) is the origin, and the width is the actual width of the reserved video. - Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840
height	Integer	Details: Video height. Unit: pixel. Constraints: - When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. - When clip_mode is set to CROP, (dx, dy) is the origin, and the height is the actual height of the reserved video. - Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840

Parameter	Type	Description
frame_rate	String	Details: Frame rate. Unit: FPS Constraints: The virtual avatar video frame rate is fixed at 25 FPS. Default value: 25
is_subtitle_enable	Boolean	Details: Whether the output video is subtitled. Constraints: Subtitles are not supported for virtual avatar livestreaming. Options: • true: enable subtitling • false: disable subtitling Default value: false
subtitle_config	SubtitleConfig object	Subtitle configuration.
disable_system_watermark	Boolean	Details: Indicates whether the system watermark is disabled for the output video. Constraints: Currently, this parameter takes effect only for trustlisted tenants. Value range: • true • false Default value: false

Parameter	Type	Description
dx	Integer	Details: Horizontal coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dx ranges from 0 to 1920. Constraints: This parameter takes effect when clip_mode is set to CROP . Default value: N/A Value range: -1920-3840
dy	Integer	Details: Vertical coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dy ranges from 0 to 1080. Constraints: This parameter takes effect when clip_mode is set to CROP . Default value: N/A Value range: -1920-3840
is_enable_super_resolution	Boolean	Details: Whether super resolution is enabled for a video. Constraints: This parameter is available only for virtual avatar video production. Options: ● true: enable ● false: do not enable Default value: false

Table 6-163 SubtitleConfig

Parameter	Type	Description
dx	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920
dy	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920
font_name	String	Details: Font. The following fonts are supported: • HarmonyOS_Sans_SC_Black: HarmonyOS bold • HarmonyOS_Sans_SC_Regular: HarmonyOS normal • HarmonyOS_Sans_SC_Thin: HarmonyOS light Constraints: N/A Options: The value contains 0 to 64 characters. Default value: HarmonyOS_Sans_SC_Black

Parameter	Type	Description
font_size	Integer	Details: Font size. The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 54
h	Integer	Details: Subtitle box height. Constraints: The parameter h is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920
w	Integer	Details: Subtitle box width. Constraints: • The subtitle box width is fixed at 80/ %of the screen width. • The parameter w is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920

Table 6-164 LiveEventCallBackConfig

Parameter	Type	Description
live_event_type_callback_url	String	Details: Live event callback address, which is an HTTPS address. Constraints: N/A Options: The value contains 0 to 2,048 characters. Default value: N/A
auth_type	String	Details: Authentication type. Constraints: N/A Options: • NONE: The URL contains authentication. • MSS_A: In HMACSHA256 signature mode, the hwSecret and hwTime parameters are added to the URL. Value format: hwSecret=hmac_sha256(Key, URI (live_event_callback_url) + hwTime)&hwTime=hex(timestamp) • MSS_A_HEAD: In HMACSHA256 signature mode, the hwSecret and hwTime parameters are placed in Head. Value format: x-hw-mss-secret=hmac_sha256(Key, URI (live_event_callback_url) + hwTime) x-hw-mss-time=hex(timestamp) • MEITUAN_DEFAULT: This parameter is used only for Meituan's API callback. Default value: NONE
key	String	Details: Key. Constraints: N/A Options: The value contains 0 to 32 characters. Default value: N/A

Parameter	Type	Description
callback_event_type	Array of strings	Details: Live event types in callbacks. Constraints: N/A Options: Currently, only the following options are supported: • SHOOT_SCRIPT_SWITCH: script paragraph switching event • RTMP_STREAM_STATE_CHANGE: RTMP link change callback event • REPLY_COMMAND_FINISH: Playback is complete. The callback event structure is defined as follows: • event_type: event type • message: event description – The SHOOT_SCRIPT_SWITCH event callback is defined as follows:<pre>{ "event_type": "SHOOT_SCRIPT_SWITCH", "message": {"room_id \":"26f065244f754b3aa853b649a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b04c49c3c \","scene_script_name\":"Product 1\","shoot_script_sequence_no \":"2\","shoot_script_title\":"Paragraph 2\"} }</pre> – The RTMP_STREAM_STATE_CHANGE callback is defined as follows:<pre>{ "event_type": "RTMP_STREAM_STATE_CHANGE", "message": {"room_id \":"26f065244f754b3aa853b649a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b04c49c3c \","output_url\":"rtmp://xx/xx/xx\","stream_key \":"xxxx\","state\":"CONNECTED\"} }</pre>The value of state can be CONNECTING, CONNECTED, DISCONNECTED, RECONNECTING, or END. – The REPLY_COMMAND_FINISH callback is defined as follows:<pre>{ "event_type": "REPLY_COMMAND_FINISH", "message": {"room_id \":"26f065244f754b3aa853b649a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b04c49c3c\","reply_id \":"e87104f76d7546ce8a46ac6b04c49c3c\"} }</pre>

Table 6-165 RTCLiveEventCallBackConfig

Parameter	Type	Description
rtc_callback_event_type	Array of strings	Live event types in RTC callbacks. Currently, only the following options are supported: • LIVE_PROGRESS: live script progress notification • REPLY_COMMAND_FINISH: Playback is complete. The callback event structure is defined as follows: • message_type: message type • data: message description – The LIVE_PROGRESS event callback is defined as follows:<pre>{ "message_type": "live_progress_notify", "data": { "script_name": "Scene 1", "shoot_script_sequence_no": 2, "shoot_script_title": "Greeting", "offset": "247", "reply_id": "e87104f76d7546ce8a46ac6b04c49c3c" } }</pre> – The REPLY_COMMAND_FINISH callback is defined as follows:<pre>{ "message_type": "reply_command_finish_notify", "data": { "reply_id": "e87104f76d7546ce8a46ac6b04c49c3c" } }</pre>

Table 6-166 ReviewConfig

Parameter	Type	Description
no_need_review	Boolean	Content review whitelist. This feature is available only for users in the whitelist. The auto review policies apply to other users.

Table 6-167 SharedConfig

Parameter	Type	Description
shared_type	String	Details: Sharing type. Constraints: This configuration applies only to templates. Options: • PRIVATE: accessible only to the current tenant • PUBLIC: accessible to all tenants. Currently, only system assets are accessible to all tenants. • SHARED: accessible to specified tenants, who are specified by the owner. Default value: N/A
shared_state	String	Details: Sharing status. Constraints: This configuration applies only to templates whose shared_type is SHARED . Options: • PUBLISHED: published. The template is available. • DRAFT: draft. The template is being edited and can be viewed only by the owner. • REVIEW: The template is being reviewed. The template cannot be edited and can be viewed only by the owner/reviewer. Default value: N/A

Parameter	Type	Description
expire_time	String	Details: Time when the sharing expires. If this parameter is left blank, the sharing never expires. Constraints: This configuration applies only to templates whose shared_type is SHARED . The format complies with RFC 3339, for example, 20210710T08:43:17Z. Options: The value contains 0 to 20 characters. Default value: N/A
allowed_project_ids	Array of strings	Details: Tenants allowed to access the asset. Constraints: This configuration applies only to templates whose shared_type is SHARED . Options: A maximum of 100 tenants are allowed. Duplicate records will be ignored. Enter a project ID containing 1 to 64 characters. Default value: N/A

Table 6-168 CoStreamerConfig

Parameter	Type	Description
voice_config	VoiceConfig object	Voice configuration parameter.

Parameter	Type	Description
streamer_action	String	Details: Behavior of the streamer when the co-streamer speaks. Constraints: N/A Options: • SILENCE: silent • VOLUME_DOWN: decreased volume Default value: N/A

Table 6-169 VoiceConfig

Parameter	Type	Description
voice_asset_id	String	Details: Timbre asset ID, which can be queried from the asset library. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
speed	Integer	Details: Speaking speed. 50 indicates 0.5x speaking speed, 100 indicates normal speaking speed, and 200 indicates 2x speaking speed. The value 100 indicates the normal speaking speed of an adult, which is about 150 words per minute. Constraints: N/A Value range: 50-200 Default value: 100

Parameter	Type	Description
pitch	Integer	Details: Pitch. Constraints: N/A Value range: 50-200 Default value: 100
volume	Integer	Details: Volume. Constraints: N/A Value range: 90-240 Default value: 140

Table 6-170 PlatformLiveDetailInfo

Parameter	Type	Description
platform_id	String	Live TV platform ID.
platform	String	Live broadcast platform. Meituan fills in meituan
account	String	Authorization account information. Meituan platform: opBizCode
live_id	String	Live TV channel ID. If this parameter is set, the live TV channel ID is carried in the segment switchback callback. Liveld corresponding to the Meituan.

Table 6-171 ErrorResponse

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 400**Table 6-172** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 6-173** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-174** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

PUT https://{endpoint}/v1/70b76xxxxx34253880af501cdxxxxx/smart-live-rooms/
24bad716-87b1-45e5-8912-6102f7693265

```
{
  "room_name": "The Legend of Nature",
  "room_description": "Courseware",
  "scene_scripts": [ {
    "script_name": "The Legend of Nature —",
    "model_asset_id": "a5d295cdb345c11bd9f36bc22ced3a7a",
    "voice_config": {
      "voice_asset_id": "a5d295cdb345c11bd9f36bc22ced3a7a"
    }
  },
  "background_config": [ {
    "background_type": "IMAGE",
    "background_config": "978f893e1de4553c183b7a805e6290f5"
  } ],
  "shoot_scripts": [ {
    "sequence_no": 1,
    "text_config": {
      "text": "Hello, everyone. I'm Sara."
    }
  }
  ]
}
```

```
  }]  
}
```

Example Responses

Status code: 400

```
{  
  "error_code" : "MSS.00000003",  
  "error_msg" : "Invalid parameter"  
}
```

Status code: 401

```
{  
  "error_code" : "MSS.00000001",  
  "error_msg" : "Unauthorized"  
}
```

Status code: 500

```
{  
  "error_code" : "MSS.00000004",  
  "error_msg" : "Internal Error"  
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.1.5 Deleting an Intelligent Livestreaming Room

Function

Deletes an intelligent livestreaming room.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v1/{project_id}/smart-live-rooms/{room_id}

Table 6-175 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
room_id	Yes	String	Script ID.

Request Parameters

Table 6-176 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 6-177 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Status code: 400**Table 6-178** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 6-179** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-180** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
DELETE https://{endpoint}/v1/70b76xxxxx34253880af501cdxxxxx/smart-live-rooms/  
24bad716-87b1-45e5-8912-6102f7693265
```

Example Responses

Status code: 400

```
{  
  "error_code" : "MSS.00000003",  
  "error_msg" : "Invalid parameter"  
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.1.6 Creating an Interaction Rule Library for Live Rooms

Function

Creates an interaction rule library for live rooms.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/smart-live-interaction-rule-groups

Table 6-181 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Request Parameters

Table 6-182 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 6-183 Request body parameters

Parameter	Mandatory	Type	Description
group_name	Yes	String	Interaction rule library name.
interaction_rules	No	Array of InteractionRuleInfo objects	Interaction rules.

Table 6-184 InteractionRuleInfo

Parameter	Mandatory	Type	Description
rule_index	No	String	Details: Rule index. It is used to index a specific rule when the rule is triggered. Constraints: You do not need to specify it. Options: 0 to 64 characters Default value: N/A
rule_name	No	String	Details: Rule name. Constraints: N/A Options: 0 to 256 characters Default value: N/A
enabled	No	Boolean	Details: Whether to enable. Constraints: N/A Options: • true: enabled • false: disabled Default value: true

Parameter	Mandatory	Type	Description
event_type	No	Integer	Details: Livestreaming event type matched by the rule. The value range is 0 to 100. Options: 1: On-screen comments 2: User joining a room 3: Giving likes 4: Sending gifts 10: Preset script events Use the actual value. NOTE 1, 2, 3, 4: corresponds to event.type in LiveEventReport 10: matches the preset script Constraints: N/A Default value: N/A Value range: 0-100
hit_condition	No	HitCondition object	Rule matching condition
trigger	No	TriggerProcesses object	Processing after rule matching
review_config	No	ReviewConfig object	Content review configuration.

Table 6-185 HitCondition

Parameter	Mandatory	Type	Description
relation	No	String	Details: Condition relationship, specifically, the logical operation relationship between multiple conditions. Constraints: N/A Options: • AND: Multiple conditions are met. • OR: One of the conditions is met. • RESERVED: The general reply does not check other matching conditions. Default value: N/A
priority	No	Integer	Details: Priority. A smaller value indicates a higher priority. The value ranges from 0 to 999. The default value is 500 . This parameter is optional. Constraints: N/A Value range: 0-999 Default value: 500
tags	No	Array of HitCondition Tag objects	Matching relationship configuration

Table 6-186 HitConditionTag

Parameter	Mandatory	Type	Description
tag	No	String	Details: Key fields in the event content. NOTE - When event_type is set to 1, 2, 3, or 4, the value corresponds to the JSON field deserialized from event.content in LiveEventReport. The following is an on-screen comment event report. { "timestamp": 1694481224245, "type": 1, "content": "{ \"user\": { \"userId\": \"2027271526\", \"name\": \"\", \"level\": 17, \"badge\": \"\", \"badgeLevel\": 0 }, \"content\": \"\" } }" To match the on-screen comment content, enter content. To match the user platform level, enter level. 10: Set this field to content. Constraints: N/A Options: The value contains 0 to 256 characters. Default value: N/A
operation	No	String	Details: Field value processing Constraints: N/A Options: SUM: accumulation AVG: average COUNT: count NONE: no processing Default value: NONE

Parameter	Mandatory	Type	Description
match	No	String	Details: Match type. You are advised to use REGEX for keyword matching. Constraints: N/A Options: • EQUAL: completely equal • REGEX: regular expression match • MATH_GT: greater than • MATH_GE: greater than or equal to • MATH_LT: less than • MATH_LE: less than or equal to • MATH_EQ: numerically equal Default value: N/A
value	No	String	Details: Matched value. Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A

Table 6-187 TriggerProcess

Parameter	Mandatory	Type	Description
time_window	No	Integer	Details: Processing suppression duration, in second. • -1: triggered only once throughout the livestream • 0: no suppression. It is triggered each time. • <i>n</i>: triggered only once within <i>n</i> seconds Constraints: N/A Default value: N/A Value range: -1-7200
reply_mode	No	String	Details: Reply type. Constraints: N/A Options: • SYSTEM_REPLY: automatic reply based on the preset script • CALLBACK: callback to other services, with the preset script • SHOW_LAYER: display of only overlaid layers, which does not affect the script • INTELLIGENT_REPLY: use the configured large model to generate reply scripts Default value: N/A
layer_config	No	SmartLayerConfig object	Intelligent layer configuration.
extra_layer_config	No	SmartLayerConfig object	Additional layer, which is used together with the second layer when dynamic text needs to be displayed for products.

Parameter	Mandatory	Type	Description
reply_texts	No	Array of strings	Details: Reply scripts. Constraints: N/A Options: A maximum of five preset scripts are allowed. A single script contains 0 to 1,024 characters. Default value: N/A
reply_audios	No	Array of ReplyAudioInfo objects	Details: Reply audio set. Set audio_url . Constraints: N/A Options: A maximum of five preset audio files are allowed. Default value: N/A
reply_order	No	String	Details: Sequence of reading reply scripts. Constraints: N/A Options: • RANDOM: randomly • ORDER: sequential loop Default value: N/A

Parameter	Mandatory	Type	Description
reply_role	No	String	Details: Reply role. Constraints: N/A Options: • STREAMER: streamer • CO_STREAMER: co-streamer, audio-only Default value: STREAMER
robot_id	No	String	Details: Bot ID. Constraints: ID of the large model robot configured for intelligent interaction. This parameter is mandatory when reply_mode is set to INTELLIGENT_REPLY . For details about how to obtain the ID. Options: The value contains 0 to 64 characters. Default value: N/A
play_type	No	String	Reply playback type. • APPEND: added to the end of the playback queue in the scene • INSERT: inserted to the end of two audio files or a text sentence • PLAY_NOW: inserted immediately. After the instruction is received, the media file is played immediately without waiting till the end of the sentence. Default value: PLAY_NOW

Table 6-188 SmartLayerConfig

Parameter	Mandatory	Type	Description
layer_type	Yes	String	Layer type. • IMAGE: image layer • VIDEO: video layer • TEXT: text layer
asset_id	No	String	ID of the asset overlaid on a video. You do not need to set this parameter for external assets.
position	No	LayerPositionConfig object	Layer position configuration.
size	No	LayerSizeConfig object	Layer size configuration.
image_config	No	SmartImageLayerConfig object	Image layer configuration.
video_config	No	SmartVideoLayerConfig object	Video layer configuration.
text_config	No	SmartTextLayerConfig object	Video layer configuration.

Table 6-189 LayerPositionConfig

Parameter	Mandatory	Type	Description
dx	Yes	Integer	Details: X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0
dy	Yes	Integer	Details: Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0

Parameter	Mandatory	Type	Description
layer_index	Yes	Integer	Details: Layer sequence of an image, video, or person image. NOTE The layer sequence is an integer starting from 1 and incremented by 1. Constraints: If duplicate layers exist, the overlay relationship between the duplicate layers is random. Value range: 1-100 Default value: 100

Table 6-190 LayerSizeConfig

Parameter	Mandatory	Type	Description
width	No	Integer	Details: Y axis position of the pixel in the upper left corner of the image. Width (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Parameter	Mandatory	Type	Description
height	No	Integer	Details: Height (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Table 6-191 SmartImageLayerConfig

Parameter	Mandatory	Type	Description
image_url	Yes	String	Image file URL.
display_duration	No	Integer	Details: Image display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-192 SmartVideoLayerConfig

Parameter	Mandatory	Type	Description
video_url	Yes	String	Video file URL.
video_cover_url	No	String	Video thumbnail file URL.
display_duration	No	Integer	Details: Image display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-193 SmartTextLayerConfig

Parameter	Mandatory	Type	Description
text_type	No	String	Details: Text type. • DYNAMIC: dynamic text, which requires keyword replacement • STATIC: static text Default value: DYNAMIC
text_context	No	String	Text.

Parameter	Mandatory	Type	Description
font_name	No	String	Details: Font. The following fonts are supported: • HarmonyOS_Sans_SC_Black: HarmonyOS bold • HarmonyOS_Sans_SC_Regular: HarmonyOS normal • HarmonyOS_Sans_SC_Thin: HarmonyOS light • fzyouh: Square & lean Default value: HarmonyOS_Sans_SC_Black
font_size	No	Integer	Details: Font size (in pixel). Value range: [4, 120]. The value range is subject to the actual service. Value range: 0-120 Default value: 16
font_color	No	String	Details: Font color. RGB color value. Default value: #FFFFFF
display_duration	No	Integer	Details: Text display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-194 ReplyAudioInfo

Parameter	Mandatory	Type	Description
audio_url	No	String	Audio URL.
audio_name	No	String	Audio name.

Table 6-195 ReviewConfig

Parameter	Mandatory	Type	Description
no_need_review	No	Boolean	Content review whitelist. This feature is available only for users in the whitelist. The auto review policies apply to other users.

Response Parameters

Status code: 200

Table 6-196 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 6-197 Response body parameters

Parameter	Type	Description
group_id	String	Interaction rule library ID.

Status code: 400

Table 6-198 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 6-199** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-200** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/smart-live-interaction-rule-groups
{
  "group_name" : "Welcome Message"
}
```

Example Responses**Status code: 200**

Succeeded.

```
{
  "group_id" : "26f06524-4f75-4b3a-a853-b649a21aaf66"
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.1.7 Querying Interaction Rule Libraries for Live Rooms

Function

Queries interaction rule libraries for live rooms.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/smart-live-interaction-rule-groups

Table 6-201 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Table 6-202 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts. Value range: 0-2147483647 Default value: 0

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of items displayed on each page. Value range: 1-100 Default value: 10
create_since	No	String	Filter the records whose creation time is not earlier than the entered time.
create_until	No	String	Filter the records whose creation time is not later than the entered time.
group_name	No	String	Rule library name.

Request Parameters

Table 6-203 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Parameter	Mandatory	Type	Description
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 6-204 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 6-205 Response body parameters

Parameter	Type	Description
count	Integer	Details: Number of interaction rules. Value range: 0-1000
interaction_rule_groups	Array of InteractionRuleGroupDetail objects	Interaction rule libraries.

Table 6-206 InteractionRuleGroupDetail

Parameter	Type	Description
group_id	String	Interaction rule library ID.
group_name	String	Interaction rule library name.
interaction_rules	Array of InteractionRuleDetailInfo objects	Interaction rules.
create_time	String	Creation time. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
update_time	String	Update time. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.

Table 6-207 InteractionRuleDetailInfo

Parameter	Type	Description
rule_index	String	Details: Rule index. It is used to index a specific rule when the rule is triggered. Constraints: You do not need to specify it. Options: 0 to 64 characters Default value: N/A
rule_name	String	Details: Rule name. Constraints: N/A Options: 0 to 256 characters Default value: N/A
enabled	Boolean	Details: Whether to enable. Constraints: N/A Options: • true: enabled • false: disabled Default value: true

Parameter	Type	Description
event_type	Integer	Details: Livestreaming event type matched by the rule. The value range is 0 to 100. Options: 1: On-screen comments 2: User joining a room 3: Giving likes 4: Sending gifts 10: Preset script events Use the actual value. NOTE 1, 2, 3, 4: corresponds to event.type in LiveEventReport 10: matches the preset script Constraints: N/A Default value: N/A Value range: 0-100
hit_condition	HitCondition object	Rule matching condition
trigger	TriggerProcesses object	Processing after rule matching
review_config	ReviewConfig object	Content review configuration.
rule_id	String	Interaction rule ID.
create_time	String	Creation time. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
update_time	String	Update time. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.

Table 6-208 HitCondition

Parameter	Type	Description
relation	String	Details: Condition relationship, specifically, the logical operation relationship between multiple conditions. Constraints: N/A Options: • AND: Multiple conditions are met. • OR: One of the conditions is met. • RESERVED: The general reply does not check other matching conditions. Default value: N/A
priority	Integer	Details: Priority. A smaller value indicates a higher priority. The value ranges from 0 to 999. The default value is 500 . This parameter is optional. Constraints: N/A Value range: 0-999 Default value: 500
tags	Array of HitCondition Tag objects	Matching relationship configuration

Table 6-209 HitConditionTag

Parameter	Type	Description
tag	String	Details: Key fields in the event content. NOTE - When event_type is set to 1, 2, 3, or 4, the value corresponds to the JSON field deserialized from event.content in LiveEventReport. The following is an on-screen comment event report. <pre>{ "timestamp": 1694481224245, "type": 1, "content": "{ \"user\": {\"userId\":\"2027271526\",\"name\":\"\",\"level\":\"17\",\"ba dge\":\"\",\"badgeLevel\":\"0\"},\"content\":\"\"} }"</pre> To match the on-screen comment content, enter content. To match the user platform level, enter level. 10: Set this field to content. Constraints: N/A Options: The value contains 0 to 256 characters. Default value: N/A
operation	String	Details: Field value processing Constraints: N/A Options: SUM: accumulation AVG: average COUNT: count NONE: no processing Default value: NONE

Parameter	Type	Description
match	String	Details: Match type. You are advised to use REGEX for keyword matching. Constraints: N/A Options: • EQUAL: completely equal • REGEX: regular expression match • MATH_GT: greater than • MATH_GE: greater than or equal to • MATH_LT: less than • MATH_LE: less than or equal to • MATH_EQ: numerically equal Default value: N/A
value	String	Details: Matched value. Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A

Table 6-210 TriggerProcess

Parameter	Type	Description
time_window	Integer	Details: Processing suppression duration, in second. • -1: triggered only once throughout the livestream • 0: no suppression. It is triggered each time. • <i>n</i>: triggered only once within <i>n</i> seconds Constraints: N/A Default value: N/A Value range: -1-7200
reply_mode	String	Details: Reply type. Constraints: N/A Options: • SYSTEM_REPLY: automatic reply based on the preset script • CALLBACK: callback to other services, with the preset script • SHOW_LAYER: display of only overlaid layers, which does not affect the script • INTELLIGENT_REPLY: use the configured large model to generate reply scripts Default value: N/A
layer_config	SmartLayerConfig object	Intelligent layer configuration.
extra_layer_config	SmartLayerConfig object	Additional layer, which is used together with the second layer when dynamic text needs to be displayed for products.

Parameter	Type	Description
reply_texts	Array of strings	Details: Reply scripts. Constraints: N/A Options: A maximum of five preset scripts are allowed. A single script contains 0 to 1,024 characters. Default value: N/A
reply_audios	Array of ReplyAudioInfo objects	Details: Reply audio set. Set audio_url . Constraints: N/A Options: A maximum of five preset audio files are allowed. Default value: N/A
reply_order	String	Details: Sequence of reading reply scripts. Constraints: N/A Options: • RANDOM: randomly • ORDER: sequential loop Default value: N/A
reply_role	String	Details: Reply role. Constraints: N/A Options: • STREAMER: streamer • CO_STREAMER: co-streamer, audio-only Default value: STREAMER

Parameter	Type	Description
robot_id	String	Details: Bot ID. Constraints: ID of the large model robot configured for intelligent interaction. This parameter is mandatory when reply_mode is set to INTELLIGENT_REPLY . For details about how to obtain the ID. Options: The value contains 0 to 64 characters. Default value: N/A
play_type	String	Reply playback type. • APPEND: added to the end of the playback queue in the scene • INSERT: inserted to the end of two audio files or a text sentence • PLAY_NOW: inserted immediately. After the instruction is received, the media file is played immediately without waiting till the end of the sentence. Default value: PLAY_NOW

Table 6-211 SmartLayerConfig

Parameter	Type	Description
layer_type	String	Layer type. • IMAGE: image layer • VIDEO: video layer • TEXT: text layer
asset_id	String	ID of the asset overlaid on a video. You do not need to set this parameter for external assets.
position	LayerPosition Config object	Layer position configuration.
size	LayerSizeConfig object	Layer size configuration.

Parameter	Type	Description
image_config	SmartImageLayerConfig object	Image layer configuration.
video_config	SmartVideoLayerConfig object	Video layer configuration.
text_config	SmartTextLayerConfig object	Video layer configuration.

Table 6-212 LayerPositionConfig

Parameter	Type	Description
dx	Integer	Details: X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0

Parameter	Type	Description
dy	Integer	Details: Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0
layer_index	Integer	Details: Layer sequence of an image, video, or person image. NOTE The layer sequence is an integer starting from 1 and incremented by 1. Constraints: If duplicate layers exist, the overlay relationship between the duplicate layers is random. Value range: 1-100 Default value: 100

Table 6-213 LayerSizeConfig

Parameter	Type	Description
width	Integer	Details: Y axis position of the pixel in the upper left corner of the image. Width (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680
height	Integer	Details: Height (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Table 6-214 SmartImageLayerConfig

Parameter	Type	Description
image_url	String	Image file URL.

Parameter	Type	Description
display_duration	Integer	Details: Image display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-215 SmartVideoLayerConfig

Parameter	Type	Description
video_url	String	Video file URL.
video_cover_url	String	Video thumbnail file URL.
display_duration	Integer	Details: Image display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-216 SmartTextLayerConfig

Parameter	Type	Description
text_type	String	Details: Text type. • DYNAMIC: dynamic text, which requires keyword replacement • STATIC: static text Default value: DYNAMIC
text_context	String	Text.
font_name	String	Details: Font. The following fonts are supported: • HarmonyOS_Sans_SC_Black: HarmonyOS bold • HarmonyOS_Sans_SC_Regular: HarmonyOS normal • HarmonyOS_Sans_SC_Thin: HarmonyOS light • fzyouh: Square & lean Default value: HarmonyOS_Sans_SC_Black
font_size	Integer	Details: Font size (in pixel). Value range: [4, 120]. The value range is subject to the actual service. Value range: 0-120 Default value: 16
font_color	String	Details: Font color. RGB color value. Default value: #FFFFFF

Parameter	Type	Description
display_duration	Integer	Details: Text display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-217 ReplyAudioInfo

Parameter	Type	Description
audio_url	String	Audio URL.
audio_name	String	Audio name.

Table 6-218 ReviewConfig

Parameter	Type	Description
no_need_review	Boolean	Content review whitelist. This feature is available only for users in the whitelist. The auto review policies apply to other users.

Status code: 400**Table 6-219** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401

Table 6-220 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-221** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
GET https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/smart-live-rooms
```

Example Responses

Status code: 200

Succeeded.

```
{
  "count" : 1,
  "interaction_rule_groups" : [ {
    "group_id" : "26f06524-4f75-4b3a-a853-b649a21aaf66",
    "group_name" : "Welcome to the live room.",
    "create_time" : "2022-11-30T06:59:55Z",
    "update_time" : "2022-12-05T12:30:37Z"
  } ]
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.1.8 Updating an Interaction Rule Library for Live Rooms

Function

Updates an interaction rule library for live rooms.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v1/{project_id}/smart-live-interaction-rule-groups/{group_id}

Table 6-222 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
group_id	Yes	String	Interaction policy library ID.

Request Parameters

Table 6-223 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 6-224 Request body parameters

Parameter	Mandatory	Type	Description
group_name	Yes	String	Interaction rule library name.
interaction_rules	No	Array of InteractionRuleInfo objects	Interaction rules.

Table 6-225 InteractionRuleInfo

Parameter	Mandatory	Type	Description
rule_index	No	String	Details: Rule index. It is used to index a specific rule when the rule is triggered. Constraints: You do not need to specify it. Options: 0 to 64 characters Default value: N/A
rule_name	No	String	Details: Rule name. Constraints: N/A Options: 0 to 256 characters Default value: N/A
enabled	No	Boolean	Details: Whether to enable. Constraints: N/A Options: • true: enabled • false: disabled Default value: true

Parameter	Mandatory	Type	Description
event_type	No	Integer	Details: Livestreaming event type matched by the rule. The value range is 0 to 100. Options: 1: On-screen comments 2: User joining a room 3: Giving likes 4: Sending gifts 10: Preset script events Use the actual value. NOTE 1, 2, 3, 4: corresponds to event.type in LiveEventReport 10: matches the preset script Constraints: N/A Default value: N/A Value range: 0-100
hit_condition	No	HitCondition object	Rule matching condition
trigger	No	TriggerProcesses object	Processing after rule matching
review_config	No	ReviewConfig object	Content review configuration.

Table 6-226 HitCondition

Parameter	Mandatory	Type	Description
relation	No	String	Details: Condition relationship, specifically, the logical operation relationship between multiple conditions. Constraints: N/A Options: • AND: Multiple conditions are met. • OR: One of the conditions is met. • RESERVED: The general reply does not check other matching conditions. Default value: N/A
priority	No	Integer	Details: Priority. A smaller value indicates a higher priority. The value ranges from 0 to 999. The default value is 500 . This parameter is optional. Constraints: N/A Value range: 0-999 Default value: 500
tags	No	Array of HitCondition Tag objects	Matching relationship configuration

Table 6-227 HitConditionTag

Parameter	Mandatory	Type	Description
tag	No	String	Details: Key fields in the event content. NOTE - When event_type is set to 1, 2, 3, or 4, the value corresponds to the JSON field deserialized from event.content in LiveEventReport. The following is an on-screen comment event report. { "timestamp": 1694481224245, "type": 1, "content": "{ \"user\": { \"userId\": \"2027271526\", \"name\": \"\", \"level\": 17, \"badge\": \"\", \"badgeLevel\": 0 }, \"content\": \"\" } }" To match the on-screen comment content, enter content. To match the user platform level, enter level. 10: Set this field to content. Constraints: N/A Options: The value contains 0 to 256 characters. Default value: N/A
operation	No	String	Details: Field value processing Constraints: N/A Options: SUM: accumulation AVG: average COUNT: count NONE: no processing Default value: NONE

Parameter	Mandatory	Type	Description
match	No	String	Details: Match type. You are advised to use REGEX for keyword matching. Constraints: N/A Options: • EQUAL: completely equal • REGEX: regular expression match • MATH_GT: greater than • MATH_GE: greater than or equal to • MATH_LT: less than • MATH_LE: less than or equal to • MATH_EQ: numerically equal Default value: N/A
value	No	String	Details: Matched value. Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A

Table 6-228 TriggerProcess

Parameter	Mandatory	Type	Description
time_window	No	Integer	Details: Processing suppression duration, in second. • -1: triggered only once throughout the livestream • 0: no suppression. It is triggered each time. • <i>n</i>: triggered only once within <i>n</i> seconds Constraints: N/A Default value: N/A Value range: -1-7200
reply_mode	No	String	Details: Reply type. Constraints: N/A Options: • SYSTEM_REPLY: automatic reply based on the preset script • CALLBACK: callback to other services, with the preset script • SHOW_LAYER: display of only overlaid layers, which does not affect the script • INTELLIGENT_REPLY: use the configured large model to generate reply scripts Default value: N/A
layer_config	No	SmartLayerConfig object	Intelligent layer configuration.
extra_layer_config	No	SmartLayerConfig object	Additional layer, which is used together with the second layer when dynamic text needs to be displayed for products.

Parameter	Mandatory	Type	Description
reply_texts	No	Array of strings	Details: Reply scripts. Constraints: N/A Options: A maximum of five preset scripts are allowed. A single script contains 0 to 1,024 characters. Default value: N/A
reply_audios	No	Array of ReplyAudioInfo objects	Details: Reply audio set. Set audio_url . Constraints: N/A Options: A maximum of five preset audio files are allowed. Default value: N/A
reply_order	No	String	Details: Sequence of reading reply scripts. Constraints: N/A Options: • RANDOM: randomly • ORDER: sequential loop Default value: N/A

Parameter	Mandatory	Type	Description
reply_role	No	String	Details: Reply role. Constraints: N/A Options: • STREAMER: streamer • CO_STREAMER: co-streamer, audio-only Default value: STREAMER
robot_id	No	String	Details: Bot ID. Constraints: ID of the large model robot configured for intelligent interaction. This parameter is mandatory when reply_mode is set to INTELLIGENT_REPLY . For details about how to obtain the ID. Options: The value contains 0 to 64 characters. Default value: N/A
play_type	No	String	Reply playback type. • APPEND: added to the end of the playback queue in the scene • INSERT: inserted to the end of two audio files or a text sentence • PLAY_NOW: inserted immediately. After the instruction is received, the media file is played immediately without waiting till the end of the sentence. Default value: PLAY_NOW

Table 6-229 SmartLayerConfig

Parameter	Mandatory	Type	Description
layer_type	Yes	String	Layer type. • IMAGE: image layer • VIDEO: video layer • TEXT: text layer
asset_id	No	String	ID of the asset overlaid on a video. You do not need to set this parameter for external assets.
position	No	LayerPositionConfig object	Layer position configuration.
size	No	LayerSizeConfig object	Layer size configuration.
image_config	No	SmartImageLayerConfig object	Image layer configuration.
video_config	No	SmartVideoLayerConfig object	Video layer configuration.
text_config	No	SmartTextLayerConfig object	Video layer configuration.

Table 6-230 LayerPositionConfig

Parameter	Mandatory	Type	Description
dx	Yes	Integer	Details: X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0
dy	Yes	Integer	Details: Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0

Parameter	Mandatory	Type	Description
layer_index	Yes	Integer	Details: Layer sequence of an image, video, or person image. NOTE The layer sequence is an integer starting from 1 and incremented by 1. Constraints: If duplicate layers exist, the overlay relationship between the duplicate layers is random. Value range: 1-100 Default value: 100

Table 6-231 LayerSizeConfig

Parameter	Mandatory	Type	Description
width	No	Integer	Details: Y axis position of the pixel in the upper left corner of the image. Width (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Parameter	Mandatory	Type	Description
height	No	Integer	Details: Height (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Table 6-232 SmartImageLayerConfig

Parameter	Mandatory	Type	Description
image_url	Yes	String	Image file URL.
display_duration	No	Integer	Details: Image display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-233 SmartVideoLayerConfig

Parameter	Mandatory	Type	Description
video_url	Yes	String	Video file URL.
video_cover_url	No	String	Video thumbnail file URL.
display_duration	No	Integer	Details: Image display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-234 SmartTextLayerConfig

Parameter	Mandatory	Type	Description
text_type	No	String	Details: Text type. • DYNAMIC: dynamic text, which requires keyword replacement • STATIC: static text Default value: DYNAMIC
text_context	No	String	Text.

Parameter	Mandatory	Type	Description
font_name	No	String	Details: Font. The following fonts are supported: • HarmonyOS_Sans_SC_Black: HarmonyOS bold • HarmonyOS_Sans_SC_Regular: HarmonyOS normal • HarmonyOS_Sans_SC_Thin: HarmonyOS light • fzyouh: Square & lean Default value: HarmonyOS_Sans_SC_Black
font_size	No	Integer	Details: Font size (in pixel). Value range: [4, 120]. The value range is subject to the actual service. Value range: 0-120 Default value: 16
font_color	No	String	Details: Font color. RGB color value. Default value: #FFFFFF
display_duration	No	Integer	Details: Text display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-235 ReplyAudioInfo

Parameter	Mandatory	Type	Description
audio_url	No	String	Audio URL.
audio_name	No	String	Audio name.

Table 6-236 ReviewConfig

Parameter	Mandatory	Type	Description
no_need_review	No	Boolean	Content review whitelist. This feature is available only for users in the whitelist. The auto review policies apply to other users.

Response Parameters

Status code: 200

Table 6-237 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 6-238 Response body parameters

Parameter	Type	Description
group_id	String	Interaction rule library ID.
group_name	String	Interaction rule library name.
interaction_rules	Array of InteractionRuleDetailInfo objects	Interaction rules.
create_time	String	Creation time. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
update_time	String	Update time. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.

Table 6-239 InteractionRuleDetailInfo

Parameter	Type	Description
rule_index	String	Details: Rule index. It is used to index a specific rule when the rule is triggered. Constraints: You do not need to specify it. Options: 0 to 64 characters Default value: N/A
rule_name	String	Details: Rule name. Constraints: N/A Options: 0 to 256 characters Default value: N/A
enabled	Boolean	Details: Whether to enable. Constraints: N/A Options: • true: enabled • false: disabled Default value: true

Parameter	Type	Description
event_type	Integer	Details: Livestreaming event type matched by the rule. The value range is 0 to 100. Options: 1: On-screen comments 2: User joining a room 3: Giving likes 4: Sending gifts 10: Preset script events Use the actual value. NOTE 1, 2, 3, 4: corresponds to event.type in LiveEventReport 10: matches the preset script Constraints: N/A Default value: N/A Value range: 0-100
hit_condition	HitCondition object	Rule matching condition
trigger	TriggerProcesses object	Processing after rule matching
review_config	ReviewConfig object	Content review configuration.
rule_id	String	Interaction rule ID.
create_time	String	Creation time. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
update_time	String	Update time. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.

Table 6-240 HitCondition

Parameter	Type	Description
relation	String	Details: Condition relationship, specifically, the logical operation relationship between multiple conditions. Constraints: N/A Options: • AND: Multiple conditions are met. • OR: One of the conditions is met. • RESERVED: The general reply does not check other matching conditions. Default value: N/A
priority	Integer	Details: Priority. A smaller value indicates a higher priority. The value ranges from 0 to 999. The default value is 500 . This parameter is optional. Constraints: N/A Value range: 0-999 Default value: 500
tags	Array of HitCondition Tag objects	Matching relationship configuration

Table 6-241 HitConditionTag

Parameter	Type	Description
tag	String	Details: Key fields in the event content. NOTE - When event_type is set to 1, 2, 3, or 4, the value corresponds to the JSON field deserialized from event.content in LiveEventReport. The following is an on-screen comment event report. <pre>{ "timestamp": 1694481224245, "type": 1, "content": "{ \"user\": {\"userId\":\"2027271526\",\"name\":\"\",\"level\":\"17\",\"ba dge\":\"\",\"badgeLevel\":\"0\"}, \"content\":\"\" } }</pre> To match the on-screen comment content, enter content. To match the user platform level, enter level. 10: Set this field to content. Constraints: N/A Options: The value contains 0 to 256 characters. Default value: N/A
operation	String	Details: Field value processing Constraints: N/A Options: SUM: accumulation AVG: average COUNT: count NONE: no processing Default value: NONE

Parameter	Type	Description
match	String	Details: Match type. You are advised to use REGEX for keyword matching. Constraints: N/A Options: • EQUAL: completely equal • REGEX: regular expression match • MATH_GT: greater than • MATH_GE: greater than or equal to • MATH_LT: less than • MATH_LE: less than or equal to • MATH_EQ: numerically equal Default value: N/A
value	String	Details: Matched value. Constraints: N/A Options: The value contains 0 to 1,024 characters. Default value: N/A

Table 6-242 TriggerProcess

Parameter	Type	Description
time_window	Integer	Details: Processing suppression duration, in second. • -1: triggered only once throughout the livestream • 0: no suppression. It is triggered each time. • <i>n</i>: triggered only once within <i>n</i> seconds Constraints: N/A Default value: N/A Value range: -1-7200
reply_mode	String	Details: Reply type. Constraints: N/A Options: • SYSTEM_REPLY: automatic reply based on the preset script • CALLBACK: callback to other services, with the preset script • SHOW_LAYER: display of only overlaid layers, which does not affect the script • INTELLIGENT_REPLY: use the configured large model to generate reply scripts Default value: N/A
layer_config	SmartLayerConfig object	Intelligent layer configuration.
extra_layer_config	SmartLayerConfig object	Additional layer, which is used together with the second layer when dynamic text needs to be displayed for products.

Parameter	Type	Description
reply_texts	Array of strings	Details: Reply scripts. Constraints: N/A Options: A maximum of five preset scripts are allowed. A single script contains 0 to 1,024 characters. Default value: N/A
reply_audios	Array of ReplyAudioInfo objects	Details: Reply audio set. Set audio_url . Constraints: N/A Options: A maximum of five preset audio files are allowed. Default value: N/A
reply_order	String	Details: Sequence of reading reply scripts. Constraints: N/A Options: • RANDOM: randomly • ORDER: sequential loop Default value: N/A
reply_role	String	Details: Reply role. Constraints: N/A Options: • STREAMER: streamer • CO_STREAMER: co-streamer, audio-only Default value: STREAMER

Parameter	Type	Description
robot_id	String	Details: Bot ID. Constraints: ID of the large model robot configured for intelligent interaction. This parameter is mandatory when reply_mode is set to INTELLIGENT_REPLY . For details about how to obtain the ID. Options: The value contains 0 to 64 characters. Default value: N/A
play_type	String	Reply playback type. • APPEND: added to the end of the playback queue in the scene • INSERT: inserted to the end of two audio files or a text sentence • PLAY_NOW: inserted immediately. After the instruction is received, the media file is played immediately without waiting till the end of the sentence. Default value: PLAY_NOW

Table 6-243 SmartLayerConfig

Parameter	Type	Description
layer_type	String	Layer type. • IMAGE: image layer • VIDEO: video layer • TEXT: text layer
asset_id	String	ID of the asset overlaid on a video. You do not need to set this parameter for external assets.
position	LayerPositionConfig object	Layer position configuration.
size	LayerSizeConfig object	Layer size configuration.

Parameter	Type	Description
image_config	SmartImageLayerConfig object	Image layer configuration.
video_config	SmartVideoLayerConfig object	Video layer configuration.
text_config	SmartTextLayerConfig object	Video layer configuration.

Table 6-244 LayerPositionConfig

Parameter	Type	Description
dx	Integer	Details: X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0

Parameter	Type	Description
dy	Integer	Details: Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the image layout is 0x0. The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: -1920-3840 Default value: 0
layer_index	Integer	Details: Layer sequence of an image, video, or person image. NOTE The layer sequence is an integer starting from 1 and incremented by 1. Constraints: If duplicate layers exist, the overlay relationship between the duplicate layers is random. Value range: 1-100 Default value: 100

Table 6-245 LayerSizeConfig

Parameter	Type	Description
width	Integer	Details: Y axis position of the pixel in the upper left corner of the image. Width (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680
height	Integer	Details: Height (in pixel) of the layer image (relative to the image layout size). The image layout resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16). Constraints: The value is the pixel value relative to the image layout. It indicates only the layout position relationship and is irrelevant to the resolution of the output image. Value range: 1-7680

Table 6-246 SmartImageLayerConfig

Parameter	Type	Description
image_url	String	Image file URL.

Parameter	Type	Description
display_duration	Integer	Details: Image display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-247 SmartVideoLayerConfig

Parameter	Type	Description
video_url	String	Video file URL.
video_cover_url	String	Video thumbnail file URL.
display_duration	Integer	Details: Image display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-248 SmartTextLayerConfig

Parameter	Type	Description
text_type	String	Details: Text type. • DYNAMIC: dynamic text, which requires keyword replacement • STATIC: static text Default value: DYNAMIC
text_context	String	Text.
font_name	String	Details: Font. The following fonts are supported: • HarmonyOS_Sans_SC_Black: HarmonyOS bold • HarmonyOS_Sans_SC_Regular: HarmonyOS normal • HarmonyOS_Sans_SC_Thin: HarmonyOS light • fzyouh: Square & lean Default value: HarmonyOS_Sans_SC_Black
font_size	Integer	Details: Font size (in pixel). Value range: [4, 120]. The value range is subject to the actual service. Value range: 0-120 Default value: 16
font_color	String	Details: Font color. RGB color value. Default value: #FFFFFF

Parameter	Type	Description
display_duration	Integer	Details: Text display duration, in second. If reply_texts and reply_audios are carried, the duration is the same as the audio playback duration. If reply_texts and reply_audios are not carried, the duration is the same as the audio playback duration of the matched keyword. Value range: 0-3600 Default value: 0

Table 6-249 ReplyAudioInfo

Parameter	Type	Description
audio_url	String	Audio URL.
audio_name	String	Audio name.

Table 6-250 ReviewConfig

Parameter	Type	Description
no_need_review	Boolean	Content review whitelist. This feature is available only for users in the whitelist. The auto review policies apply to other users.

Status code: 400**Table 6-251** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401

Table 6-252 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-253** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
PUT https://{endpoint}/v1/70b76xxxxx34253880af501cdxxxxx/smart-live-interaction-rule-groups/26f06524-4f75-4b3a-a853-b649a21aaf66
{
  "group_name" : "Welcome Message"
}
```

Example Responses

Status code: 200

Succeeded.

```
{
  "group_id" : "26f06524-4f75-4b3a-a853-b649a21aaf66"
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.1.9 Deleting an Interaction Rule Library for Live Rooms

Function

Deletes an interaction rule library for live rooms.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v1/{project_id}/smart-live-interaction-rule-groups/{group_id}

Table 6-254 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
group_id	Yes	String	Interaction policy library ID.

Request Parameters

Table 6-255 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200**Table 6-256** Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Status code: 400

Table 6-257 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 6-258** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-259** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
DELETE https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/smart-live-interaction-rule-groups/26f06524-4f75-4b3a-a853-b649a21aaf66
```

Example Responses

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.2 Livestreaming Task Management

6.2.1 Starting a Virtual Human Intelligent Livestreaming Task

Function

Starts a virtual human intelligent livestreaming task.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/smart-live-rooms/{room_id}/smart-live-jobs

Table 6-260 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
room_id	Yes	String	Script ID.

Request Parameters

Table 6-261 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 6-262 Request body parameters

Parameter	Mandatory	Type	Description
video_config	No	VideoConfig object	Video output configuration.
play_policy	No	PlayPolicy object	Script playback policy.

Parameter	Mandatory	Type	Description
output_urls	No	Array of strings	Details: Address of the third-party livestreaming platform for RTMP video stream push. NOTE The command REFRESH_OUTPUT_URL needs to be executed to refresh the URL during the livestream. Constraints: N/A Options: Currently, only one RTMP stream output address is supported. Default value: N/A
stream_keys	No	Array of strings	Details: Stream key of the third-party livestreaming platform for RTMP video stream push, which corresponds to the ingest URL. NOTE The command REFRESH_OUTPUT_URL needs to be executed to refresh the URL during the livestream. Constraints: N/A Options: Currently, only one RTMP stream output address is supported. Default value: N/A

Parameter	Mandatory	Type	Description
interaction_callback_url	No	String	Details: Interactive callback URL, including authentication information. This parameter is mandatory when trigger.reply_mode is set to CALLBACK . Constraints: N/A Options: The value contains 0 to 2,048 characters. Default value: N/A
live_event_callback_config	No	LiveEventCallbackConfig object	Live event HTTPS callback notification configuration
rtc_callback_config	No	RTCLiveEventCallbackConfig object	RTC callback event configuration. Compatible processing. If the configuration is not carried, LIVE_PROGRESS is subscribed by default.
view_mode	No	String	Details: Landscape or portrait mode. Constraints: You do not need to set this parameter. The value is determined by the resolution in video_config . Options: • LANDSCAPE: landscape • VERTICAL: portrait Default value: VERTICAL
co_streamer_config	No	CoStreamerConfig object	Co-streamer configuration

Table 6-263 VideoConfig

Parameter	Mandatory	Type	Description
clip_mode	No	String	Details: Clipping mode of the output video. Constraints: N/A Options: • RESIZE: video scaling • CROP: video cropping Default value: RESIZE
codec	Yes	String	Details: Video encoding format and video file format. Constraints: Only virtual avatar video production supports VP8 encoding. Options: • H264: H.264 encoding, MP4 file output • VP8: VP8 encoding, WebM file output Default value: N/A
bitrate	Yes	Integer	Details: Average output bitrate. Unit: kbit/s Constraints: • Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. • Bitrate range for virtual avatar video production: [1000, 8000]. Default value: N/A Value range: 40-30000

Parameter	Mandatory	Type	Description
width	Yes	Integer	Details: Video width. Unit: pixel. Constraints: • When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. 4K is available only when the virtual avatar model supports 4K. • When clip_mode is set to CROP, (dx, dy) is the origin, and the width is the actual width of the reserved video. • Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840

Parameter	Mandatory	Type	Description
height	Yes	Integer	Details: Video height. Unit: pixel. Constraints: - When clip_mode is set to RESIZE, the following resolutions are supported: 1920 x 1080, 1080 x 1920, 1280 x 720, 720 x 1280, 3840 x 2160, and 2160 x 3840. - When clip_mode is set to CROP, (dx, dy) is the origin, and the height is the actual height of the reserved video. - Currently, only 1080 x 1920 and 1920 x 1080 are supported for virtual avatar livestreaming. Default value: N/A Value range: 0-3840
frame_rate	No	String	Details: Frame rate. Unit: FPS Constraints: The virtual avatar video frame rate is fixed at 25 FPS. Default value: 25
is_subtitle_enabled	No	Boolean	Details: Whether the output video is subtitled. Constraints: Subtitles are not supported for virtual avatar livestreaming. Options: true: enable subtitling false: disable subtitling Default value: false

Parameter	Mandatory	Type	Description
subtitle_config	No	SubtitleConfig object	Subtitle configuration.
disable_system_watermark	No	Boolean	Details: Indicates whether the system watermark is disabled for the output video. Constraints: Currently, this parameter takes effect only for trustlisted tenants. Value range: • true • false Default value: false
dx	No	Integer	Details: Horizontal coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dx ranges from 0 to 1920. Constraints: This parameter takes effect when clip_mode is set to CROP . Default value: N/A Value range: -1920-3840

Parameter	Mandatory	Type	Description
dy	No	Integer	Details: Vertical coordinate of the pixel in the upper left corner of the cropped video. NOTE The image layout size is based on the model resolution. For example, for a model with the resolution of 1920 x 1080, the value of dy ranges from 0 to 1080. Constraints: This parameter takes effect when clip_mode is set to CROP . Default value: N/A Value range: -1920-3840
is_enable_super_resolution	No	Boolean	Details: Whether super resolution is enabled for a video. Constraints: This parameter is available only for virtual avatar video production. Options: • true: enable • false: do not enable Default value: false

Table 6-264 SubtitleConfig

Parameter	Mandatory	Type	Description
dx	No	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920
dy	No	Integer	Details: Coordinates of the pixel in the lower left corner of the subtitle box. Constraints: N/A Default value: N/A Value range: 0-1920
font_name	No	String	Details: Font. The following fonts are supported: • HarmonyOS_Sans_SC_Black: HarmonyOS bold • HarmonyOS_Sans_SC_Regular: HarmonyOS normal • HarmonyOS_Sans_SC_Thin: HarmonyOS light Constraints: N/A Options: The value contains 0 to 64 characters. Default value: HarmonyOS_Sans_SC_Black

Parameter	Mandatory	Type	Description
font_size	No	Integer	Details: Font size. The interface value ranges from 0 to 120. The actual value range is 4 to 120. Use the actual value range. Constraints: N/A Value range: 0-120 Default value: 54
h	No	Integer	Details: Subtitle box height. Constraints: The parameter h is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920
w	No	Integer	Details: Subtitle box width. Constraints: • The subtitle box width is fixed at 80/ %of the screen width. • The parameter w is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box. This parameter is not used in the background. Value range: 0-1920

Table 6-265 PlayPolicy

Parameter	Mandatory	Type	Description
repeat_count	No	Integer	Details: Number of times that a script is played repeatedly. • -1: The playback is repeated until it is stopped manually. • 0: It is played only once. • n: It is played $n + 1$ times. Constraints: N/A Value range: -1-100 Default value: 0
auto_play_script	No	Boolean	Details: Indicates whether to automatically play a script. Constraints: N/A Options: • true: The script is automatically played after the task is initialized. • false: After the task is initialized, the script is not played until signal appears. Default value: true

Parameter	Mandatory	Type	Description
play_mode	No	String	Details: Virtual avatar control method. Constraints: N/A Options: TEXT: text control, that is, using TTS AUDIO: speech control NO_PRESET: no preset script, manual control Default value: TEXT
random_play_mode	No	String	Details: Method of random script reading. Constraints: Random script reading starts from the second round of reading. Options: • NONE: Random script reading is disabled. • SCENE: Random script reading based on scenes is enabled. Paragraphs in a scene are read in sequence. • SCRIPT_ITEM: Random script reading based on paragraphs is enabled. Script of each scene is read in sequence. • SCENE_AND_SCRIPT_ITEM: Script of both scenes and paragraphs is read randomly. Default value: SCRIPT_ITEM

Parameter	Mandatory	Type	Description
need_independent_capture_client	No	Boolean	Details: Whether an independent data collection device is required. This parameter is used when the client playback is separated from the command. Constraints: N/A Options: • true: Devices are allocated to RTC users CAPTURE and PLAYER. • false: Devices are allocated only to the RTC user PLAYER. Default value: false

Table 6-266 LiveEventCallBackConfig

Parameter	Mandatory	Type	Description
live_event_type_callback_url	No	String	Details: Live event callback address, which is an HTTPS address. Constraints: N/A Options: The value contains 0 to 2,048 characters. Default value: N/A

Parameter	Mandatory	Type	Description
auth_type	No	String	Details: Authentication type. Constraints: N/A Options: • NONE: The URL contains authentication. • MSS_A: In HMACSHA256 signature mode, the hwSecret and hwTime parameters are added to the URL. Value format: hwSecret=hmac_sha256(K ey, URI (live_event_callback_url) + hwTime)&hwTime=hex(ti mestamp) • MSS_A_HEAD: In HMACSHA256 signature mode, the hwSecret and hwTime parameters are placed in Head. Value format: x-hw-mss-secret=hmac_sha256(Key, URI (live_event_callback_url) + hwTime) x-hw-mss-time=hex(timestamp) • MEITUAN_DEFAULT: This parameter is used only for Meituan's API callback. Default value: NONE
key	No	String	Details: Key. Constraints: N/A Options: The value contains 0 to 32 characters. Default value: N/A

Parameter	Mandatory	Type	Description
callback_event_type	No	Array of strings	Details: Live event types in callbacks. Constraints: N/A Options: Currently, only the following options are supported: • SHOOT_SCRIPT_SWITCH: script paragraph switching event • RTMP_STREAM_STATE_CHANGE: RTMP link change callback event • REPLY_COMMAND_FINISH: Playback is complete. The callback event structure is defined as follows: • event_type: event type • message: event description – The SHOOT_SCRIPT_SWITCH event callback is defined as follows:<pre>{ "event_type": "SHOOT_SCRIPT_SWITCH", "message":{"room_id \":"26f065244f754b3aa853b649 a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b 04c49c3c\","scene_script_name \":"Product 1\","shoot_script_sequence_no \":"2\","shoot_script_title \":"Paragraph 2\"} }</pre> – The RTMP_STREAM_STATE_CHANGE callback is defined as follows:<pre>{ "event_type": "RTMP_STREAM_STATE_CHANGE", "message":{"room_id \":"26f065244f754b3aa853b649 a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b 04c49c3c\","output_url \":"rtmp://xxx/xx/xx \","stream_key\":"xxxxx }</pre>

Parameter	Mandatory	Type	Description
			<pre>\",\"state\": \"CONNECTED\"}]\"}</pre> The value of state can be CONNECTING, CONNECTED, DISCONNECTED, RECONNECTING, or END. - The REPLY_COMMAND_FINISH callback is defined as follows:<pre>{ \"event_type\": \"REPLY_COMMAND_FINISH\", \"message\": \"{\\\"room_id\\\": \\\"26f065244f754b3aa853b649a21aaf66\\\",\\\"job_id\\\": \\\"e87104f76d7546ce8a46ac6b04c49c3c\\\",\\\"reply_id\\\": \\\"e87104f76d7546ce8a46ac6b04c49c3c\\\"}\"}</pre>

Table 6-267 RTCLiveEventCallBackConfig

Parameter	Mandatory	Type	Description
rtc_callback_event_type	No	Array of strings	Live event types in RTC callbacks. Currently, only the following options are supported: • LIVE_PROGRESS: live script progress notification • REPLY_COMMAND_FINISH: Playback is complete. The callback event structure is defined as follows: • message_type: message type • data: message description – The LIVE_PROGRESS event callback is defined as follows:<pre>{ "message_type": "live_progress_notify", "data": { "script_name": "Scene 1", "shoot_script_sequence_no": 2, "shoot_script_title": "Greeting", "offset": "247", "reply_id": "e87104f76d7546ce8a46ac6b04c49c3c" } }</pre> – The REPLY_COMMAND_FINISH callback is defined as follows:<pre>{ "message_type": "reply_command_finish_notify", "data": "{ "reply_id": "e87104f76d7546ce8a46ac6b04c49c3c" }" }</pre>

Table 6-268 CoStreamerConfig

Parameter	Mandatory	Type	Description
voice_config	No	VoiceConfig object	Voice configuration parameter.

Parameter	Mandatory	Type	Description
streamer_action	No	String	Details: Behavior of the streamer when the co-streamer speaks. Constraints: N/A Options: • SILENCE: silent • VOLUME_DOWN: decreased volume Default value: N/A

Table 6-269 VoiceConfig

Parameter	Mandatory	Type	Description
voice_asset_id	Yes	String	Details: Timbre asset ID, which can be queried from the asset library. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A

Parameter	Mandatory	Type	Description
speed	No	Integer	Details: Speaking speed. 50 indicates 0.5x speaking speed, 100 indicates normal speaking speed, and 200 indicates 2x speaking speed. The value 100 indicates the normal speaking speed of an adult, which is about 150 words per minute. Constraints: N/A Value range: 50-200 Default value: 100
pitch	No	Integer	Details: Pitch. Constraints: N/A Value range: 50-200 Default value: 100
volume	No	Integer	Details: Volume. Constraints: N/A Value range: 90-240 Default value: 140

Response Parameters

Status code: 202

Table 6-270 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 6-271 Response body parameters

Parameter	Type	Description
job_id	String	Livestreaming task ID.
rtc_room_info	RTCRoomInfoList object	RTC room information.
live_event_report_url	String	URL for reporting livestreaming events. Users report their own livestreaming events to this URL to trigger intelligent interaction and automatic reply.
live_event_callback_config	LiveEventCallbackConfig object	Live event HTTPS callback notification configuration
live_warning_info	Array of LiveWarningItem objects	List of livestreaming risk alarms.

Table 6-272 RTCRoomInfoList

Parameter	Type	Description
app_id	String	RTC application ID.
room_id	String	RTC room ID.
users	Array of RTCUserInfo objects	Information about users joining an RTC room.

Table 6-273 RTCUserInfo

Parameter	Type	Description
user_type	String	User type. • CAPTURE: Live assistant, which pushes video streams captured by cameras to RTC rooms. • ANIMATION: Visual control service, which pulls video streams from RTC rooms to generate motion data. • RENDER: Rendering service, which renders motion data into virtual human animations. • PLAYER: Common viewer, who can watch the original video stream or virtual human animation video stream. • INFERENCE_USER: Virtual human inference user, who receives audio streams from and pushes video streams to an RTC room. • END_USER: Device user, who receives video streams from and pushes audio streams to an RTC room.
user_id	String	RTC user ID.
signature	String	RTC authentication token.
ctime	Long	Validity period. Timestamp, in seconds. Value range: 0-4294967295

Table 6-274 LiveEventCallBackConfig

Parameter	Type	Description
live_event_type_callback_url	String	Details: Live event callback address, which is an HTTPS address. Constraints: N/A Options: The value contains 0 to 2,048 characters. Default value: N/A

Parameter	Type	Description
auth_type	String	Details: Authentication type. Constraints: N/A Options: • NONE: The URL contains authentication. • MSS_A: In HMACSHA256 signature mode, the hwSecret and hwTime parameters are added to the URL. Value format: hwSecret=hmac_sha256(Key, URI (live_event_callback_url) + hwTime)&hwTime=hex(timestamp) • MSS_A_HEAD: In HMACSHA256 signature mode, the hwSecret and hwTime parameters are placed in Head. Value format: x-hw-mss-secret=hmac_sha256(Key, URI (live_event_callback_url) + hwTime) x-hw-mss-time=hex(timestamp) • MEITUAN_DEFAULT: This parameter is used only for Meituan's API callback. Default value: NONE
key	String	Details: Key. Constraints: N/A Options: The value contains 0 to 32 characters. Default value: N/A

Parameter	Type	Description
callback_event_type	Array of strings	Details: Live event types in callbacks. Constraints: N/A Options: Currently, only the following options are supported: • SHOOT_SCRIPT_SWITCH: script paragraph switching event • RTMP_STREAM_STATE_CHANGE: RTMP link change callback event • REPLY_COMMAND_FINISH: Playback is complete. The callback event structure is defined as follows: • event_type: event type • message: event description – The SHOOT_SCRIPT_SWITCH event callback is defined as follows:<pre>{ "event_type": "SHOOT_SCRIPT_SWITCH", "message": {"room_id \":"26f065244f754b3aa853b649a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b04c49c3c \","scene_script_name\":"Product 1\","shoot_script_sequence_no \":"2\","shoot_script_title\":"Paragraph 2\"}"</pre> – The RTMP_STREAM_STATE_CHANGE callback is defined as follows:<pre>{ "event_type": "RTMP_STREAM_STATE_CHANGE", "message": {"room_id \":"26f065244f754b3aa853b649a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b04c49c3c \","output_url\":"rtmp://xx/xx/xx\","stream_key \":"xxxx\","state\":"CONNECTED\"}"</pre>The value of state can be CONNECTING, CONNECTED, DISCONNECTED, RECONNECTING, or END. – The REPLY_COMMAND_FINISH callback is defined as follows:<pre>{ "event_type": "REPLY_COMMAND_FINISH", "message": {"room_id \":"26f065244f754b3aa853b649a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b04c49c3c\","reply_id \":"e87104f76d7546ce8a46ac6b04c49c3c\"}"</pre>

Table 6-275 LiveWarningItem

Parameter	Type	Description
warning_type	String	Alarm type. • TOO_LESS_SCRIPT_ITEMS: There are too few paragraphs (scripts). • TOO_SHORT_SCRIPT_TIME: The total duration of paragraphs (scripts) is too short. • TOO_LESS_DANMAKU_RULES: There are too few on-screen comment interaction rules. • RANDOM_PLAY_CLOSED: The random playback function is disabled. • ROTATION_MODEL_CLOSED: Streamer rotation is not configured.

Status code: 400**Table 6-276** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 6-277** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-278** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/smart-live-rooms/  
24bad716-87b1-45e5-8912-6102f7693265/smart-live-jobs  
  
{  
  "output_urls": [ "rtmp://vfxpush.hwcloudvr.cn/live/lysa" ]  
}
```

Example Responses

Status code: 202

Succeeded.

```
{  
  "job_id": "26f06524-4f75-4b3a-a853-b649a21aaf66"  
}
```

Status code: 400

```
{  
  "error_code": "MSS.00000003",  
  "error_msg": "Invalid parameter"  
}
```

Status code: 401

```
{  
  "error_code": "MSS.00000001",  
  "error_msg": "Unauthorized"  
}
```

Status code: 500

```
{  
  "error_code": "MSS.00000004",  
  "error_msg": "Internal Error"  
}
```

Status Codes

Status Code	Description
202	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.2.2 Querying Livestreaming Tasks of a Live Room

Function

Queries livestreaming tasks of a live room.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/smart-live-rooms/{room_id}/smart-live-jobs

Table 6-279 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
room_id	Yes	String	Script ID.

Table 6-280 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts. Value range: 0-2147483647 Default value: 0
limit	No	Integer	Number of items displayed on each page. Value range: 1-100 Default value: 10
state	No	String	Task status. By default, all statuses are selected. Multiple statuses can be queried. Use commas (,) to separate them, for example, state=CREATING,PUBLISHED .

Parameter	Mandatory	Type	Description
sort_key	No	String	Sorting field. Options: • create_time: sorting by creation time • update_time: sorting by update time • asset_order: sorting by asset
sort_dir	No	String	Sorting mode. • asc: ascending order • desc: descending order asc is used by default.
create_since	No	String	Filter the records whose creation time is not earlier than the entered time.
create_until	No	String	Filter the records whose creation time is not later than the entered time.

Request Parameters

Table 6-281 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.

Parameter	Mandatory	Type	Description
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 6-282 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 6-283 Response body parameters

Parameter	Type	Description
count	Integer	Details: Total number of virtual avatar livestreaming tasks. Value range: 0-2147483647
smart_live_jobs	Array of SmartLiveJob objects	Virtual human livestreaming task list.

Table 6-284 SmartLiveJob

Parameter	Type	Description
job_id	String	Virtual human livestreaming task ID.
room_id	String	Live room ID.
room_name	String	Live room name.

Parameter	Type	Description
state	String	Virtual human livestreaming task status. ● WAITING: The task is waiting for execution. ● PROCESSING: The task is being processed. ● SUCCEED: The task has been completed. ● FAILED: The task failed. ● BLOCKED: The live room was blocked.
duration	Float	Details: Virtual avatar livestreaming duration, in second. Value range: 0-2147483647
start_time	String	Start time of a virtual avatar livestreaming task. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
end_time	String	End time of a virtual avatar livestreaming task. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
error_info	ErrorResponse object	Virtual human livestreaming task error information.
create_time	String	Time when a virtual avatar livestreaming task is created. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
lastupdate_time	String	Last update time of a virtual avatar livestreaming task. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
rtc_room_info	RTCRoomInfoList object	RTC room information.
live_event_report_url	String	URL for reporting livestreaming events. Users report their own livestreaming events to this URL to trigger intelligent interaction and automatic reply.
live_event_callback_config	LiveEventCallbackConfig object	Live event HTTPS callback notification configuration
rtc_callback_config	RTCLiveEventCallbackConfig object	RTC callback event configuration. Compatible processing. If the configuration is not carried, LIVE_PROGRESS is subscribed by default.

Parameter	Type	Description
stream_duration	Float	Details: Virtual avatar livestream push duration, in second. Value range: 0-2147483647
block_reason	String	Information about live room blocking.
cover_url	String	Live room thumbnail URL
co_streamer_config	CoStreamerConfig object	Co-streamer configuration
live_job_log	LiveJobLog object	Livestreaming task records
relation_live_platform_info	PlatformLiveDetailInfo object	Platform live broadcast information.

Table 6-285 ErrorResponse

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Table 6-286 RTCRoomInfoList

Parameter	Type	Description
app_id	String	RTC application ID.
room_id	String	RTC room ID.
users	Array of RTCUserInfo objects	Information about users joining an RTC room.

Table 6-287 RTCUserInfo

Parameter	Type	Description
user_type	String	User type. • CAPTURE: Live assistant, which pushes video streams captured by cameras to RTC rooms. • ANIMATION: Visual control service, which pulls video streams from RTC rooms to generate motion data. • RENDER: Rendering service, which renders motion data into virtual human animations. • PLAYER: Common viewer, who can watch the original video stream or virtual human animation video stream. • INFERENCE_USER: Virtual human inference user, who receives audio streams from and pushes video streams to an RTC room. • END_USER: Device user, who receives video streams from and pushes audio streams to an RTC room.
user_id	String	RTC user ID.
signature	String	RTC authentication token.
ctime	Long	Validity period. Timestamp, in seconds. Value range: 0-4294967295

Table 6-288 LiveEventCallBackConfig

Parameter	Type	Description
live_event_type_callback_url	String	Details: Live event callback address, which is an HTTPS address. Constraints: N/A Options: The value contains 0 to 2,048 characters. Default value: N/A

Parameter	Type	Description
auth_type	String	Details: Authentication type. Constraints: N/A Options: • NONE: The URL contains authentication. • MSS_A: In HMACSHA256 signature mode, the hwSecret and hwTime parameters are added to the URL. Value format: hwSecret=hmac_sha256(Key, URI (live_event_callback_url) + hwTime)&hwTime=hex(timestamp) • MSS_A_HEAD: In HMACSHA256 signature mode, the hwSecret and hwTime parameters are placed in Head. Value format: x-hw-mss-secret=hmac_sha256(Key, URI (live_event_callback_url) + hwTime) x-hw-mss-time=hex(timestamp) • MEITUAN_DEFAULT: This parameter is used only for Meituan's API callback. Default value: NONE
key	String	Details: Key. Constraints: N/A Options: The value contains 0 to 32 characters. Default value: N/A

Parameter	Type	Description
callback_event_type	Array of strings	Details: Live event types in callbacks. Constraints: N/A Options: Currently, only the following options are supported: • SHOOT_SCRIPT_SWITCH: script paragraph switching event • RTMP_STREAM_STATE_CHANGE: RTMP link change callback event • REPLY_COMMAND_FINISH: Playback is complete. The callback event structure is defined as follows: • event_type: event type • message: event description – The SHOOT_SCRIPT_SWITCH event callback is defined as follows:<pre>{ "event_type": "SHOOT_SCRIPT_SWITCH", "message": {"room_id \":"26f065244f754b3aa853b649a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b04c49c3c \","scene_script_name\":"Product 1\","shoot_script_sequence_no \":"2\","shoot_script_title\":"Paragraph 2\"}" }</pre> – The RTMP_STREAM_STATE_CHANGE callback is defined as follows:<pre>{ "event_type": "RTMP_STREAM_STATE_CHANGE", "message": {"room_id \":"26f065244f754b3aa853b649a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b04c49c3c \","output_url\":"rtmp://xx/xx/xx\","stream_key \":"xxxx\","state\":"CONNECTED\"}" }</pre>The value of state can be CONNECTING, CONNECTED, DISCONNECTED, RECONNECTING, or END. – The REPLY_COMMAND_FINISH callback is defined as follows:<pre>{ "event_type": "REPLY_COMMAND_FINISH", "message": {"room_id \":"26f065244f754b3aa853b649a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b04c49c3c\","reply_id \":"e87104f76d7546ce8a46ac6b04c49c3c\"}" }</pre>

Table 6-289 RTCLiveEventCallBackConfig

Parameter	Type	Description
rtc_callback_event_type	Array of strings	Live event types in RTC callbacks. Currently, only the following options are supported: • LIVE_PROGRESS: live script progress notification • REPLY_COMMAND_FINISH: Playback is complete. The callback event structure is defined as follows: • message_type: message type • data: message description – The LIVE_PROGRESS event callback is defined as follows:<pre>{ "message_type": "live_progress_notify", "data": { "script_name": "Scene 1", "shoot_script_sequence_no": 2, "shoot_script_title": "Greeting", "offset": "247", "reply_id": "e87104f76d7546ce8a46ac6b04c49c3c" } }</pre> – The REPLY_COMMAND_FINISH callback is defined as follows:<pre>{ "message_type": "reply_command_finish_notify", "data": { "reply_id": "e87104f76d7546ce8a46ac6b04c49c3c" } }</pre>

Table 6-290 CoStreamerConfig

Parameter	Type	Description
voice_config	VoiceConfig object	Voice configuration parameter.

Parameter	Type	Description
streamer_action	String	Details: Behavior of the streamer when the co-streamer speaks. Constraints: N/A Options: • SILENCE: silent • VOLUME_DOWN: decreased volume Default value: N/A

Table 6-291 VoiceConfig

Parameter	Type	Description
voice_asset_id	String	Details: Timbre asset ID, which can be queried from the asset library. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
speed	Integer	Details: Speaking speed. 50 indicates 0.5x speaking speed, 100 indicates normal speaking speed, and 200 indicates 2x speaking speed. The value 100 indicates the normal speaking speed of an adult, which is about 150 words per minute. Constraints: N/A Value range: 50-200 Default value: 100

Parameter	Type	Description
pitch	Integer	Details: Pitch. Constraints: N/A Value range: 50-200 Default value: 100
volume	Integer	Details: Volume. Constraints: N/A Value range: 90-240 Default value: 140

Table 6-292 LiveJobLog

Parameter	Type	Description
interaction_records_url	String	Live interaction record file address

Table 6-293 PlatformLiveDetailInfo

Parameter	Type	Description
platform_id	String	Live TV platform ID.
platform	String	Live broadcast platform. Meituan fills in meituan
account	String	Authorization account information. Meituan platform: opBizCode
live_id	String	Live TV channel ID. If this parameter is set, the live TV channel ID is carried in the segment switchback callback. LiveId corresponding to the Meituan.

Status code: 400**Table 6-294** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 6-295** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-296** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
GET https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/smart-live-rooms/  
24bad716-87b1-45e5-8912-6102f7693265/smart-live-jobs
```

Example Responses

Status code: 200

Succeeded.

```
{  
  "count" : 1,  
  "smart_live_jobs" : [ {  
    "job_id" : "26f06524-4f75-4b3a-a853-b649a21aaf66",  
    "state" : "WAITING",  
    "start_time" : "2022-01-18T16:29:36Z",  
    "end_time" : "2022-01-18T16:30:36Z",  
    "duration" : 60  
  } ]  
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.2.3 Querying Virtual Human Intelligent Livestreaming Task Details

Function

Queries virtual human intelligent livestreaming task details.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/smart-live-rooms/{room_id}/smart-live-jobs/{job_id}

Table 6-297 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
room_id	Yes	String	Script ID.
job_id	Yes	String	Task ID.

Request Parameters

Table 6-298 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 6-299 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 6-300 Response body parameters

Parameter	Type	Description
job_id	String	Virtual human livestreaming task ID.
room_id	String	Live room ID.
room_name	String	Live room name.
state	String	Virtual human livestreaming task status. ● WAITING: The task is waiting for execution. ● PROCESSING: The task is being processed. ● SUCCEED: The task has been completed. ● FAILED: The task failed. ● BLOCKED: The live room was blocked.
duration	Float	Details: Virtual avatar livestreaming duration, in second. Value range: 0-2147483647
start_time	String	Start time of a virtual avatar livestreaming task. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
end_time	String	End time of a virtual avatar livestreaming task. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
error_info	ErrorResponse object	Virtual human livestreaming task error information.
create_time	String	Time when a virtual avatar livestreaming task is created. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
lastupdate_time	String	Last update time of a virtual avatar livestreaming task. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
rtc_room_info	RTCRoomInfoList object	RTC room information.

Parameter	Type	Description
live_event_report_url	String	URL for reporting livestreaming events. Users report their own livestreaming events to this URL to trigger intelligent interaction and automatic reply.
live_event_callback_config	LiveEventCallbackConfig object	Live event HTTPS callback notification configuration
rtc_callback_config	RTCLiveEventCallbackConfig object	RTC callback event configuration. Compatible processing. If the configuration is not carried, LIVE_PROGRESS is subscribed by default.
stream_duration	Float	Details: Virtual avatar livestream push duration, in second. Value range: 0-2147483647
block_reason	String	Information about live room blocking.
cover_url	String	Live room thumbnail URL
co_streamer_config	CoStreamerConfig object	Co-streamer configuration
live_job_log	LiveJobLog object	Livestreaming task records
relation_live_platform_info	PlatformLiveDetailInfo object	Platform live broadcast information.

Table 6-301 ErrorResponse

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Table 6-302 RTCRoomInfoList

Parameter	Type	Description
app_id	String	RTC application ID.
room_id	String	RTC room ID.

Parameter	Type	Description
users	Array of RTCUserInfo objects	Information about users joining an RTC room.

Table 6-303 RTCUserInfo

Parameter	Type	Description
user_type	String	User type. • CAPTURE: Live assistant, which pushes video streams captured by cameras to RTC rooms. • ANIMATION: Visual control service, which pulls video streams from RTC rooms to generate motion data. • RENDER: Rendering service, which renders motion data into virtual human animations. • PLAYER: Common viewer, who can watch the original video stream or virtual human animation video stream. • INFERENCE_USER: Virtual human inference user, who receives audio streams from and pushes video streams to an RTC room. • END_USER: Device user, who receives video streams from and pushes audio streams to an RTC room.
user_id	String	RTC user ID.
signature	String	RTC authentication token.
ctime	Long	Validity period. Timestamp, in seconds. Value range: 0-4294967295

Table 6-304 LiveEventCallBackConfig

Parameter	Type	Description
live_event_type_callback_url	String	Details: Live event callback address, which is an HTTPS address. Constraints: N/A Options: The value contains 0 to 2,048 characters. Default value: N/A
auth_type	String	Details: Authentication type. Constraints: N/A Options: • NONE: The URL contains authentication. • MSS_A: In HMACSHA256 signature mode, the hwSecret and hwTime parameters are added to the URL. Value format: hwSecret=hmac_sha256(Key, URI (live_event_callback_url) + hwTime)&hwTime=hex(timestamp) • MSS_A_HEAD: In HMACSHA256 signature mode, the hwSecret and hwTime parameters are placed in Head. Value format: x-hw-mss-secret=hmac_sha256(Key, URI (live_event_callback_url) + hwTime) x-hw-mss-time=hex(timestamp) • MEITUAN_DEFAULT: This parameter is used only for Meituan's API callback. Default value: NONE
key	String	Details: Key. Constraints: N/A Options: The value contains 0 to 32 characters. Default value: N/A

Parameter	Type	Description
callback_event_type	Array of strings	Details: Live event types in callbacks. Constraints: N/A Options: Currently, only the following options are supported: • SHOOT_SCRIPT_SWITCH: script paragraph switching event • RTMP_STREAM_STATE_CHANGE: RTMP link change callback event • REPLY_COMMAND_FINISH: Playback is complete. The callback event structure is defined as follows: • event_type: event type • message: event description – The SHOOT_SCRIPT_SWITCH event callback is defined as follows:<pre>{ "event_type": "SHOOT_SCRIPT_SWITCH", "message": {"room_id \":"26f065244f754b3aa853b649a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b04c49c3c \","scene_script_name\":"Product 1\","shoot_script_sequence_no \":"2\","shoot_script_title\":"Paragraph 2\"}"</pre> – The RTMP_STREAM_STATE_CHANGE callback is defined as follows:<pre>{ "event_type": "RTMP_STREAM_STATE_CHANGE", "message": {"room_id \":"26f065244f754b3aa853b649a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b04c49c3c \","output_url\":"rtmp://xx/xx/xx\","stream_key \":"xxxx\","state\":"CONNECTED\}"</pre>The value of state can be CONNECTING, CONNECTED, DISCONNECTED, RECONNECTING, or END. – The REPLY_COMMAND_FINISH callback is defined as follows:<pre>{ "event_type": "REPLY_COMMAND_FINISH", "message": {"room_id \":"26f065244f754b3aa853b649a21aaf66\","job_id \":"e87104f76d7546ce8a46ac6b04c49c3c\","reply_id \":"e87104f76d7546ce8a46ac6b04c49c3c\}"</pre>

Table 6-305 RTCLiveEventCallBackConfig

Parameter	Type	Description
rtc_callback_event_type	Array of strings	Live event types in RTC callbacks. Currently, only the following options are supported: • LIVE_PROGRESS: live script progress notification • REPLY_COMMAND_FINISH: Playback is complete. The callback event structure is defined as follows: • message_type: message type • data: message description – The LIVE_PROGRESS event callback is defined as follows:<pre>{ "message_type": "live_progress_notify", "data": { "script_name": "Scene 1", "shoot_script_sequence_no": 2, "shoot_script_title": "Greeting", "offset": "247", "reply_id": "e87104f76d7546ce8a46ac6b04c49c3c" } }</pre> – The REPLY_COMMAND_FINISH callback is defined as follows:<pre>{ "message_type": "reply_command_finish_notify", "data": { "reply_id": "e87104f76d7546ce8a46ac6b04c49c3c" } }</pre>

Table 6-306 CoStreamerConfig

Parameter	Type	Description
voice_config	VoiceConfig object	Voice configuration parameter.

Parameter	Type	Description
streamer_action	String	Details: Behavior of the streamer when the co-streamer speaks. Constraints: N/A Options: • SILENCE: silent • VOLUME_DOWN: decreased volume Default value: N/A

Table 6-307 VoiceConfig

Parameter	Type	Description
voice_asset_id	String	Details: Timbre asset ID, which can be queried from the asset library. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
speed	Integer	Details: Speaking speed. 50 indicates 0.5x speaking speed, 100 indicates normal speaking speed, and 200 indicates 2x speaking speed. The value 100 indicates the normal speaking speed of an adult, which is about 150 words per minute. Constraints: N/A Value range: 50-200 Default value: 100

Parameter	Type	Description
pitch	Integer	Details: Pitch. Constraints: N/A Value range: 50-200 Default value: 100
volume	Integer	Details: Volume. Constraints: N/A Value range: 90-240 Default value: 140

Table 6-308 LiveJobLog

Parameter	Type	Description
interaction_records_url	String	Live interaction record file address

Table 6-309 PlatformLiveDetailInfo

Parameter	Type	Description
platform_id	String	Live TV platform ID.
platform	String	Live broadcast platform. Meituan fills in meituan
account	String	Authorization account information. Meituan platform: opBizCode
live_id	String	Live TV channel ID. If this parameter is set, the live TV channel ID is carried in the segment switchback callback. Liveld corresponding to the Meituan.

Status code: 400**Table 6-310** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 6-311** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-312** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
GET https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/smart-live-rooms/  
24bad716-87b1-45e5-8912-6102f7693265/smart-live-jobs/26f06524-4f75-4b3a-a853-b649a21aaf66
```

Example Responses**Status code: 200**

Succeeded.

```
{  
  "job_id" : "26f06524-4f75-4b3a-a853-b649a21aaf66",  
  "state" : "WAITING",  
  "start_time" : "2022-01-18T16:29:36Z",  
  "end_time" : "2022-01-18T16:30:36Z",  
  "duration" : 60  
}
```

Status code: 400

```
{  
  "error_code" : "MSS.00000003",  
}
```

```
"error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.2.4 Ending a Virtual Human Intelligent Livestreaming Task

Function

Ends a virtual human intelligent livestreaming task.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/smart-live-rooms/{room_id}/smart-live-jobs/{job_id}/stop

Table 6-313 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Parameter	Mandatory	Type	Description
room_id	Yes	String	Script ID.
job_id	Yes	String	Task ID.

Request Parameters

Table 6-314 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 6-315 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Status code: 400**Table 6-316** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 6-317** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-318** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/smart-live-rooms/24bad716-87b1-45e5-8912-6102f7693265/smart-live-jobs/26f06524-4f75-4b3a-a853-b649a21aaf66/stop
```

Example Responses

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
}
```

```
"error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.2.5 Controlling Virtual Human Intelligent Livestreaming

Function

Controls virtual human intelligent livestreaming.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/smart-live-rooms/{room_id}/smart-live-jobs/{job_id}/
command

Table 6-319 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
room_id	Yes	String	Script ID.
job_id	Yes	String	Task ID.

Request Parameters

Table 6-320 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 6-321 Request body parameters

Parameter	Mandatory	Type	Description
command	Yes	String	Details: Command name. Constraints: None Options: • INSERT_PLAY_SCRIPT: inserts a performance script that is used for interactive reply. The virtual avatar and background remain unchanged. params structure definition: PlayTextInfo • INSERT_PLAY_AUDIO: inserts an audio that is used to control a virtual avatar. The virtual avatar and background remain unchanged. params structure definition: PlayAudioInfo • REWRITE_PLAY_SCRIPT: dynamically edits a script that has not been played. params structure definition: scene_scripts • REWRITE_INTERACTION_RULES: dynamically modifies an interaction rule. params structure definition: interaction_rules • GET_CURRENT_PLAYING_SCRIPTS: queries the script list of the current round. The response structure is LivePlayingScriptList. • SHOW_LAYER: displays materials used for livestreaming. params structure definition: LiveGuideRuleInfo • REFRESH_OUTPUT_URL: updates the RTMP stream push information of the current task. params

Parameter	Mandatory	Type	Description
			structure definition: RefreshOutputUrlConfig • GET_LIVE_JOB_CONFIG_IN FO: obtains room information in a task. The params structure definition is the same as that in the response body of live room details. • CLEAN_UP_INSERT_COMMAND: clears the insertion commands that are not played. params structure definition: CleanUpInsertCommand Default value: N/A
params	No	Object	Details: Command parameter. Constraints: None Options: For details, see the COMMAND description. Default value: N/A
review_config	No	ReviewConfig object	Content review configuration.

Table 6-322 ReviewConfig

Parameter	Mandatory	Type	Description
no_need_review	No	Boolean	Content review whitelist. This feature is available only for users in the whitelist. The auto review policies apply to other users.

Response Parameters

Status code: 200

Table 6-323 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 6-324 Response body parameters

Parameter	Type	Description
command_id	String	Control command ID
command	String	Command name. • INSERT_PLAY_SCRIPT: inserts a performance script that is used for interactive reply. The virtual avatar and background remain unchanged. params structure definition: ShootScript • REWRITE_PLAY_SCRIPT: dynamically edits a script that has not been played. params structure definition: scene_scripts • INSERT_PLAY_AUDIO: inserts an audio that is used to control a virtual avatar. The virtual avatar and background remain unchanged. params structure definition: PlayAudioInfo • GET_CURRENT_PLAYING_SCRIPTS: queries the script list of the current round. The response is in the LivePlayingScriptList structure. • REFRESH_OUTPUT_URL: updates the RTMP stream push information of the current task. params structure definition: RefreshOutputUrlConfig • REWRITE_INTERACTION_RULES: dynamically modifies an interaction rule. params structure definition: interaction_rules • GET_LIVE_JOB_CONFIG_INFO: obtains room information in a task. params structure definition: SmartLiveRoomInfo • CLEAN_UP_INSERT_COMMAND: clears the insertion commands that are not played. params structure definition: CleanUpInsertCommand
result	String	Command execution result.

Status code: 400

Table 6-325 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 6-326** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-327** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/smart-live-rooms/  
24bad716-87b1-45e5-8912-6102f7693265/smart-live-jobs/26f06524-4f75-4b3a-a853-b649a21aaf66/  
command
```

```
{  
  "command": "INSERT_PLAY_SCRIPT",  
  "params": {  
    "text_config": {  
      "text": "I'll answer the questions raised by the audience in the comment area."  
    },  
    "play_type": "APPEND",  
    "rule_index": "test-rule-index"  
  }  
}
```

Example Responses

Status code: 200

Succeeded.

```
{  
  "command": "GET_CURRENT_PLAYING_SCRIPTS",  
  "result": ""  
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.2.6 Querying All Virtual Human Livestreaming Tasks of a Tenant

Function

Queries all virtual human livestreaming tasks of a tenant.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/smart-live-jobs

Table 6-328 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Table 6-329 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts. Value range: 0-2147483647 Default value: 0
limit	No	Integer	Number of items displayed on each page. Value range: 1-100 Default value: 10
state	No	String	Task status. By default, all statuses are selected. Multiple statuses can be queried. Use commas (,) to separate them, for example, state=CREATING,PUBLISHED .
sort_key	No	String	Sorting field. Options: • create_time: sorting by creation time • update_time: sorting by update time • asset_order: sorting by asset
sort_dir	No	String	Sorting mode. • asc: ascending order • desc: descending order asc is used by default.

Parameter	Mandatory	Type	Description
create_since	No	String	Filter the records whose creation time is not earlier than the entered time.
create_until	No	String	Filter the records whose creation time is not later than the entered time.
room_name	No	String	Fuzzy search by livestreaming room name.

Request Parameters

Table 6-330 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 6-331 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 6-332 Response body parameters

Parameter	Type	Description
count	Integer	Details: Total number of virtual avatar livestreaming tasks. Value range: 0-2147483647
smart_live_jobs	Array of SmartLiveJob objects	Virtual human livestreaming task list.

Table 6-333 SmartLiveJob

Parameter	Type	Description
job_id	String	Virtual human livestreaming task ID.
room_id	String	Live room ID.
room_name	String	Live room name.
state	String	Virtual human livestreaming task status. • WAITING: The task is waiting for execution. • PROCESSING: The task is being processed. • SUCCEED: The task has been completed. • FAILED: The task failed. • BLOCKED: The live room was blocked.
duration	Float	Details: Virtual avatar livestreaming duration, in second. Value range: 0-2147483647
start_time	String	Start time of a virtual avatar livestreaming task. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.

Parameter	Type	Description
end_time	String	End time of a virtual avatar livestreaming task. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
error_info	ErrorResponse object	Virtual human livestreaming task error information.
create_time	String	Time when a virtual avatar livestreaming task is created. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
lastupdate_time	String	Last update time of a virtual avatar livestreaming task. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
rtc_room_info	RTCRoomInfoList object	RTC room information.
live_event_report_url	String	URL for reporting livestreaming events. Users report their own livestreaming events to this URL to trigger intelligent interaction and automatic reply.
live_event_callback_config	LiveEventCallbackConfig object	Live event HTTPS callback notification configuration
rtc_callback_config	RTCLiveEventCallbackConfig object	RTC callback event configuration. Compatible processing. If the configuration is not carried, LIVE_PROGRESS is subscribed by default.
stream_duration	Float	Details: Virtual avatar livestream push duration, in second. Value range: 0-2147483647
block_reason	String	Information about live room blocking.
cover_url	String	Live room thumbnail URL
co_streamer_config	CoStreamerConfig object	Co-streamer configuration
live_job_log	LiveJobLog object	Livestreaming task records
relation_live_platform_info	PlatformLiveDetailInfo object	Platform live broadcast information.

Table 6-334 ErrorResponse

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Table 6-335 RTCRoomInfoList

Parameter	Type	Description
app_id	String	RTC application ID.
room_id	String	RTC room ID.
users	Array of RTCUserInfo objects	Information about users joining an RTC room.

Table 6-336 RTCUserInfo

Parameter	Type	Description
user_type	String	User type. • CAPTURE: Live assistant, which pushes video streams captured by cameras to RTC rooms. • ANIMATION: Visual control service, which pulls video streams from RTC rooms to generate motion data. • RENDER: Rendering service, which renders motion data into virtual human animations. • PLAYER: Common viewer, who can watch the original video stream or virtual human animation video stream. • INFERENCE_USER: Virtual human inference user, who receives audio streams from and pushes video streams to an RTC room. • END_USER: Device user, who receives video streams from and pushes audio streams to an RTC room.
user_id	String	RTC user ID.
signature	String	RTC authentication token.

Parameter	Type	Description
ctime	Long	Validity period. Timestamp, in seconds. Value range: 0-4294967295

Table 6-337 LiveEventCallBackConfig

Parameter	Type	Description
live_event_type_callback_url	String	Details: Live event callback address, which is an HTTPS address. Constraints: N/A Options: The value contains 0 to 2,048 characters. Default value: N/A
auth_type	String	Details: Authentication type. Constraints: N/A Options: • NONE: The URL contains authentication. • MSS_A: In HMACSHA256 signature mode, the hwSecret and hwTime parameters are added to the URL. Value format: hwSecret=hmac_sha256(Key, URI (live_event_callback_url) + hwTime)&hwTime=hex(timestamp) • MSS_A_HEAD: In HMACSHA256 signature mode, the hwSecret and hwTime parameters are placed in Head. Value format: x-hw-mss-secret=hmac_sha256(Key, URI (live_event_callback_url) + hwTime) x-hw-mss-time=hex(timestamp) • MEITUAN_DEFAULT: This parameter is used only for Meituan's API callback. Default value: NONE

Parameter	Type	Description
key	String	Details: Key. Constraints: N/A Options: The value contains 0 to 32 characters. Default value: N/A

Parameter	Type	Description
callback_event_type	Array of strings	Details: Live event types in callbacks. Constraints: N/A Options: Currently, only the following options are supported: • SHOOT_SCRIPT_SWITCH: script paragraph switching event • RTMP_STREAM_STATE_CHANGE: RTMP link change callback event • REPLY_COMMAND_FINISH: Playback is complete. The callback event structure is defined as follows: • event_type: event type • message: event description – The SHOOT_SCRIPT_SWITCH event callback is defined as follows:<pre>{ "event_type": "SHOOT_SCRIPT_SWITCH", "message": {"room_id \":"26f065244f754b3aa853b649a21aaf66"\,"job_id \":"e87104f76d7546ce8a46ac6b04c49c3c \","scene_script_name\":"Product 1\","shoot_script_sequence_no \":"2\","shoot_script_title\":"Paragraph 2\"}" }</pre> – The RTMP_STREAM_STATE_CHANGE callback is defined as follows:<pre>{ "event_type": "RTMP_STREAM_STATE_CHANGE", "message": {"room_id \":"26f065244f754b3aa853b649a21aaf66"\,"job_id \":"e87104f76d7546ce8a46ac6b04c49c3c \","output_url\":"rtmp://xx/xx/xx\","stream_key \":"xxxx\","state\":"CONNECTED\"}" }</pre>The value of state can be CONNECTING, CONNECTED, DISCONNECTED, RECONNECTING, or END. – The REPLY_COMMAND_FINISH callback is defined as follows:<pre>{ "event_type": "REPLY_COMMAND_FINISH", "message": {"room_id \":"26f065244f754b3aa853b649a21aaf66"\,"job_id \":"e87104f76d7546ce8a46ac6b04c49c3c\","reply_id \":"e87104f76d7546ce8a46ac6b04c49c3c\"}" }</pre>

Table 6-338 RTCLiveEventCallBackConfig

Parameter	Type	Description
rtc_callback_event_type	Array of strings	Live event types in RTC callbacks. Currently, only the following options are supported: • LIVE_PROGRESS: live script progress notification • REPLY_COMMAND_FINISH: Playback is complete. The callback event structure is defined as follows: • message_type: message type • data: message description – The LIVE_PROGRESS event callback is defined as follows:<pre>{ "message_type": "live_progress_notify", "data": { "script_name": "Scene 1", "shoot_script_sequence_no": 2, "shoot_script_title": "Greeting", "offset": "247", "reply_id": "e87104f76d7546ce8a46ac6b04c49c3c" } }</pre> – The REPLY_COMMAND_FINISH callback is defined as follows:<pre>{ "message_type": "reply_command_finish_notify", "data": { "reply_id": "e87104f76d7546ce8a46ac6b04c49c3c" } }</pre>

Table 6-339 CoStreamerConfig

Parameter	Type	Description
voice_config	VoiceConfig object	Voice configuration parameter.

Parameter	Type	Description
streamer_action	String	Details: Behavior of the streamer when the co-streamer speaks. Constraints: N/A Options: • SILENCE: silent • VOLUME_DOWN: decreased volume Default value: N/A

Table 6-340 VoiceConfig

Parameter	Type	Description
voice_asset_id	String	Details: Timbre asset ID, which can be queried from the asset library. Constraints: N/A Options: The value contains 1 to 256 characters. Default value: N/A
speed	Integer	Details: Speaking speed. 50 indicates 0.5x speaking speed, 100 indicates normal speaking speed, and 200 indicates 2x speaking speed. The value 100 indicates the normal speaking speed of an adult, which is about 150 words per minute. Constraints: N/A Value range: 50-200 Default value: 100

Parameter	Type	Description
pitch	Integer	Details: Pitch. Constraints: N/A Value range: 50-200 Default value: 100
volume	Integer	Details: Volume. Constraints: N/A Value range: 90-240 Default value: 140

Table 6-341 LiveJobLog

Parameter	Type	Description
interaction_records_url	String	Live interaction record file address

Table 6-342 PlatformLiveDetailInfo

Parameter	Type	Description
platform_id	String	Live TV platform ID.
platform	String	Live broadcast platform. Meituan fills in meituan
account	String	Authorization account information. Meituan platform: opBizCode
live_id	String	Live TV channel ID. If this parameter is set, the live TV channel ID is carried in the segment switchback callback. Liveld corresponding to the Meituan.

Status code: 400**Table 6-343** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 6-344** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-345** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

GET https://metastudio.cn-north-4.myhuaweicloud.com/v1/70b76xxxxxx34253880af501cdxxxxxx/smart-live-rooms/24bad716-87b1-45e5-8912-6102f7693265/smart-live-jobs

Example Responses

Status code: 200

Succeeded.

```
{
  "count" : 1,
  "smart_live_jobs" : [ {
    "job_id" : "26f06524-4f75-4b3a-a853-b649a21aaf66",
    "state" : "WAITING",
    "start_time" : "2022-01-18T16:29:36Z",
    "end_time" : "2022-01-18T16:30:36Z",
    "duration" : 60
  } ]
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
  "error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.2.7 Reporting Livestreaming Events

Function

Reports livestreaming events.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/smart-live-rooms/{room_id}/smart-live-jobs/{job_id}/live-event-report

Table 6-346 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
room_id	Yes	String	Script ID.
job_id	Yes	String	Task ID.

Table 6-347 Query Parameters

Parameter	Mandatory	Type	Description
auth_key	No	String	Authentication key. Authentication key generated using HMACSHA256.
expires_time	No	Long	Details: Expiration time of the authentication key. Number of milliseconds that have elapsed since January 1, 1970 (midnight in UTC/GMT). Value range: 0-4102415999000
refresh_url	No	Boolean	Whether to refresh the URL.

Request Parameters

Table 6-348 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.

Parameter	Mandatory	Type	Description
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 6-349 Request body parameters

Parameter	Mandatory	Type	Description
total	Yes	Integer	Details: Number of events. Value range: 1-1000
events	No	Array of LiveEvent objects	Event content.
review_config	No	ReviewConfig object	Content review configuration.

Table 6-350 LiveEvent

Parameter	Mandatory	Type	Description
timestamp	Yes	Long	Details: Event timestamp. Number of milliseconds since 1970-01-01 00:00:00. Value range: 0-4102415999000

Parameter	Mandatory	Type	Description
type	No	Integer	Details: Event type. 1: On-screen comment information 2: User joining a room 3: Liking 4: Sending gifts 5: Subscription/Following 6: Number of viewers in a room Value range: 0-100

Parameter	Mandatory	Type	Description
content	No	String	Event content. The content varies according to the event type. The definition is as follows: • type=1 on-screen comment information Definition of content: – user: user, JSON – content: on-screen comment. The value is a string. Definition of user: – userId: user ID. The value is a string. – name: username. The value is a string. – level: user platform level. The value is an integer. – badge: user brand name. The value is a string. – badgeLevel: brand level. The value is an integer. For example: <pre>{ "timestamp": 1694481224245, "type": 1, "content": "{\\\"user\\\":{\\\"userId\\\":\\\"2027271526\\\",\\\"name\\\":\\\"***\\\",\\\"level\\\":17,\\\"badge\\\":\\\"\\\",\\\"badgeLevel\\\":0},\\\"content\\\":\\\"***\\\"}" }</pre> • type=2 user joining a room Definition of content: – user: user, JSON For example: <pre>{ "timestamp": 1694481227655, "type": 2, "content": "{\\\"user\\\":{\\\"userId\\\":\\\"2978899271\\\",\\\"name\\\":\\\"***\\\",\\\"level\\\":1,\\\"badge\\\":\\\"\\\",\\\"badgeLevel\\\":0}}}" }</pre> • type=3 Liking Definition of content: – user: user, JSON

Parameter	Mandatory	Type	Description
			For example: <pre>{ "timestamp": 1694481227655, "type": 2, "content": "{ \"user\": { \"userId \\\": \"2978899271\", \"name\": \"*** \\\", \"level\": 1, \"badge \\\": \"\", \"badgeLevel\": 0 } }"</pre> • type=4 sending gifts Definition of content: – user: user, JSON – gift: gift information, JSON Definition of gift: – giftName: gift name. The value is a string. – giftNum: number of gifts. The value is an integer. – totalValue: total value of gifts. The value is an integer. – giftValue: value of one gift. The value is an integer. For example: <pre>{ "timestamp": 1690531652862, "type": 4, "content": "{ \"gift\": { \"giftName \\\": \"Star\", \"giftNum \\\": 10, \"totalValue\": 10, \"giftValue \\\": 3 }, \"user\": { \"userId \\\": \"douyin_95882940927\", \"name \\\": \"Romantic lover\", \"level \\\": 2, \"badge\": \"\", \"badgeLevel \\\": 0 } }"</pre> • type=5 subscription Not used currently • type=6 number of viewers in a room Definition of content: – numberOfViewers: number of viewers in a room. The value is an integer. For example:

Parameter	Mandatory	Type	Description
			<pre>{ "timestamp": 1694481236886, "type": 6, "content": "{ \"numberOfViewers \":5466}" }</pre>

Table 6-351 ReviewConfig

Parameter	Mandatory	Type	Description
no_need_review	No	Boolean	Content review whitelist. This feature is available only for users in the whitelist. The auto review policies apply to other users.

Response Parameters

Status code: 200

Table 6-352 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 6-353 Response body parameters

Parameter	Type	Description
live_event_report_url	String	URL for uploading the updated livestreaming event.

Status code: 400

Table 6-354 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 401**Table 6-355** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-356** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/smart-live-rooms/
24bad716-87b1-45e5-8912-6102f7693265/smart-live-jobs/26f06524-4f75-4b3a-a853-b649a21aaf66/live-
event-report

{
  "total" : 1,
  "events" : [ {
    "timestamp" : 1690819199000,
    "type" : 1,
    "content" : "xxxxx"
  } ]
}
```

Example Responses**Status code: 200**

Succeeded.

```
{
  "live_event_report_url" : "https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/smart-live-rooms/
24bad716-87b1-45e5-8912-6102f7693265/smart-live-jobs/26f06524-4f75-4b3a-a853-b649a21aaf66/live-
event-report"
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 401

```
{
  "error_code" : "MSS.00000001",
}
```

```
"error_msg" : "Unauthorized"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Parameters error, including the error code and its description.
401	Authentication is not performed or fails.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.3 Live Product Management

6.3.1 Creating a Product

Function

Create product

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/products

Table 6-357 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Request Parameters

Table 6-358 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-User-Privilege	No	String	Indicates the access whitelist of users.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 6-359 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Product name
description	No	String	Product description
tags	No	Array of strings	Tag. A single tag contains 16 bytes. Multiple tags are separated by commas (,). A maximum of 50 tags are allowed.
cover	No	ProductCover Info object	Product thumbnail information

Parameter	Mandatory	Type	Description
text_list	No	Array of ProductTextInfo objects	Text list
asset_list	No	Array of ProductMediaInfo objects	Material asset list
auto_active	No	Boolean	Details: Automatically activates a product. Default value: true

Table 6-360 ProductCoverInfo

Parameter	Mandatory	Type	Description
asset_id	No	String	Asset ID

Table 6-361 ProductTextInfo

Parameter	Mandatory	Type	Description
title	No	String	Text title
text	No	String	Text

Table 6-362 ProductMediaInfo

Parameter	Mandatory	Type	Description
asset_id	No	String	Asset ID
asset_type	No	String	Asset type. Options: • IMAGE: image • VIDEO: video • AUDIO: audio

Parameter	Mandatory	Type	Description
order	No	Integer	Details: Asset sequence. If this parameter is not specified or is set to 0 , assets are sorted by creation time. The image on top of the list is set as the product thumbnail. Value range: 0-300 Default value: 0

Response Parameters

Status code: 200

Table 6-363 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID

Table 6-364 Response body parameters

Parameter	Type	Description
product_id	String	Product ID

Status code: 400

Table 6-365 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500

Table 6-366 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/6a6a1f8354f64dd9b9a614def7b59d83/products
{
  "name" : "Animated realistic",
  "description" : "Animated realistic product",
  "tags" : [ "Huawei" ]
}
```

Example Responses

Status code: 200

Service enabled.

```
{
  "product_id" : "24bad716-87b1-45e5-8912-6102f7693265"
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Service enabled.
400	Parameters error, including the error code and its description.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.3.2 Querying Products

Function

Queries products.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/products

Table 6-367 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Table 6-368 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts. Value range: 0-2147483647 Default value: 0
limit	No	Integer	Number of items displayed on each page. Value range: 1-100 Default value: 10
sort_key	No	String	Sorting field. Options: • create_time: sorting by creation time • update_time: sorting by update time • asset_order: sorting by asset

Parameter	Mandatory	Type	Description
sort_dir	No	String	Sorting mode. • asc: ascending order • desc: descending order asc is used by default.
create_until	No	String	Filter the records whose creation time is not later than the entered time.
create_since	No	String	Filter the records whose creation time is not earlier than the entered time.
name	No	String	Fuzzy search by name.
tag	No	String	Fuzzy search by tag.
state	No	String	Search by status. Use commas (,) to separate multiple statuses.

Request Parameters

Table 6-369 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Parameter	Mandatory	Type	Description
X-User-Privilege	No	String	Indicates the access whitelist of users.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 6-370 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID

Table 6-371 Response body parameters

Parameter	Type	Description
count	Integer	Details: Total number of product information records Value range: 0-2147483647
products	Array of ProductDetailInfo objects	Product information list

Table 6-372 ProductDetailInfo

Parameter	Type	Description
product_id	String	Product ID
name	String	Product name
description	String	Product description
tags	Array of strings	Tag. A single tag contains 16 bytes. Multiple tags are separated by commas (,). A maximum of 50 tags are allowed.

Parameter	Type	Description
cover	ProductCoverDetailInfo object	Product thumbnail information
text_list	Array of ProductTextInfo objects	Text list
asset_list	Array of ProductMediaDetailInfo objects	Material asset list
create_time	String	Time when a product is created. The format complies with RFC 3339, for example, 2020-07-30T10:43:17Z.
update_time	String	Time when a product is updated. The format complies with RFC 3339, for example, 2020-07-30T10:43:17Z.
state	String	Product status. Options: ● ACTIVED: activated ● UNACTIVED: unactivated ● BLOCK: frozen and unavailable ● DELETED: deleted

Table 6-373 ProductCoverDetailInfo

Parameter	Type	Description
asset_id	String	Asset ID
cover_url	String	Thumbnail image path.
thumbnail_url	String	Thumbnail path.

Table 6-374 ProductTextInfo

Parameter	Type	Description
title	String	Text title
text	String	Text

Table 6-375 ProductMediaDetailInfo

Parameter	Type	Description
asset_id	String	Asset ID
asset_type	String	Asset type. Options: • IMAGE: image • VIDEO: video • AUDIO: audio
order	Integer	Details: Asset sequence. If this parameter is not specified or is set to 0 , assets are sorted by creation time. The image on top of the list is set as the product thumbnail. Value range: 0-300 Default value: 0
asset_name	String	Asset name.
asset_state	String	Asset status.
cover_url	String	Thumbnail image path.
thumbnail_url	String	Thumbnail path.
main_url	String	Thumbnail path.

Status code: 400**Table 6-376** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-377** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
GET https://{endpoint}/v1/6a6a1f8354f64dd9b9a614def7b59d83/products
```

Example Responses

Status code: 200

Products queried.

```
{
  "count" : 1,
  "products" : [ {
    "product_id" : "24bad716-87b1-45e5-8912-6102f7693265",
    "name" : "Meeting",
    "description" : "Meeting",
    "tags" : [ "Huawei" ],
    "create_time" : "2021-09-30T10:43:17Z",
    "update_time" : "2021-10-30T12:30:35Z",
    "state" : "CREATING"
  } ]
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Products queried.
400	Parameters error, including the error code and its description.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.3.3 Updating a Product

Function

Update product

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v1/{project_id}/products/{product_id}

Table 6-378 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
product_id	Yes	String	Product ID.

Request Parameters

Table 6-379 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-User-Privilege	No	String	Indicates the access whitelist of users.

Parameter	Mandatory	Type	Description
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 6-380 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Product name
description	No	String	Product description
tags	No	Array of strings	Tag. A single tag contains 16 bytes. Multiple tags are separated by commas (,). A maximum of 50 tags are allowed.
cover	No	ProductCoverInfo object	Product thumbnail information
text_list	No	Array of ProductTextInfo objects	Text list
asset_list	No	Array of ProductMediaInfo objects	Material asset list
state	No	String	Product status. Options: ● ACTIVED: activated ● UNACTIVED: unactivated

Table 6-381 ProductCoverInfo

Parameter	Mandatory	Type	Description
asset_id	No	String	Asset ID

Table 6-382 ProductTextInfo

Parameter	Mandatory	Type	Description
title	No	String	Text title
text	No	String	Text

Table 6-383 ProductMediaInfo

Parameter	Mandatory	Type	Description
asset_id	No	String	Asset ID
asset_type	No	String	Asset type. Options: • IMAGE: image • VIDEO: video • AUDIO: audio
order	No	Integer	Details: Asset sequence. If this parameter is not specified or is set to 0 , assets are sorted by creation time. The image on top of the list is set as the product thumbnail. Value range: 0-300 Default value: 0

Response Parameters

Status code: 200

Table 6-384 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID

Status code: 400

Table 6-385 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500

Table 6-386 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
PUT https://{endpoint}/v1/6a6a1f8354f64dd9b9a614def7b59d83/products/24bad716-87b1-45e5-8912-6102f7693265
```

```
{
  "name" : "Meeting",
  "description" : "Meeting product",
  "tags" : [ "Huawei" ]
}
```

Example Responses

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Product updated.
400	Parameters error, including the error code and its description.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.3.4 Querying Product Details

Function

Show product

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/products/{product_id}

Table 6-387 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
product_id	Yes	String	Product ID.

Request Parameters

Table 6-388 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-User-Privilege	No	String	Indicates the access whitelist of users.

Parameter	Mandatory	Type	Description
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 6-389 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID

Table 6-390 Response body parameters

Parameter	Type	Description
product_id	String	Product ID
name	String	Product name
description	String	Product description
tags	Array of strings	Tag. A single tag contains 16 bytes. Multiple tags are separated by commas (,). A maximum of 50 tags are allowed.
cover	ProductCoverDetailInfo object	Product thumbnail information
text_list	Array of ProductTextInfo objects	Text list
asset_list	Array of ProductMediaDetailInfo objects	Material asset list
create_time	String	Time when a product is created. The format complies with RFC 3339, for example, 2020-07-30T10:43:17Z.
update_time	String	Time when a product is updated. The format complies with RFC 3339, for example, 2020-07-30T10:43:17Z.

Parameter	Type	Description
state	String	Product status. Options: • ACTIVED: activated • UNACTIVED: unactivated • BLOCK: frozen and unavailable • DELETED: deleted

Table 6-391 ProductCoverDetailInfo

Parameter	Type	Description
asset_id	String	Asset ID
cover_url	String	Thumbnail image path.
thumbnail_url	String	Thumbnail path.

Table 6-392 ProductTextInfo

Parameter	Type	Description
title	String	Text title
text	String	Text

Table 6-393 ProductMediaDetailInfo

Parameter	Type	Description
asset_id	String	Asset ID
asset_type	String	Asset type. Options: • IMAGE: image • VIDEO: video • AUDIO: audio

Parameter	Type	Description
order	Integer	Details: Asset sequence. If this parameter is not specified or is set to 0 , assets are sorted by creation time. The image on top of the list is set as the product thumbnail. Value range: 0-300 Default value: 0
asset_name	String	Asset name.
asset_state	String	Asset status.
cover_url	String	Thumbnail image path.
thumbnail_url	String	Thumbnail path.
main_url	String	Thumbnail path.

Status code: 400

Table 6-394 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500

Table 6-395 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
GET https://{endpoint}/v1/6a6a1f8354f64dd9b9a614def7b59d83/products/24bad716-87b1-45e5-8912-6102f7693265
```

Example Responses

Status code: 200

Product details queried.

```
{
  "product_id" : "24bad716-87b1-45e5-8912-6102f7693265",
  "name" : "Meeting",
  "description" : "Meeting product",
  "tags" : [ "Huawei" ],
  "create_time" : "2021-09-30T10:43:17Z",
  "update_time" : "2021-10-30T12:30:35Z",
  "state" : "CREATING"
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Product details queried.
400	Parameters error, including the error code and its description.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.3.5 Deleting a Product

Function

Deletes a product.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v1/{project_id}/products/{product_id}

Table 6-396 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
product_id	Yes	String	Product ID.

Request Parameters

Table 6-397 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-User-Privilege	No	String	Indicates the access whitelist of users.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 6-398 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID

Status code: 400**Table 6-399** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-400** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
DELETE https://{endpoint}/v1/6a6a1f8354f64dd9b9a614def7b59d83/products/24bad716-87b1-45e5-8912-6102f7693265
```

Example Responses

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	Product deleted.
400	Parameters error, including the error code and its description.
500	Internal service error.

Error Codes

See [Error Codes](#).

6.3.6 Configuring a Product Asset Portfolio

Function

Configures a product asset portfolio.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/products/{product_id}/assets

Table 6-401 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
product_id	Yes	String	Product ID.

Request Parameters

Table 6-402 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-User-Privilege	No	String	Indicates the access whitelist of users.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 6-403 Request body parameters

Parameter	Mandatory	Type	Description
asset_item	No	ProductMediaInfo object	Product material information
text_item	No	ProductTextInfo object	Product text
action	No	String	Adds or deletes asset associations. - LINK : manages assets - UNLINK : cancels asset management

Table 6-404 ProductMediaInfo

Parameter	Mandatory	Type	Description
asset_id	No	String	Asset ID
asset_type	No	String	Asset type. Options: • IMAGE: image • VIDEO: video • AUDIO: audio
order	No	Integer	Details: Asset sequence. If this parameter is not specified or is set to 0 , assets are sorted by creation time. The image on top of the list is set as the product thumbnail. Value range: 0-300 Default value: 0

Table 6-405 ProductTextInfo

Parameter	Mandatory	Type	Description
title	No	String	Text title
text	No	String	Text

Response Parameters

Status code: 200

Table 6-406 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID

Status code: 400

Table 6-407 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 6-408** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/6a6a1f8354f64dd9b9a614def7b59d83/digitalhumans/24bad716-87b1-45e5-8912-6102f7693265/assets
{
  "action": "LINK",
  "asset_item": {
    "asset_id": "24bad716-87b1-45e5-8912-6102f7693265"
  }
}
```

Example Responses

Status code: 400

```
{
  "error_code": "MSS.00000003",
  "error_msg": "Invalid parameter"
}
```

Status code: 500

```
{
  "error_code": "MSS.00000004",
  "error_msg": "Internal Error"
}
```

Status Codes

Status Code	Description
200	Virtual human asset set.
400	Parameters error, including the error code and its description.
500	Internal service error.

Error Codes

See [Error Codes](#).

7 Intelligent Interaction

7.1 Third-Party LLM Callback for Intelligent Interaction

7.1.1 Third-Party LLM Callback API for Intelligent Interaction

Functions

The MetaStudio intelligent interaction service allows developers to customize the virtual human brain, that is, a third-party large language model (LLM). When a user talks with the virtual avatar, this API is called to return the answer in text.

Signature Calculation Methods

If a third-party LLM API uses the HMAC-SHA256 signature, the parameters **secret** and **time_stamp** need to be added to the URL.

Value format: **secret**=hmac_sha256(URI(llm_url) + timestamp, appKey)&**time_stamp**=hex(timestamp)

Fields:

- **llm_url**: API URL of the third-party LLM called by MetaStudio
- **appKey**: **APPKEY** information provided by the third-party LLM integrated with MetaStudio

Code example:

```
URI uri = URI.create(llm_url);
long currentTimeMillis = System.currentTimeMillis();
String input = uri.toString() + currentTimeMillis;
String secret = Hmacsha256.doFinal(input, appKey);
String timeStamp = Long.toHexString(currentTimeMillis);
```

Specifically:

```
String appKey = "huawei_metaStudio";
URI uri = URI.create("https://metastudio-llm/digital-human/chat");
long currentTimeMillis = 1744612873350L;
String input = uri.toString() + currentTimeMillis; // input = https://metastudio-llm/digital-human/
chat1744612873350
```

```
String secret = Hmacsha256.doFinal(input, appKey); // secret =  
a02fc32111795dc6f760e6bd15bb0cbc9a35921dc5dc86e57eea56ae644d793e  
String timeStamp = Long.toHexString(currentTimeMillis); // timeStamp = 1963307d486  
// The final request is https://metastudio-llm/digital-human/chat?  
secret=a02fc32111795dc6f760e6bd15bb0cbc9a35921dc5dc86e57eea56ae644d793e&time_stamp=1963307d4  
86.
```

URI

POST `llm_url`

Table 7-1 Query parameters

Parameter	Mandatory	Type	Description
secret	Yes	String	Signature information. Value format: secret =hmac_sha256(<code>URI(llm_url)</code> + <code>timestamp, appKey</code>) Fields: • llm_url: API URL of the third-party LLM called by MetaStudio • appKey: APPKEY information provided by the third-party LLM integrated with MetaStudio
time_stamp	Yes	String	Timestamp. The value is in hexadecimal format, in millisecond.

Request Parameters

Table 7-2 Request body parameters

Parameter	Mandatory	Type	Description
messages	Yes	Array of Message objects	Multiple rounds of Q&A.
app_id	Yes	String	Application ID of a third-party LLM.
user	Yes	String	Unique ID of a user.
session_id	Yes	String	Unique ID of the current dialog. The ID is used to make the dialog context coherent.
is_stream	No	Boolean	Whether to use streaming responses for answers. The default value is false .

Table 7-3 Message

Parameter	Mandatory	Type	Description
content	Yes	String	Dialog content. The value contains 1 to 4,096 characters.

Response Parameters

Status code: 200

Table 7-4 Header parameters in a non-streaming response

Parameter	Type	Description
Content-Type	String	Value: application/json; charset=UTF-8

Table 7-5 Header parameters in a streaming response

Parameter	Type	Description
Content-Type	String	Value: text/event-stream; charset=UTF-8

See [Table 7-6](#) when **is_stream** is set to **false**.

Table 7-6 Body parameters in a non-streaming response

Parameter	Type	Description
id	String	Unique ID of each response.
created	Integer	Time when a response is generated.
choices	Array of ChatChoice objects	List of generated text.

Table 7-7 ChatChoice

Parameter	Mandatory	Type	Description
message	Yes	Table 7-8 objects	Generated text content.
index	Yes	Integer	Index value of generated text in the list. The counting starts from 0.

Table 7-8 MessageItem

Parameter	Mandatory	Type	Description
content	Yes	String	Dialog content. The value contains 1 to 4,096 characters.

See [Table 7-6](#) when **is_stream** is set to **true**.

Table 7-9 Body parameters in a streaming response

Parameter	Type	Description
data	String	If the value of is_stream is true , messages generated by a third-party LLM are returned to MetaStudio as Server-Sent Events (SSE) streams. That is, the generated messages are sent incrementally one by one. Each data field contains a part of the generated content. After all data is returned, the response ends. A streaming response must end with data:[DONE] .

Status code: 400

Table 7-10 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Request Examples

A Q&A request can be sent in either of the following ways:

- Single-round non-streaming Q&A request

Code example:

```
POST https://xxx.xxx.xxx/xxx/xxx?secret=xxxxxxxxxxxxxxxx&time_stamp=18d0cf1d921
```

```
{
  "messages": [{
    "content": "Please introduce the Yangtze River."
  }],
  "app_id": "5ca7fxxxxxe40a0a01bcxxxxx88307",
  "user": "f6befxxxxx24a6dbaaxxxxxc576475",
  "session_id": "b1cb4bxxxxx4de793129f76xxxxx68",
  "is_stream": false
}
```

- Multi-round streaming Q&A request

Code example:

```
POST https://xxx.xxx.xxx/xxx/xxx?secret=xxxxxxxxxxxxxxxx&time_stamp=18d0cf1d921
```

```
{
  "messages": [{
    "content": "Please introduce the Yangtze River." //Question of the first round
  }, {
    "content": "The Yangtze River is a major river in China and one of the longest rivers in the world. Originating at the Tanggula Mountains, the Yangtze River runs more than 6,300 km through 11 provinces in China before flowing into the East China Sea." //Answer of the first round
  }, {
    "content": "Please list five provinces along the Yangtze River." //Question of the second round
  }, {
    "content": "The following are the five provinces along the Yangtze River:\n\n1. Qinghai\n2. Sichuan\n3. Yunnan\n4. Hunan\n5. Jiangxi" //Answer of the second round
  }, {
    "content": "What fish are there in the Yangtze River?" //Question of the third round
  }],
  "app_id": "5ca7fxxxxxe40a0a01bcxxxxx88307",
  "user": "f6befxxxxx24a6dbaaxxxxxc576475",
  "session_id": "b1cb4bxxxxx4de793129f76xxxxx68",
  "is_stream": true
}
```

Response Examples

Status code: 200

A Q&A request and its response must be sent in the same way.

- Response to a single-round non-streaming Q&A

Code example:

```
{
  "id": "2f8e891225d486190c8bea91207e9aa1",
  "created": 20230512084843,
  "choices": [{
    "index": 0,
    "message": {
      "content": "The Yangtze River is a major river in China and one of the longest rivers in the world. Originating at the Tanggula Mountains, the Yangtze River runs more than 6,300 km through 11 provinces in China before flowing into the East China Sea."
    }
  }
]
```

- Response to a multi-round streaming Q&A

Code example:

```
data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394646748, "choices": [{"message": {"content": "The Yangtze River"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394646766, "choices": [{"message": {"content": "is"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394646785, "choices": [{"message": {"content": "one of the"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394646822, "choices": [{"message": {"content": "longest"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394646841, "choices": [{"message": {"content": "rivers"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394646878, "choices": [{"message": {"content": "in China,"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394646915, "choices": [{"message": {"content": "running through"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394646952, "choices": [{"message": {"content": "multiple"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394646989, "choices": [{"message": {"content": "provinces."}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647008, "choices": [{"message": {"content": "The river"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647026, "choices": [{"message": {"content": "boasts"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647044, "choices": [{"message": {"content": "a"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647063, "choices": [{"message": {"content": "wide"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647081, "choices": [{"message": {"content": "range of"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647100, "choices": [{"message": {"content": "fish species."}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647118, "choices": [{"message": {"content": "The following"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647136, "choices": [{"message": {"content": "are"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647154, "choices": [{"message": {"content": "some"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647173, "choices": [{"message": {"content": "typical"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647191, "choices": [{"message": {"content": "fish"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647209, "choices": [{"message": {"content": "species"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647246, "choices": [{"message": {"content": "of the Yangtze River:\n"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647265, "choices": [{"message": {"content": "\n"}}]}
```

```
data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647302, "choices": [{"message": {"content": "1."}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647321, "choices": [{"message": {"content": "***"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647357, "choices": [{"message": {"content": "Chinese sturgeon"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647394, "choices": [{"message": {"content": "**: "}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647412, "choices": [{"message": {"content": "This is"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647431, "choices": [{"message": {"content": "an"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647449, "choices": [{"message": {"content": "old"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647468, "choices": [{"message": {"content": "species"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647523, "choices": [{"message": {"content": "of"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647560, "choices": [{"message": {"content": "the family Acipenseridae,"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647579, "choices": [{"message": {"content": "and"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647597, "choices": [{"message": {"content": "is"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647616, "choices": [{"message": {"content": "also"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647635, "choices": [{"message": {"content": "one"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647653, "choices": [{"message": {"content": "of"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647672, "choices": [{"message": {"content": "the"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647690, "choices": [{"message": {"content": "oldest"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647709, "choices": [{"message": {"content": "fish species"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647728, "choices": [{"message": {"content": "in the"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647747, "choices": [{"message": {"content": "world."}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647765, "choices": [{"message": {"content": "\n"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647804, "choices": [{"message": {"content": "2."}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647822, "choices": [{"message": {"content": "***"}}]}
```

```
data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647878, "choices": [{"message": {"content": "Silverfin"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647914, "choices": [{"message": {"content": "***: "}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647932, "choices": [{"message": {"content": "also"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394647951, "choices": [{"message": {"content": "known as"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648005, "choices": [{"message": {"content": "silver carp,"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648024, "choices": [{"message": {"content": "is"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648042, "choices": [{"message": {"content": "a"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648060, "choices": [{"message": {"content": "typical"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648079, "choices": [{"message": {"content": "freshwater"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648115, "choices": [{"message": {"content": "fish"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648133, "choices": [{"message": {"content": "species"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648152, "choices": [{"message": {"content": "."}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648170, "choices": [{"message": {"content": "\n"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648206, "choices": [{"message": {"content": "3."}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648225, "choices": [{"message": {"content": "***"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648316, "choices": [{"message": {"content": "Bighead carp"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648362, "choices": [{"message": {"content": "***: "}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648380, "choices": [{"message": {"content": "featuring"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648398, "choices": [{"message": {"content": "a"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648471, "choices": [{"message": {"content": "big head,"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648489, "choices": [{"message": {"content": "is"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648508, "choices": [{"message": {"content": "an"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648527, "choices": [{"message": {"content": "important"}}]}
```

```
data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648545, "choices": [{"message": {"content": "edible"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648564, "choices": [{"message": {"content": "fish"}}]}

data:{"id": "5b7eb95f59e54981b3aa58998c888c4b", "created": 1705394648582, "choices": [{"message": {"content": "species."}}]}

data:[DONE]
```

Status code: 400

```
{
  "error_code" : "xxxxxxx",
  "error_msg" : "Invalid parameter"
}
```

Status Codes

Status Code	Description
200	The information is returned when the request succeeded.
400	Incorrect input parameters of the request, including the error code and its description.

Error Codes

See [Error Codes](#).

7.2 Intelligent Interaction Client SDK

7.2.1 Prerequisites

Prerequisites

The intelligent interaction SDK can be integrated only after the intelligent interaction permission is granted.

Constraints on the Web SDK

Due to the security policy of the browser, you can use only **https://*domain name*** to load and run the intelligent interaction web SDK.

7.2.2 SDK Overview

The virtual avatar intelligent interaction SDK integrates the capabilities provided by MetaStudio, a digital content production pipeline, to simplify development. You can directly call the APIs provided by the virtual avatar intelligent interaction SDK to use the service capabilities.

The virtual avatar intelligent interaction SDK is compatible with the following programming languages.

Table 7-11 Client SDKs

Platform	Integrated SDK	API Reference
Web	Web SDK	API Reference

7.2.3 SDK Download

7.2.3.1 SDK Installation Package Download

NOTICE

The MetaStudio client SDK is maintained for one year. For any problem that occurs after one year, upgrade the SDK to the latest version.

You can verify the package integrity of the downloaded SDK by referring to [Integrity Check](#).

Table 7-12 SDK download

SDK	SDK Package	Developed By
HwICSUiSDK	See the download link in Table 7-13 .	Huawei Cloud Computing Technologies Co., Ltd.

Table 7-13 Web SDK download

Version	Date	Download URL	Integrity Check	Description
3.2.0	2025-03-12	Web SDK: HwICSUiSDK-3.2.0.zip	HwICSUiSDK-3.2.0.zip.cms	Download the web SDK installation package.
3.1.0	2025-02-18	Web SDK: HwICSUiSDK-3.1.0.zip	HwICSUiSDK-3.1.0.zip.cms	Download the web SDK installation package.
3.0.2	2025-01-14	Web SDK: HwICSUiSDK-3.0.2.zip	HwICSUiSDK-3.0.2.zip.cms	Download the web SDK installation package.

Version	Date	Download URL	Integrity Check	Description
3.0.1	2024-12-30	Web SDK: HwICSUiSDK-3.0.1.zip	HwICSUiSDK-3.0.1.zip.cms	Download the web SDK installation package.
2.2.0	2024-12-10	Web SDK: HwICSUiSDK-2.2.0.zip	HwICSUiSDK-2.2.0.zip.cms	Download the web SDK installation package.
2.1.0	2024-11-13	Web SDK: HwICSUiSDK-2.1.0.zip	HwICSUiSDK-2.1.0.zip.cms	Download the web SDK installation package.
2.0.3	2024-10-08	Web SDK: HwICSUiSDK-2.0.3.zip	HwICSUiSDK-2.0.3.zip.cms	Download the web SDK installation package.
2.0.2	2024-08-15	Web SDK: HwICSUiSDK-2.0.2.zip	HwICSUiSDK-2.0.2.zip.cms	Download the web SDK installation package.

7.2.3.2 Integrity Check

Operations

Check the integrity of the downloaded SDK installation package, that is, check whether the package was tampered with or packets were lost during download.

Verifying a Digital Signature CMS File

Step 1 Download the SDK installation package to the local PC. See [SDK Installation Package Download](#).

Step 2 Download the root CA certificate and four certificate revocation lists (CRLs) from [Huawei support](#).

File names:

- CA certificate: **Huawei Software Integrity Protection Root CA.der**
- CRLs: **HuaweiRootCA.crl**, **HuaweiCodeSigningCA.crl**, **HuaweiCodeSigningCA 2.crl**, and **HuaweiCodeSigningCA 3.crl**

Step 3 Convert the formats of the CA certificate and CRLs from DER to PEM.

For CRLs:

```
openssl crl -inform DER -in "HuaweiRootCA.crl" -out HuaweiRootCaCrl.pem
openssl crl -inform DER -in "HuaweiCodeSigningCA 3.crl" -out HuaweiCodeSigningCA3.pem
```

```
openssl crl -inform DER -in "HuaweiCodeSigningCA 2.crl" -out HuaweiCodeSigningCA2.pem
openssl crl -inform DER -in HuaweiCodeSigningCA.crl -out HuaweiCodeSigningCA.pem
```

For the CA certificate:

```
openssl x509 -inform DER -in "Huawei Software Integrity Protection Root CA.der" -out HuaweiRootCA.pem
```

Step 4 Use Notepad to open the following four files. Copy and paste the content of these four files to the end of the content of **HuaweiRootCA.pem**:

- HuaweiRootCaCrl.pem
- HuaweiCodeSigningCA3.pem
- HuaweiCodeSigningCA2.pem
- HuaweiCodeSigningCA.pem

Step 5 Verify the CMS signature:

```
openssl cms -verify -inform DER -crl_check_all -in hmwsdk-win-demo-win32.zip.cms -content hmwsdk-win-demo-win32.zip -CAfile HuaweiRootCA.pem -out cmsVerifiedData -binary -purpose any -certsout tmpCertChain.pem
```

If a message similar to the following is displayed, the verification is successful:

```
CMS Verification successful
```

----End

7.2.4 SDK Maintenance Cycles

The maintenance cycle of the web SDK of the intelligent interaction client is one year. For details, see [Table 7-14](#).

NOTICE

Versions earlier than 2.0.2 are no longer maintained. If any problem occurs during your usage, upgrade your SDK to the latest version.

Table 7-14 Web SDK maintenance cycles

SDK Version	Released On	Maintenance Ended
4.0.0	2025-06-18	2026-06-17
3.3.1	2025-05-21	2026-05-20
3.3.0	2025-05-07	2026-05-06
3.2.0	2025-03-12	2026-03-11
3.1.0	2025-02-18	2026-02-17
3.0.2	2025-01-14	2026-01-13
3.0.1	2024-12-30	2025-12-29
2.2.0	2024-12-10	2025-12-09

SDK Version	Released On	Maintenance Ended
2.1.0	2024-11-13	2025-11-12
2.0.3	2024-10-08	2025-10-07
2.0.2	2024-08-15	2025-08-14

7.2.5 Web SDK

7.2.5.1 Getting Started

Environment Requirements

[Table 7-15](#) describes the operating environment requirements of the web SDK.

Table 7-15 Environment requirements

Item	Constraint
Development tool	Microsoft Visual Studio Code, WebStorm, or other web IDE development tools
Language	JavaScript or TypeScript
Build environment	Node v17+ (recommended)
Compilation tool	Webpack 5 + Babel 7 is recommended.
Browser	Use a supported browser by referring to Table 7-16 .

Due to the security policy of the browser, you can use only **https://*domain name*** to load and run the intelligent interaction web SDK.

Table 7-16 Browser compatibility

OS	Browser	Browser Version
Windows	Google Chrome	91+
	Microsoft Edge	80+
Android	Mobile Google Chrome	91+
iOS	Mobile Safari	17.3+
Mac	Safari	15.6+

Table 7-17 Support for transparent background

OS	Browser	Browser Version
Windows	Google Chrome	94+
	Microsoft Edge	94+
Android	Mobile Google Chrome	94+
iOS	Mobile Safari	17.3+
macOS	Safari	16.4+

Quick SDK Integration

Step 1 Place the downloaded SDK package in the **sdk** directory of your project.

Step 2 Import **HwICSUiSdk** to the project code.

- To import the SDK using `<script>`, access HwICSUiSdk to obtain the exported module:

```
<script src='./sdk/HwICSUiSdk.js'></script>
```

- To directly reference the static JS file of Huawei WebRTC SDK, use the following:

```
import { HwICSUiSdk } from './sdk/HwICSUiSdk'
```

- In addition to the preceding JS file, you also need to import the CSS file. You can import the CSS file using the link tag, or directly import it in the project.

```
<link rel="stylesheet" href='./sdk/HwICSUiSdk.css'>
import './sdk/HwICSUiSdk.css'
@import './sdk/HwICSUiSdk.css'
```

Step 3 Check whether the browser supports the SDK. For details about the APIs, see [checkBrowserSupport](#).

```
const result = await HwICSUiSdk.checkBrowserSupport();
if (result) {
  // Supported
} else {
  // Not supported
}
```

Step 4 Add a container element to the page for intelligent interaction tasks.

The container element must contain the **id** attribute.

```
<div id="ics-sdk" style="width: 100vw;height: 100vh"></div>
```

Step 5 Create an intelligent interaction task. For details about the APIs, see [create](#).

```
HwICSUiSdk.create({
  serverAddress: 'metastudio-api.cn-north-4.myhuaweicloud.com',
  onceCode: 'aaa',
  robotId: 'aaa',
  containerId: 'ics-sdk',
});
```

----End

7.2.5.2 API Reference

7.2.5.2.1 Main Entry (HwICSUiSdk)

This section describes the APIs of the web SDK.

Table 7-18 APIs

API	Description	Supporte d by a Third- Party Large Model	Supporte d by a Non- Third- Party Large Model
activeInteraction-Mode	Obtains the interaction mode (speech/text Q&A) in use.	×	√
addEventListeners	Callback registration.	√	√
changeLanguage	Sets the language of an interaction task.	×	√
checkBrowserSupport	Checks the browser compatibility.	√	√
create	Creates an interaction task.	√	√
destroy	Destroys an interaction task.	√	√
getJobInfo	Obtains interaction task information.	√	√
getLanguageInfo	Obtains language information of an interaction task.	×	√
initResourcePath	Initializes voice wakeup resources. If voice wakeup is not used, ignore this API.	×	√
interactionModeSwitch	Switches the interaction mode (speech/text Q&A).	×	√
interruptSpeaking	Interrupts the virtual avatar's speech.	×	√
muteRemoteAudio	Mutes the virtual avatar.	√	√
sendDrivenText	Sends the text to be read by the interactive virtual avatar.	×	√
sendTextQuestion	Sends the question text.	×	√
setConfig	Updates a configuration item.	√	√
setLogLevel	Sets the log level.	√	√
startChat	Starts a dialog.	×	√

API	Description	Supported by a Third-Party Large Model	Supported by a Non-Third-Party Large Model
startSpeak	Starts speaking by calling the new API startUserSpeak .	×	√
startUserSpeak	The user starts to ask questions.	×	√
stopChat	Ends a dialog.	×	√
stopSpeak	Stops speaking by calling the new API stopUserSpeak .	×	√
stopUserSpeak	The user stops asking questions. The automatic speech recognition (ASR) stops receiving the user's speech but the dialog is still active.	×	√
unmuteRemoteAudio	Unmutes the virtual avatar.	√	√

activeInteractionMode

```
(static) activeInteractionMode(): Promise<InteractionModeResult>
```

[Function Description]

Obtains the interaction mode (speech/text Q&A) in use.

[Request Parameters]

None.

[Response Parameters]

Table 7-19 InteractionModeResult

Parameter	Type	Description
result	boolean	Execution result.
errorCode	string undefined	Error code. See Table 7-46 .
errorMsg	string undefined	Error message.
interactionMode	'AUDIO' 'TEXT'	Interaction mode.

[Code Examples]

```
const { result, interactionMode } = await HwICSUISdk.activeInteractionMode();
```

addEventListeners

```
(static) addEventListeners(eventMap: EventMap): void
```

[Function Description]

Sets the event callback.

[Request Parameters]

Table 7-20 eventMap

Parameter	Mandatory	Default Value	Type	Description
eventMap	Yes	-	EventMap	Event registration map. See Table 7-21 .

Table 7-21 EventMap

Parameter	Mandatory	Default Value	Type	Description
error	No	-	(icsError: IcsError) => any	Error event.
jobInfoChange	No	-	(jobInfo: JobInfo) => any	Interaction task information change.
speakingStart	No	-	() => any	A virtual avatar starts speaking.
speakingStop	No	-	() => any	A virtual avatar stops speaking.
speechRecognized	No	-	(question: SpeechRecognitionInfo) => any	Speech recognition result.
semanticRecognized	No	-	(answer: SemanticRecognitionInfo) => any	Semantic recognition result.

[Response Parameters]

None

[Code Examples]

```
HwlCSUiSdk.addEventListeners({
  error: (icsError) => {
    console.error('icsError', icsError);
  },
  jobInfoChange: (jobInfo) => {
    console.info('jobInfoChange', jobInfo);
  }
});
```

changeLanguage

(static) changeLanguage(param: ChangeParam): Promise<void>

[Function Description]

Sets the language of an interaction task.

[Request Parameters]

Table 7-22 param

Parameter	Mandatory	Default Value	Type	Description
param	Yes	-	ChangeParam	Language options. For details, see Table 7-23 .

Table 7-23 ChangeParam

Parameter	Mandatory	Default Value	Type	Description
langCode	Yes	-	'zh_CN' 'en_US'	Language code, which is obtained from the API getLanguageInfo .

[Response Parameters]

See [Table 7-39](#).

[Code Examples]

```
const { result } = await HwlCSUiSdk.changeLanguage({
  langCode: 'zh_CN',
});
```

checkBrowserSupport

(static) checkBrowserSupport(): Promise<boolean>

[Function Description]

Checks whether the SDK is supported by the browser.

[Request Parameters]

None

[Response Parameters]

Promise<boolean>: whether the SDK is supported by the browser

[Code Examples]

```
const result = await HwICUISdk.checkBrowserSupport();
if (result) {
  // Supported
} else {
  // Not supported
}
```

create

```
(static) create(param: CreateParam): Promise<void>
```

[Function Description]

Creates an intelligent interaction task using the obtained task link and one-off authentication code.

[Request Parameters]

Table 7-24 param

Parameter	Mandatory	Default Value	Type	Description
param	Yes	-	Create Param	For details about how to create an activity option, see Table 7-25 .

Table 7-25 CreateParam

Parameter	Mandatory	Default Value	Type	Description
onceCode	Yes	-	string	One-off authentication code. For details about how to obtain an authentication code, see Creating a One-Off Authentication Code . NOTE The API CreateOnceCode needs to be called in the backend and cannot be directly called on the browser. Otherwise, cross-domain problems may occur.

Parameter	Mandatory	Default Value	Type	Description
serverAddress	Yes	-	string	IP address of the intelligent interaction server. The values of different regions are as follows: AP-Singapore: metastudio-api.ap-southeast-3.myhuaweicloud.com
robotId	No	-	string	Intelligent interaction activity ID, which is the value of robot_id in the URL specified by taskUrl . For example, if the URL is https://metastudio-api.cn-north-4.myhuaweicloud.com/icswebclient?robot_id=a1b2c3d4e5f6, the robot ID is a1b2c3d4e5f6 . Note: Specify robotId or taskUrl , or both.
taskUrl	No	-	string	URL of the virtual avatar interaction task page created on the MetaStudio console. For details about how to obtain the URL, see Creating an Interactive Virtual Avatar. Note: Specify robotId or taskUrl , or both.
containerId	Yes	-	string	ID of the DOM node for the rendering SDK interaction UI.
config	No	-	Config Map	Configuration information. See Table 7-35 .
eventListeners	No	-	Event Map	Event registration map. See Table 7-21 . This parameter is mandatory for the intelligent interaction using a third-party application.
logLevel	No	info	string	Log level. Options: debug info warn error none

[Response Parameters]

None

[Code Examples]

```
HwICSUiSdk.create({
  serverAddress: 'serverAddress',
  onceCode: 'onceCode',
  robotId: 'robotId',
  containerId: 'ics-root',
  logLevel: 'debug',
  config: {
    enableCaption: true,
    enableChatBtn: false
  },
  eventListeners: {
    error: (error) => {
      console.error('sdk error', {
        message: error.message,
        code: error.code,
      }, error);
    }
  }
});
```

destroy

```
(static) destroy(): Promise<void>
```

[Function Description]

Destroys an interaction task.

[Request Parameters]

None

[Response Parameters]

None

[Code Examples]

```
HwICSUiSdk.destroy();
```

getJobInfo

```
(static) getJobInfo(): Promise<JobInfo>
```

[Function Description]

Obtains interaction task information.

[Request Parameters]

None

[Response Parameters]

Table 7-26 JobInfo

Parameter	Type	Description
jobId	string	Task ID.

Parameter	Type	Description
websocketAddress	string undefined	WebSocket address of the intelligent interaction server. This address is used to assemble a WebSocket connection address when the virtual avatar is equipped with a third-party large model. NOTICE By default, the returned address does not contain the prefix wss://. You need to add the prefix. For example, if the returned content is metastudio-api.cn-north-4.myhuaweicloud.com:443, the address should be wss://metastudio-api.cn-north-4.myhuaweicloud.com:443.

[Code Examples]

```
const jobInfo = await HwICSUISdk.getJobInfo();
```

getLanguageInfo

```
(static) getLanguageInfo(): Promise<LanguageResult>
```

[Function Description]

Obtains language information of an interaction task. To implement the multilingual capability, you need to create an intelligent interaction page in the backend and set the languages, which can be Chinese and English currently.

[Request Parameters]

None

[Response Parameters]

Table 7-27 LanguageResult

Parameter	Type	Description
languageList	LanguageInfo []	Language list.
currentLanguage	'zh_CN' 'en_US'	Language of the current interaction task.
result	boolean	Execution result.
errorCode	string undefined	Error code. See Table 7-46 .
errorMsg	string undefined	Error message.

Table 7-28 LanguageInfo

Parameter	Type	Description
language	'zh_CN' 'en_US'	Language.
language_desc	string	Language description.
isDefault	boolean	Whether it is the default language.

[Code Examples]

```
const languageResult = await HwICsUISdk.getLanguageInfo();
```

initResourcePath

```
(static) interactionModeSwitch(param: ResourcePath): Promise<void>
```

[Function Description]

Initializes voice wakeup resources. If voice wakeup is not used, ignore this API.

The web SDK package later than 3.0.1 contains the following two resource files, which are needed only when voice wakeup is used:

- **wasmData.js**: voice wakeup algorithm resource file
- **modelData.js**: voice wakeup model resource file

The SDK has a preset wakeup model that allows customizing wakeup phrases. You can update the model to a local path. For details, see [Web Voice Wakeup](#).

[Request Parameters]**Table 7-29** ResourcePath

Parameter	Mandatory	Default Value	Type	Description
wasm Path	Yes	'wasmData.js'	string	Relative or absolute path of the wakeup algorithm resource file. • The relative path is based on the current page. For example, if the page URL is https://.../a/b and the default value is wasmData.js, the path of the algorithm executable file is https://.../a/b/wasmData.js. Ensure that this path contains the file wasmData.js of the web SDK package. • The absolute path is a complete HTTP file resource path.

Parameter	Mandatory	Default Value	Type	Description
dataPath	Yes	'modelData.js'	string	Relative or absolute path of the wakeup model resource file. • The relative path is based on the current page. For example, if the page URL is https://.../a/b and the default value is modelData.js, the path of the algorithm executable file is https://.../a/b/modelData.js. • The absolute path is a complete HTTP file resource path.
initModel	No	true	boolean	Whether to initialize the wakeup model when calling an API. It takes 2 to 3 seconds to load the wakeup model before initialization. During this period, no operations can be performed. Therefore, you need to select a proper time point for model initialization: • true means initializing the model when an API is called. • false means initializing the model during virtual avatar creation.

[Response Parameters]

None.

[Code Examples]

```
await HwICSUiSdk.initResourcePath({  
  wasmPath: 'wasmData.js',  
  dataPath: 'modelData.js',  
  initModel: true,  
});
```

Note: If **wasmPath** and **dataPath** are not set or are incorrectly set, error messages as shown in the following figure will be reported.

In this case, voice wakeup is not available. You need to set the paths correctly.

Figure 7-1 Error messages



interactionModeSwitch

```
(static) interactionModeSwitch(param: InteractionModeParam): Promise<InteractionModeResult>
```

[Function Description]

Switches the interaction mode (speech/text Q&A).

[Request Parameters]

Table 7-30 InteractionModeParam

Parameter	Mandatory	Default Value	Type	Description
interaction Mode	No	AUDIO	AUDIO TEXT	Interaction mode, which can be speech or text interaction.

[Response Parameters]

See [Table 7-19](#).

[Code Examples]

```
const { result } = await HwICUISdk.interactionModeSwitch({ interactionMode: 'AUDIO' });
```

interruptSpeaking

```
(static) interruptSpeaking(): Promise<UISdkResult>
```

[Function Description]

Interrupts the virtual avatar's speech.

[Request Parameters]

None

[Response Parameters]

See [Table 7-39](#).

[Code Examples]

```
const { result } = await HwICUISdk.interruptSpeaking();
```

muteRemoteAudio

```
(static) muteRemoteAudio(): Promise<boolean>
```

[Function Description]

Mutes the virtual avatar.

[Request Parameters]

None

[Response Parameters]

Promise<boolean>: whether the virtual avatar has been muted

[Code Examples]

```
const result = await HwICsUISdk.muteRemoteAudio();
```

sendDrivenText

```
(static) sendDrivenText(param: TextDrivenParam): Promise<ChatResult>
```

[Function Description]

Sends the text to be read by the interactive virtual avatar.

The parameter **isLast:true** must be transferred for the last calling when active script reading ends. Otherwise, the virtual avatar cannot receive the notification **speakingStop** when finishing the reading.

[Request Parameters]

Table 7-31 TextDrivenParam

Parameter	Mandatory	Default Value	Type	Description
text	Yes	""	String	Text to be read by the interactive virtual avatar.
isLast	No	false	Boolean	Whether it is the last piece of text.

[Response Parameters]

See [Table 7-38](#).

[Code Examples]

```
const { result } = await HwICsUISdk.sendDrivenText({ text: 'Hello', isLast: true });
```

sendTextQuestion

```
(static) sendTextQuestion(param: TextQuestionParam): Promise<TextQuestionResult>
```

[Function Description]

Sends the question text.

[Request Parameters]

Table 7-32 TextQuestionParam

Parameter	Mandatory	Default Value	Type	Description
text	Yes	-	String	Question text.

[Response Parameters]**Table 7-33** TextQuestionResult

Parameter	Type	Description
result	Boolean	Execution result.
errorCode	string undefined	Error code. See Table 7-46 .
errorMsg	string undefined	Error message.
chatId	String	Dialog ID.

[Code Examples]

```
const { result } = await HwICUISdk.sendTextQuestion({ text: 'Who are you?' });
```

setConfig

```
(static) setConfig(config: ConfigMap): void
```

[Function Description]

Sets **config** to determine whether to display subtitles or the button for interaction.

[Request Parameters]**Table 7-34** config

Parameter	Mandatory	Default Value	Type	Description
config	Yes	-	ConfigMap	Configuration information. See Table 7-35 .

Table 7-35 ConfigMap

Parameter	Mandatory	Default Value	Type	Description
enableCaption	No	false	Boolean	Whether to display subtitles.

Parameter	Mandatory	Default Value	Type	Description
enableChatBtn	No	false	Boolean	Whether to display the button for interaction.
enableHotIssues	No	false	Boolean	Whether to display frequently asked questions.
enableWeakErrorInfo	No	true	Boolean	Whether to display a weak prompt. Example: A WebSocket exception occurs in the SDK.
enableBusinessTrack	No	true	Boolean	Whether to report SDK tracking data.
enableJobCache	No	true	Boolean	Whether to enable task cache. If you want the task configuration modification to take effect immediately, you do not need to enable the cache. - Enabling task cache can accelerate the startup of virtual avatars. - If task cache is disabled, a new task will be created each time the API create is called, instead of using the cached task.
useDefaultBackground	No	true	Boolean	Whether to use the default background image.
enableLocalWakeup	No	false	Boolean	Whether to enable voice wakeup. To enable it, you need to call the API initResourcePath to initialize the wakeup resource path, and then call the API create to create a virtual avatar.

Parameter	Mandatory	Default Value	Type	Description
firstCreateLocalStream	No	false	boolean	Whether to create a local stream first. This method is applicable when the virtual avatar's voice volume is low on some Android devices in receiver mode.
enableMediaViewer	No	true	boolean	Whether to enable image preview. You can click an image in the default dialog list to zoom in on the image. If this function is not required, set the value to false (disabled).

[Response Parameters]

None

[Code Examples]

```
HwiCSUISdk.setConfig({  
  enableCaption: true,  
  enableChatBtn: false,  
  enableHotIssues: false,  
  enableWeakErrorInfo: true,  
});
```

setLogLevel

```
(static) setLogLevel(logLevel: 'debug' | 'info' | 'warn' | 'error' | 'none'): void
```

[Function Description]

Sets the output log level.

[Request Parameters]

Table 7-36 logLevel

Parameter	Mandatory	Default Value	Type	Description
logLevel	Yes	info	- debug - info - warn - error - none	Log level.

[Response Parameters]

None

[Code Examples]

```
HwICSUISdk.setLogLevel('warn');
```

startChat

```
(static) startChat(param?: ChatParam): Promise<ChatResult>
```

[Function Description]

Starts a dialog.

[Request Parameters]

Table 7-37 ChatParam

Parameter	Mandatory	Default Value	Type	Description
interaction Mode	No	AUDIO	AUDIO TEXT	Interaction mode, which can be speech or text interaction.

[Response Parameters]

Table 7-38 ChatResult

Parameter	Type	Description
result	Boolean	Execution result.
errorCode	string undefined	Error code. See Table 7-46 .
errorMsg	string undefined	Error message.
chatId	String	Dialog ID.

[Code Examples]

```
const { result } = await HwICSUISdk.startChat({ interactionMode: 'AUDIO' });
```

startSpeak

```
(static) startSpeak(): Promise<UISdkResult>
```

[Function Description]

Starting speaking

[Request Parameters]

None

[Response Parameters]

See [Table 7-39](#).

[Code Examples]

```
const { result } = await HwICsUISdk.startSpeak();
```

startUserSpeak

```
(static) startUserSpeak(): Promise<UISdkResult>
```

[Function Description]

The user starts to ask questions.

[Request Parameters]

None

[Response Parameters]

Table 7-39 UISdkResult

Parameter	Type	Description
result	Boolean	Execution result.
errorCode	string undefined	Error code. See Table 7-46 .
errorMsg	string undefined	Error message.

[Code Examples]

```
const { result } = await HwICsUISdk.startUserSpeak();
```

stopChat

```
(static) stopChat(): Promise<ChatResult>
```

[Function Description]

Ends a dialog.

[Request Parameters]

None

[Response Parameters]

See [Table 7-38](#).

[Code Examples]

```
const { result } = await HwICsUISdk.stopChat();
```

stopSpeak

```
(static) stopSpeak(): Promise<UISdkResult>
```

[Function Description]

The virtual avatar stops speaking.

[Request Parameters]

None

[Response Parameters]

See [Table 7-39](#).

[Code Examples]

```
const { result } = await HwICsUISdk.stopSpeak();
```

stopUserSpeak

```
(static) stopUserSpeak(): Promise<UISdkResult>
```

[Function Description]

The user stops asking questions.

[Request Parameters]

None

[Response Parameters]

See [Table 7-39](#).

[Code Examples]

```
const { result } = await HwICsUISdk.stopUserSpeak();
```

unmuteRemoteAudio

```
(static) unmuteRemoteAudio(): Promise<boolean>
```

[Function Description]

Unmutes the virtual avatar.

[Request Parameters]

None

[Response Parameters]

Promise<boolean>: whether the virtual avatar has been unmuted

[Code Examples]

```
const result = await HwICsUISdk.unmuteRemoteAudio();
```

7.2.5.2.2 Event Notifications (EventMap)

This section describes the **EventMap** events of the web SDK.

Table 7-40 Notifications

API	Description	Supported by a Third-Party Large Model	Supported by a Non-Third-Party Large Model
error	Error event.	√	√
enterActive	Activates a virtual avatar.	×	√
enterSleep	Automatic hibernation of a virtual avatar.	×	√
jobInfoChange	Interaction task information change.	√	√
speakingStart	A virtual avatar starts speaking.	×	√
speakingStop	A virtual avatar stops speaking.	×	√
speechRecognized	A speech question is converted to text after ASR.	×	√
semanticRecognized	The large language model (LLM) performs semantic recognition on a question and the answer text is output. speechRecognized and semanticRecognized indicate the question and answer, respectively. They share one chatId in each round of Q&A.	×	√

error

[Event Description]

Error event returned when a service exception occurs.

[Callback Parameters]

icsError: ICS Error type. [Table 7-41](#) describes the fields.

Table 7-41 IcsError

Parameter	Type	Description
code	String	Error code. See Error Codes (ICSError) .
message	String	Error message.

enterActive

[Event Description]

Activates a virtual avatar. This event is triggered when any of the following occurs:

- The API [startChat](#) is called.
- The button of starting a dialog on the web SDK page is clicked.
- Voice wakeup is used (see [Web Voice Wakeup](#)).

[Callback Parameters]

None.

enterSleep

[Event Description]

Automatic hibernation of a virtual avatar.

[Callback Parameters]

None.

jobInfoChange

[Event Description]

Interaction task information change. When the status of an interaction task changes, the user will be notified. If the interaction task is ready, *jobId* in **jobInfo** is the ID of the ongoing task. If the interaction task is not ready, *jobId* is an empty string.

[Callback Parameters]

jobInfo: JobInfo type. [Table 7-42](#) describes the fields.

Table 7-42 JobInfo

Parameter	Type	Description
jobId	String	Task ID.
websocketAddress	string undefined	WebSocket address of the intelligent interaction server. This address is used to assemble a WebSocket connection address when the virtual avatar is equipped with a third-party large model. NOTICE By default, the returned address does not contain the prefix wss:// . You need to add the prefix. For example, if the returned content is metastudio-api.cn-north-4.myhuaweicloud.com:443 , the address should be wss://metastudio-api.cn-north-4.myhuaweicloud.com:443 .
isReady	Boolean	Whether a task is ready.

languageInfoChange

[Event Description]

Changes the language information of an interaction task. This event is triggered when the language setting is added or deleted in the backend or the language is changed using the API [changeLanguage](#).

[Callback Parameters]

languageInfo: [Table 7-43](#) describes the fields.

Table 7-43 LanguageInfo

Parameter	Type	Description
languageList	LanguageInfo []	Language list.
currentLanguage	'zh_CN' 'en_US'	Language of the current interaction task.

speakingStart

[Event Description]

A virtual avatar starts speaking.

[Callback Parameters]

None.

speakingStop

[Event Description]

A virtual avatar stops speaking.

[Callback Parameters]

None.

speechRecognized

[Event Description]

A speech question is converted to text after ASR.

[Callback Parameters]

question: SpeechRecognitionInfo type. [Table 7-44](#) describes the fields.

Table 7-44 SpeechRecognitionInfo

Parameter	Type	Description
text	String	Recognition result.
resultId	number	Sequence number of each packet returned when a streaming response is recognized.
isLast	Boolean	Whether it is the last recognition result.
chatId	String	Dialog ID, which is unique in each round of Q&A.

NOTICE

Note: The streaming response of **speechRecognized** is different from that of **semanticRecognized**. For details, see [What Are the Differences Between the Streaming Response of speechRecognized and That of semanticRecognized?](#).

semanticRecognized

[Event Description]

The large language model (LLM) performs semantic recognition on a question and the answer text is output. **speechRecognized** and **semanticRecognized** indicate the question and answer, respectively. They share one **chatId** in each round of Q&A.

[Callback Parameters]

answer: SemanticRecognitionInfo type. [Table 7-45](#) describes the fields.

Table 7-45 SemanticRecognitionInfo

Parameter	Type	Description
text	String	Recognition result.
questionText	String	Question text.
resultId	number	Sequence number of each packet returned when a streaming response is recognized.
isLast	Boolean	Whether it is the last recognition result.
chatId	String	Dialog ID, which is unique in each round of Q&A.

NOTICE

Note: The streaming response of **semanticRecognized** is different from that of **speechRecognized**. For details, see [What Are the Differences Between the Streaming Response of speechRecognized and That of semanticRecognized?](#).

7.2.5.2.3 Error Codes (ICSError)

This section describes details about the error codes (**IcsError**) reported on the client of the web SDK.

Table 7-46 Error code description

Error Code	Error Description	Error Cause or Handling Suggestion
20010001	Invalid characters in the name.	Remove invalid characters from the name.
20010010	Asset query error.	Asset query failed. Contact technical support.
20010035	Insufficient resources.	Insufficient resources.
20010040	Send message to NATS failed.	Send message to NATS failed. Contact technical support.
20010041	Message subscription failed.	Subscribe to messages failed on NATS. Contact technical support.
20010042	Delete messages failed.	Delete messages failed on NATS. Contact technical support.
20010043	NATS internal error.	NATS internal error. Contact technical support.
20010044	Virtual avatar asset unavailable.	Virtual avatar asset unavailable.
20010045	roomInfo not found.	Room information not found. Contact technical support.
20010046	Room ID task exists.	Room task ID not found. Contact technical support.
20010047	Asset not found.	Asset not found. Contact technical support.
20010050	Invalid asset information. Check the ID configuration of the virtual avatar.	Invalid asset information. Check the ID configuration of the virtual avatar.
20010053	Invalid command. Check the parameter command .	Invalid command. Check the parameter command .

Error Code	Error Description	Error Cause or Handling Suggestion
20010056	Insufficient resources for 2D virtual avatar videos.	Too many ongoing tasks. Please try again later.
20010060	Request the TMS failed.	Request the TMS failed. Contact technical support.
20010066	Complete tasks cannot be modified.	Complete tasks cannot be modified.
20010067	Audio file not found. Check audio_config .	Audio file not found. Check audio_config and contact technical support.
20010070	Field verification failed.	Field verification failed. Contact technical support.
20010071	Asset unavailable.	Asset unavailable.
20010074	Task information not found or task expired.	The intelligent interaction task is not found or has expired.
20010075	Insufficient quota of concurrent dialogs.	Insufficient quota of concurrent dialogs.
20010076	The intelligent interaction task has expired.	The intelligent interaction task has expired. Please try again later.
20010131	Voice ID unavailable.	Check the timbre asset ID.
20010135	Too many concurrent dialogs.	Too many concurrent dialogs.
20010139	Too many concurrent dialogs or tasks.	Insufficient tenant resources.
20010140	Invalid asset ID.	Check the parameter.
20010146	Dialog task heartbeat failed.	Contact technical support.
20010148	Duplicate chat room name.	Change the room name.
20050038	Mobvoi app not found.	Mobvoi AK not found. Change the timbre or contact technical support.
20050039	Insufficient Mobvoi account balance.	Insufficient Mobvoi account balance. Change the timbre or contact technical support.
MSS.20050040	Invalid text.	The answer text cannot be read.
MSS.20050029	TTS access configuration not found.	Check whether the AK and SK of the purchased third-party timbre have been configured.

Error Code	Error Description	Error Cause or Handling Suggestion
MSS.20051001	This text contains a word that is too long.	The answer text cannot be read.
MSS.20050064	Unsupported text language.	This timbre does not support this language. Check the timbre configuration.
MSS.47000001	Error.	Contact technical support.
MSS.47000002	Inference service error: {0}	Contact technical support.
MSS.47000003	Task preparation failed: {0}	Contact technical support.
MSS.47000004	Inference model creation failed: {0}	Contact technical support.
MSS.47000005	Join the room as a worker failed: {0}	Contact technical support.
MSS.47000006	Administrator service error: {0}	Try again. If the fault persists, contact technical support.
MSS.47000007	Task stopped by an administrator command.	Task closed. Start a new task.
MSS.47000009	FSM status {0} timed out.	Try again. If the fault persists, contact technical support.
MSS.47000010	ICS service error: {0}	Try again. If the fault persists, contact technical support.
MSS.47000011	Empty RTSA room.	Try again. If the fault persists, contact technical support.
MSS.47000012	RTSA reported that the worker leaves the room. Reason: {0}	Try again. If the fault persists, contact technical support.
MSS.47000013	Model file download failed.	Check whether the avatar asset file exists. If not, replace the avatar model. If yes, contact technical support.
MSS.47000014	Background file download failed.	Check whether the background image asset file exists. If not, replace the background. If yes, contact technical support.
MSS.47000015	Join the room as a worker timed out.	Try again. If the fault persists, contact technical support.

Error Code	Error Description	Error Cause or Handling Suggestion
MSS.47000 016	The pre-processing task of joining a room failed.	Try again. If the fault persists, contact technical support.
MSS.47000 017	TTS prefetch task failed.	Try again. If the fault persists, contact technical support.
MSS.47000 018	Invalid package format.	Invalid avatar model asset format. Change the asset format or contact technical support.
MSS.47000 019	Too many entries in package: {0}	Try again. If the fault persists, contact technical support.
MSS.47000 020	Package too large: {0}	Try again. If the fault persists, contact technical support.
MSS.47000 021	File in the package too large: {0}	Try again. If the fault persists, contact technical support.
MSS.47000 022	Unexpected directory in the package.	Try again. If the fault persists, contact technical support.
MSS.47000 023	Invalid entry name in the package: {0}	Try again. If the fault persists, contact technical support.
MSS.47000 024	Invalid resource file name.	Try again. If the fault persists, contact technical support.
MSS.47000 025	Invalid task parameter: {0}	Contact technical support.
MSS.47000 027	FSM status error.	Try again. If the fault persists, contact technical support.
MSS.47000 029	TTS conversion failed.	The virtual avatar is thinking. Please continue with your question.
MSS.47002 000	Try again or contact technical support.	Try again. If the fault persists, contact technical support.
MSS.47002 001	Try again or contact technical support.	Try again. If the fault persists, contact technical support.
MSS.47002 002	Try again or contact technical support.	Try again. If the fault persists, contact technical support.
MSS.47010 040	Too many concurrent intelligent interaction tasks.	Too many concurrent intelligent interaction tasks.
MSS.47010 046	Authentication using a one-off authentication code failed.	Authentication using a one-off authentication code failed.

Error Code	Error Description	Error Cause or Handling Suggestion
MSS.47010047	Too many failures of authentication using a one-off authentication code. This operation is not allowed currently.	Too many failures of authentication using a one-off authentication code. This operation is not allowed currently.
MSS.47010063	No permission to view dialog information. Check whether the operation is correct or contact technical support.	View dialog information of the current tenant.
MSS.47010065	Connection lost. Refresh the page.	Use a valid task ID or contact technical support.
MSS.47010066	Frequently asked question does not exist. No action is required.	Use a valid frequently asked question ID for query or check whether the frequently asked question is correctly configured.
MSS.47010100	Internal error.	Internal error. Contact technical support.
MSS.47010101	Message parsing failed.	Message parsing failed. Contact technical support.
MSS.47010102	Starting the dialog failed. The robot ID is empty.	Starting the dialog failed. The robot ID is empty. Contact technical support.
MSS.47010103	Dialog request failed. This operation is not supported.	Dialog request failed. This operation is not supported. Contact technical support.
MSS.47010104	The connection to the third-party app timed out.	The connection to the third-party app timed out.
MSS.47010105	Invalid authentication token. Please try again.	Use a valid token.
MSS.47010106	Establish session failed because parameters are invalid. Check whether the operation is correct or contact technical support.	The request for establishing a dialog connection must contain correct parameter information.
MSS.47010107	Error information returned by the third-party app.	Error information returned by the third-party app.
MSS.47010109	Starting the dialog failed. The dialog is not in the status of waiting for connection.	The dialog is not in the status of waiting for connection and cannot be started. Contact technical support.

Error Code	Error Description	Error Cause or Handling Suggestion
MSS.47010 111	Starting the dialog failed and disconnected from the worker.	Starting the dialog failed and disconnected from the worker. Contact technical support.
MSS.47010 119		Try again. If the error persists for a long time, contact technical support.
MSS.47010 120	The quota of authorized iFLYTEK interactions is insufficient.	The quota of authorized iFLYTEK interactions is insufficient. Please contact the iFLYTEK customer service.
MSS.47010 121	The number of tokens for iFLYTEK interactions is insufficient.	The number of tokens for iFLYTEK interactions is insufficient. Please contact the iFLYTEK customer service.
MSS.47010 122	Internal RPC communication failure.	Internal error. Refresh the page and try again.
MSS.47010 124	AIUI configuration authentication failed	AIUI authentication failed. Contact the administrator.
MSS.47010 125	Spark authentication failed.	Spark authentication failed. Contact the administrator.
MSS.47010 126	The number of Mobvoi questions or the word number quota is insufficient.	The number of Mobvoi questions or the token quota is insufficient. Check the quota.
MSS.47010 127	Mobvoi authentication failed.	Mobvoi authentication failed. Ensure that the AppKey and AppSecret are correct.
MSS.47010 128	Invalid Mobvoi role ID.	Invalid Mobvoi role ID.
MSS.47010 130	The third-party language model is empty.	Configure the third-party language model correctly.
MSS.47010 131	The third-party language model URL is empty.	Configure the third-party language model URL correctly.
MSS.47010 134	The third-party language model URL is invalid.	Configure the third-party language model URL correctly.
MSS.47010 136	Contact the administrator to check whether the iFLYTEK app has created a scene in the corresponding language.	Check whether the iFLYTEK app has created a scene in the corresponding language.

Error Code	Error Description	Error Cause or Handling Suggestion
MSS.47010 141	SIS authorization error. Contact your administrator.	SIS authorization error. Contact the administrator.
MSS.47010 143	Speech recognition unavailable for this language. Try with another language.	Speech recognition unavailable for this language. Try with another language.
MSS.47010 144	Switch to the text mode and try again.	Switch to the text mode for interaction and try again.
MSS.47010 145	Too many characters input. Shorten the text.	Too many characters input. Shorten the text.
MSS.47010 146	No content entered.	Enter some content.
MSS.47010 147	Stop the virtual avatar from replying or wake it up before asking a new question.	The virtual avatar is answering or hibernating. Please interrupt the answer or wake up the virtual avatar before asking a new question.
MSS.47010 148	Invalid mode.	This mode is invalid and cannot be switched to.
MSS.47010 150	Too many concurrent questions for Mobvoi. Try again later or contact technical support to increase the quota.	Too many concurrent questions for Mobvoi. Try again later or contact technical support to increase the quota.
MSS.47010 151	Too many log files to upload. Try again later.	Too many log files to upload. Try again later.
MSS.47010 152	Invalid extended parameter. Carry a valid one.	Invalid extended parameter. Carry a valid one.
MSS.47015 005	Too many WebSocket connections. Contact technical support.	Too many WebSocket connections established for a single tenant.
MSS.47015 006	Too many WebSocket connections. Contact technical support.	Too many WebSocket connections established.
MSS.47015 008	iFLYTEK Spark model you configured does not match the selected application type.	iFLYTEK Spark model you configured does not match the selected application type.

Error Code	Error Description	Error Cause or Handling Suggestion
MSS.47015009	AIUI application you configured does not match the selected application type.	AIUI application you configured does not match the selected application type.
MSS.47015010	Selected application type not supported. Check the selected application type or control mode.	Selected application type not supported. Check the selected application type or control mode.
MSS.47015011	Empty media service address. Contact technical support to locate and rectify the fault.	Empty media service address. Contact technical support to locate and rectify the fault.
MSS.47015012	Media negotiation failed. Contact technical support to locate and rectify the fault.	Media negotiation failed. Contact technical support to locate and rectify the fault.
MSS.47015014	There is ongoing text control.	There is ongoing text control. Please wait.
MSS.47015015	SIS frozen.	SIS is unavailable due to arrears. Contact the administrator.
MSS.47015016	Text used for virtual avatar control is too long.	Text used for virtual avatar control cannot exceed 500 characters.
MSS.47015017	Unsupported by a third-party large model that controls the virtual avatar. Try with the control API.	This operation is not supported by a third-party large model that controls the virtual avatar. Try with the control API.
90000001	SDK internal error.	Internal error. Contact technical support.
90000004	Message response timed out.	Message response timed out. Please contact technical support.
90000005	Invalid parameter.	Invalid parameter. For details, see the API documentation.
90100001	-	Invalid operation. The user status is incorrect.
90100002	enumerateDevices unsupported.	The browser does not support the enumerateDevices method. Check whether HTTPS is used for access or use another browser.
90100003	No available devices.	No available devices. Check whether the device is ready.

Error Code	Error Description	Error Cause or Handling Suggestion
90100004	No available video input devices.	No available camera devices. Check whether the video capture device is ready.
90100005	No available audio input devices.	No available audio input devices. Check whether the audio capture device is ready.
90100006	No available audio output devices.	No available audio output devices.
90100007	Room status error.	The room status is incorrect. Check whether you have joined the room.
90100008	The WebSocket connection status is not Connected .	No WebSocket connections. Check the WebSocket connection.
90100009	Obtaining the delivered configuration failed.	Obtaining the delivered configuration failed. Contact technical support.
90100010	Publishing the response failed.	Publishing the response failed. Contact technical support.
90100011	Service unavailable in this region.	Server address not found. Contact technical support.
90100012	WebSocket connection timed out.	WebSocket connection timed out. Contact technical support.
90100013	Re-establishing the WebSocket connection timed out.	Re-establishing the WebSocket connection timed out. Contact technical support.
90100014	The WebSocket connection is not enabled.	The WebSocket connection is not enabled. Contact technical support.
90100015	The WebSocket connection status is not Idle and the operation is interrupted.	WebSocket connection force disabled. The possible cause is that the user leaves the meeting or reconnects to the meeting.
90100016	WebSocket connection error.	WebSocket connection error. It is a proactive disconnection by the server.
90100017	Capture failed because there is no permission.	Capture failed because the audio device is not granted the permission. Grant the microphone the access permission.
90100018	Capture failed due to invalid constraint parameter.	Capture failed because the audio capture device does not support the configured capture constraints.

Error Code	Error Description	Error Cause or Handling Suggestion
90100019	Capture failed because the device requesting capture is not found.	Capture failed because the device requesting capture is not found. You are advised to ask the user to check whether the microphone required for the call is ready before the call starts.
90100020	Capture failed. The possible cause is that the device is being used by another application.	Capture failed. The possible cause is that the device is being used by another application. Check the usage status of the device. You are advised to give a prompt message indicating that the microphone cannot be accessed temporarily, and ask the user to ensure that other applications are not requesting for accessing the microphone and try again.
90100021	The user did not interact with the document first. Please trigger it by gesture.	Playback is not allowed.
90100022	The user role does not have the permission.	The user role does not have the permission. Check the user role.
90100023	Invalid SDP of the answer.	SDP negotiation error. Contact technical support.
90100024	Upstream media unsupported.	The browser does not support media capture.
90100025	Unsupported by the browser.	Unsupported by the browser. Upgrade the browser or use another browser.
90100026	Establishing the media connection failed. Switch to another network and try again.	Establishing the media connection failed. Switch to another network and try again.
90100029	Room stream paused.	Room audio paused.
90100030	Signature expired.	The signature has expired.
90100031	Invalid signature.	Invalid signature.
90100032	Window or navigator error.	The browser window or navigator is abnormal. Upgrade the browser or use a new one.

Error Code	Error Description	Error Cause or Handling Suggestion
90100033	The kernel version of Google Chrome is earlier than 67.	The kernel version of Google Chrome is earlier than 67. Upgrade the browser or use a new one.
90100034	WebSocket component missing.	Insufficient WebSocket capability of the browser. Upgrade the browser or use a new one.
90100035	RTCPeerConnection does not support AVC encoders.	WebRTC does not support remote image rendering. Upgrade the browser or use a new one.
90100036	RTCPeerConnection does not support AVC decoders.	WebRTC does not support local video transmission. Upgrade the browser or use a new one.
90100037	This model is not in the whitelist and does not support the browser.	This model does not support the WeChat browser.
90100100	Internal server error.	Internal server error. Contact technical support.
90100200	Internal server error.	Internal server error. Contact technical support.
90100600	Internal server error.	Internal server error. Contact technical support.
999000001	-	Network error. Check the network connection, refresh the page, and try again.
999000002	-	The task status is abnormal. Refresh the page and try again.
999100001	-	Internal error. Refresh the page and try again.
999100002	-	Internal error. Refresh the page and try again.
999100003	-	The user has joined the room elsewhere. Refresh the page and try again.
999100004	-	Audio device error. Check whether the device exists or is authorized to use.
999100005	-	The current dialog has ended or been canceled. Refresh the page to join the dialog again.

Error Code	Error Description	Error Cause or Handling Suggestion
999100006	-	The current dialog has ended or been canceled. Refresh the page to join the dialog again.
999100007	-	The RTC is not initialized. Contact technical support.
999200001	-	Network error. Check the network and try again.
999200002	-	Network error. Check the network and try again.
999200003	-	The WebSocket connection is abnormal. Please try again later.
999200004	-	Network error of the WebSocket connection. Check the network and try again.
999200005	-	You have joined the room elsewhere. Refresh the page and try again.
999300001	-	The SDK mount node does not exist. Check the parameters.
999300002	-	Invalid parameter.
999400001	-	This operation is forbidden. Check the time of API calling.

7.2.5.2.4 Granting a Browser the Permission of Using Microphones

The permission of using microphones can be granted to a Google Chrome or macOS browser.

Google Chrome

Step 1 Open the Google Chrome browser, click  in the upper right corner of the browser, and select **Settings** from the drop-down list box.

The **Settings** page is displayed.

Step 2 In the navigation pane, choose **Privacy and security**.

Step 3 In the right pane, click **Site Settings**. The **Site Settings** page is displayed.

Step 4 In the **Permissions** area, click **Microphone**. The page for granting the permission of using microphones is displayed.

Select **Sites can ask to use your microphone**. If this option is selected by default, no more operation is needed.

Step 5 Click the return icon in the upper left corner to return to the **Site Settings** page.

Step 6 In the **Permissions** area, click **Camera**. The page for granting the permission of using cameras is displayed.

Select **Sites can ask to use your camera**. If this option is selected by default, no more operation is needed.

Step 7 After the preceding settings are complete, when the browser needs to use the microphone or camera, a dialog box asking you for the permission is displayed. In this case, grant the permission.

----End

macOS Browser

On the macOS browser, grant the apps that need to use the microphone the corresponding permission.

7.2.5.2.5 Web Voice Wakeup

Wakeup (see [Preset Wakeup Capability](#)) is a preset capability of MetaStudio. To update the wakeup phrases, follow [Custom Wakeup Capability](#). MetaStudio will provide you with the custom wakeup model. You need to update the model to a local model path by referring to [Updating a Wakeup Model](#).

Usage Requirements

- The web SDK should be 3.0.1 or later.
- Only the ASR configured on MetaStudio or the preset ASR (TTS) is supported. Virtual avatar control using a WebSocket API, that is, text control, is not supported.
- Before calling the API [create](#), you must have clicked the page integrated with the web SDK.

Only with click operations can the browser obtain the permission to collect sound. Sound collection is a must-have for using voice wakeup.

- Use a supported browser by referring to [Table 7-47](#).

Table 7-47 Browser compatibility

OS	Browser	Browser Version
Windows	Google Chrome	91+
	Microsoft Edge	91+
Android	Mobile Google Chrome	91+
iOS	Mobile Safari	17.3+
macOS	Safari	16.5+

Preset Wakeup Capability

The web SDK has supported wakeup since 3.0.1. However, if a WebSocket API is used for virtual avatar control, the preset voice wakeup capability of the web SDK is not available. Preset wakeup allows using three wakeup phrases ("Hello, Sara", "Wait a moment", and "Thank you") to wake up a virtual avatar, interrupt and exit a dialog.

You can call the API `create` and configure the parameter `enableLocalWakeup` in `config` to enable voice wakeup.

Custom Wakeup Capability

If the customer wants to use organization-specific wakeup phrases, they need to contact MetaStudio technical support to customize a wakeup model. Wakeup model customization takes about five working days, with up to eight custom wakeup phrases.

Examples of custom wakeup phrases:

- Wakeup: Hello/Hi, Sara
- Interruption: Wait a moment
- Exiting: Thank you/Goodbye

Updating a Wakeup Model

After obtaining the wakeup model customized by MetaStudio, the customer needs to replace the original `hwICSUiSdk` file `modelData.js`. Then, place `wasmData.js` and `modelData.js` in the project's static resource folder or other locations accessible through HTTP requests. Finally, call the API `initResourcePath` to set a correct resource path, and call the API `create` or `setConfig` to create an interaction task.

Figure 7-2 Replacing the file `modelData.js`

images	2024/12/25 16:17		
HwICSUiSdk.css	2024/12/24 21:28		748 KB
HwICSUiSdk.d.ts	2024/12/24 21:28		15 KB
HwICSUiSdk.js	2024/12/24 21:28		3,757 KB
modelData.js	2024/12/24 21:28		16,692 KB
package.json	2024/12/24 21:28		1 KB
wasmData.js	2024/12/24 21:28		14,533 KB

7.2.5.3 FAQs

Why Are There Image Resources in the Intelligent Interaction SDK Installation Package?

The dynamic effect and background of intelligent interaction can be better displayed when there are image resources in the intelligent interaction SDK

installation package. As a result, to facilitate integration and use, the intelligent interaction web SDK also contains UI-related resources.

What Are the Differences Between the Streaming Response of `speechRecognized` and That of `semanticRecognized`?

Differences:

- The streaming response of `speechRecognized` is overwritten. The value of `text` in the second notification contains the content of the first notification. For example, if the value of `text` in the first notification is "How do" and "you do?" is recognized in the second notification, the value of `text` in the second notification is "How do you do?"
- The streaming response of `semanticRecognized` is segmented. The value of `text` in the second notification must be combined with the content of the first notification. For example, if the value of `text` in the first notification is "How do" and "you do?" is returned in the second notification, the value of `text` in the second notification is "How do you do?" The values of `text` in the two notifications must be combined to make sense.

Usage of Text Q&A

By default, intelligent interaction uses speech Q&A. To use text Q&A, you need to switch the interaction mode in either of the following ways:

- Set the interaction mode to text Q&A when using the API `startChat` to start a dialog:

```
const { result } = await HwICSUISdk.startChat({ interactionMode: 'TEXT' });
```
- Switch the interaction mode to text Q&A during a dialog by calling the API `interactionModeSwitch`. This method is applicable when the API `startChat` has been called and speech Q&A is in use:

```
const { result } = await HwICSUISdk.interactionModeSwitch({ interactionMode: 'TEXT' });
```

After switching the mode, you can call the API `sendTextQuestion` to perform text Q&A.

What Are the Differences Between Text Q&A and Script Reading by Virtual Avatars?

A virtual avatar can read script and perform text Q&A for intelligent interaction. Virtual avatars speak as instructed by the input text.

Differences:

- Script reading: A virtual avatar reads the text input through the API `sendDrivenText`.
- Text Q&A: A question in text is input through the API `sendTextQuestion` and the answer is given by the equipped large model of the virtual avatar. The virtual avatar reads the answer instead of the question.

Why Do I Need to Customize a Voice Wakeup Model?

A custom wakeup model based on wakeup phrases can improve the accuracy of wakeup phrases.

Can I Change a Wakeup Phrase Locally?

No, because a model is bound to certain wakeup phrases.

When a Web Page Integrated with the Web SDK Was Loaded, the API create Was Automatically Called to Create a Virtual Avatar. Why Was the Script Reading by This Avatar Muted?

You can locate the cause by referring to [Autoplay Guide for Media and Web Audio APIs](#). Then troubleshoot with the following steps:

1. Click the button of adding to trigger the API `create` and check whether it is muted. If no, the problem is caused by the security policy of the browser. In this case, users need to click the page before calling `create`.
2. Check whether the speaker is working properly.
3. If the speaker has been added or deleted, refresh or re-open the virtual avatar page and try again. If the fault persists, repeat step 2.

What Are the Statuses of a Chatting Virtual Avatar?

Virtual avatars can be in any of the following statuses when chatting:

- Sleeping: received the notification `enterSleep`
- Recognition pending: received the notification `enterActive`
- Recognizing: received the notification `speechRecognized`
- Thinking: received the notification `speechRecognized`, in which `isLast` is set to `true`
- Answering: received the notification `semanticRecognized` for the first time
- Answered: received the notification `speakingStop`

The preceding statuses are only examples provided by the SDK. You can customize the statuses as needed.

What If the Preset Buttons and Fonts Displayed by the Web SDK Are Larger Than Those on the Demonstration Page?

The CSS style of the web SDK is optimized based on 1920 x 1080 (PCs) and 1080 x 1920 (mobile devices and large screens). The width and height in the CSS file are expressed in px. As a result, the preset fonts and buttons of the SDK are displayed disproportionately and look large on devices with small screens, such as mobile devices. Here are the solutions:

1. Do not use components such as the preset button and chat list of the SDK. Instead, develop an operation UI using the APIs and notifications provided by the SDK.
2. Alternatively, use a plugin similar to px2rem in the compilation tool to convert PX in the CSS file of the SDK to REM. Adjust the relative size of the font and button by controlling **font-size** on the root node.

7.2.5.4 Change History

Table 7-48 Change history

Date	Change Description
2025-03-12	Changes: The SDK 3.2.0 was released. Compared with the SDK 3.1.0: - Added the APIs getLanguageInfo and changeLanguage and the notification languageInfoChange to switch the language of an interaction task. - Added the following parameters to the API setConfig: firstCreateLocalStream: Whether to create a local stream first. This method is applicable when the virtual avatar's voice volume is low on some Android devices in receiver mode. enableMediaViewer: Whether to enable image preview. You can click an image in the default dialog list to zoom in on the image. - Optimized the default layout of the large-screen interaction page created in the backend. - Added the scope constraint on the CSS style to prevent the integration page from affecting the CSS style or being affected by the CSS style.
2025-02-18	Changes: The SDK 3.1.0 was released. Compared with the SDK 3.0.2, the SDK 3.1.0 has the file HwICSUiSdk.esm.js added and uses the modularized standard esmodule. If the file HwICSUiSdk.js cannot be imported to a project built using Vite, you can import the file HwICSUiSdk.esm.js to integrate the web SDK.
2025-01-14	Changes: The SDK 3.0.2 was released. Compared with the SDK 3.0.1, the SDK 3.0.2 allows voice wakeup to take effect immediately when devices are switched.

Date	Change Description
2024-12-30	Changes: The SDK 3.0.1 was released. Compared with the SDK 2.2.0: • Added the voice wakeup capability (see Web Voice Wakeup). • Added the API initResourcePath to set the voice wakeup algorithm and resource path to ensure that voice wakeup works properly. • Added the parameter enableLocalWakeup to the API setConfig to determine whether to enable voice wakeup. • Added the event of activating a virtual avatar (see enterActive).
2024-12-10	Changes: The SDK 2.2.0 was released. Compared with the SDK 2.1.0: • Added the API sendDrivenText to send text that is to be read by the interactive virtual avatar. • Rectified the error that occurs when the .ts declaration file is loaded in the integrated development environment (IDE).
2024-11-13	Changes: The SDK 2.1.0 was released. Compared with the SDK 2.0.3: • Supported text Q&A. • Add parameters to the API startChat. You can set the interaction mode (speech or text Q&A) by referring to Table 7-37. • Added the APIs activeInteractionMode, interactionModeSwitch, and sendTextQuestion to obtain and set the current interaction mode (speech or text Q&A) and send the question text.
2024-10-08	Changes: The SDK 2.0.3 was released. Compared with the SDK 2.0.2: • Added the APIs startChat and stopChat. • Add the notification enterSleep.

Date	Change Description
2024-08-15	Changes: The SDK 2.0.2 was released. Compared with the SDK 2.0.1: • Added the following parameters to setConfig: – enableBusinessTrack: SDK tracking can be disabled. – enableJobCache: Task cache can be disabled. A new task is created each time the API create is called. – useDefaultBackground: Using the default background image can be disabled to use a custom one. • Added the following APIs to Main Entry (HwICSUiSdk): – startUserSpeak and stopUserSpeak: These two APIs replace the APIs startSpeak and stopSpeak, respectively. The return values of the input parameters remain unchanged. – interruptSpeaking: Interrupts the speaking by the virtual avatar. • Added the parameter websocketAddr to the notification jobInfoChange to assemble the WebSocket request URL used in third-party large model scenarios. • Updated the profile pictures in the subtitle list. • Automatic recovery is supported when the SDK heartbeat times out. • Rectified the error that occurs when the VUE 2 scaffold is introduced to the SDK. • Fixed some bugs and revised some error messages.
2024-06-30	This issue is the first official release.

8 Image Modeling Management

8.1 Creating a Virtual Avatar Model Training Task

Function

Creates a virtual avatar model training task.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/digital-human-training-manage/user/jobs

Table 8-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Request Parameters

Table 8-2 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 8-3 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Virtual avatar model name, which is used as its name in the asset library.
contact	No	String	Contact of the virtual avatar training task creator, for example, mobile number or email address.

Parameter	Mandatory	Type	Description
command_message	No	String	Command type. Options: • UPDATE_VIDEO: updating a video • UPLOAD_VIDEO: uploading a video • CONFIRM_ACTION_VIDEO: confirming the video for choreography • GET_ACTION_VIDEO_MULTIPART: obtaining segments of the video for choreography Value range: 0-64 Default value: UPLOAD_VIDEO
video_multipart_count	No	Integer	Number of uploaded training video segments (These segments are uploaded concurrently, not separately.) Value range: 1-1000 Default value: 1
action_video_multipart_count	No	Integer	Number of uploaded action video segments. Value range: 1-1000 Default value: 1
is_background_replacement	No	Boolean	Indicates whether to replace the background for a virtual avatar. If yes, training videos require green-screen shooting. Default value: true
batch_name	No	String	Batch name of virtual avatar training tasks.
tags	No	Array of strings	Tag of a virtual avatar training task.

Parameter	Mandatory	Type	Description
model_version	No	String	Virtual avatar model version. By default, the V3 model is used. • V2: V2 model • V3: V3 model • V3.2: V3.2 model NOTE • V2 has been discarded. Value range: 0-64 Default value: V3.2
is_flexus	No	Boolean	Whether the image training is of the basic edition Default value: false
audio_source_type	No	String	Audio source. • VIDEO: audio extracted from a video • AUDIO: audio uploaded separately Default value: VIDEO
voice_properties	No	VoiceProperties object	Voice configuration
supported_service	No	Array of strings	Service types supported by the model generated by the task. You can select multiple service types. Default value: [VIDEO_2D,LIVE_2D]

Table 8-4 VoiceProperties

Parameter	Mandatory	Type	Description
job_tag	Yes	String	Task tag. • ECOMMERCE • NEWS • MARKETING

Parameter	Mandatory	Type	Description
sex	Yes	String	Voice gender, which can be male or female. • FEMALE • MALE Default value: FEMALE
language	Yes	String	Training language. Currently, only Chinese is supported. • CN: Chinese • EN: English

Response Parameters

Status code: 200

Table 8-5 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 8-6 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.
training_video_upload_url	Array of strings	URL for uploading a virtual avatar training video. The URL becomes invalid after the file is uploaded. The file can be uploaded only once. Note: The video must be in MP4 format with 1080P or 4K resolution (horizontal or portrait). The video length must range from 3 minutes to 10 minutes. Otherwise, the review will fail.
action_video_upload_url	Array of strings	URL for uploading a virtual avatar training video. The URL becomes invalid after the file is uploaded. The file can be uploaded only once. Note: The video must be in MP4 format with 1080p or 4K resolution (horizontal or portrait). The video length must range from 3 minutes to 10 minutes.

Parameter	Type	Description
audio_upload_url	String	URL for uploading audio data for training. The URL becomes invalid after the file is uploaded. The file can be uploaded only once.
cover_upload_url	String	URL for uploading a model thumbnail. The URL becomes invalid after the file is uploaded. The file can be uploaded only once.
id_card_image_1_upload_url	String	URL for uploading the ID card front-side photo. The URL becomes invalid after the file is uploaded. The file can be uploaded only once. Note: Non-NA users must upload the file. Otherwise, the review will fail.
id_card_image_2_upload_url	String	URL for uploading the ID card back-side photo. The URL becomes invalid after the file is uploaded. The file can be uploaded only once. Note: Non-NA users must upload the file. Otherwise, the review will fail.
grant_file_upload_url	String	URL for uploading the authorization letter. The URL becomes invalid after the file is uploaded. The file can be uploaded only once. Note: Non-NA users must upload the file. Otherwise, the review will fail.

Status code: 400**Table 8-7** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 8-8** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
https://example.com/rest/v1/**/digital-human-training-manage/user/jobs

{
  "name" : "Test Role",
  "contact" : "1*****",
  "video_multipart_count" : 2,
  "is_background_replacement" : true
}
```

Example Responses

Status code: 200

The information is returned when the request succeeded.

```
{
  "job_id" : "efc5300ecdba4ea48d1ff13a9d907bc0",
  "training_video_upload_url" : [ "https://example.com/efc5300ecdba4ea48d1ff13a9d907bc0_trainingVideo?
parma1=XXX&param2=YYY", "https://example.com/efc5300ecdba4ea48d1ff13a9d907bc0_trainingVideo?
parma1=XXX&param2=YYY" ],
  "cover_upload_url" : "https://example.com/efc5300ecdba4ea48d1ff13a9d907bc0_cover?
parma1=XXX&param2=YYY",
  "id_card_image1_upload_url" : "https://example.com/
efc5300ecdba4ea48d1ff13a9d907bc0_idCardImage1_tmp?parma1=XXX&param2=YYY",
  "id_card_image2_upload_url" : "https://example.com/
efc5300ecdba4ea48d1ff13a9d907bc0_idCardImage2_tmp?parma1=XXX&param2=YYY",
  "grant_file_upload_url" : "https://example.com/efc5300ecdba4ea48d1ff13a9d907bc0_grantFile_tmp?
parma1=XXX&param2=YYY"
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	The information is returned when the request succeeded.
400	Parameters error, including the error code and its description.
500	Internal service error.

Error Codes

See [Error Codes](#).

8.2 Querying Virtual Avatar Model Training Tasks

Function

Queries virtual avatar model training tasks.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/digital-human-training-manage/user/jobs

Table 8-9 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Table 8-10 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts. Value range: 0-2147483647 Default value: 0
limit	No	Integer	Number of items displayed on each page. Value range: 1-100 Default value: 10
sort_key	No	String	Sorting field. Options: • create_time: sorting by creation time • update_time: sorting by update time • asset_order: sorting by asset

Parameter	Mandatory	Type	Description
sort_dir	No	String	Sorting mode. • asc: ascending order • desc: descending order asc is used by default.
create_until	No	String	Filter the records whose creation time is not later than the entered time.
create_since	No	String	Filter the records whose creation time is not earlier than the entered time.
state	No	String	Task status. By default, all statuses are selected. Multiple statuses can be queried. Use commas (,) to separate them, for example, state=CREATING,PUBLISHED .
query_project_id	No	String	Queries the tenant ID.
batch_name	No	String	Task batch name.
tag	No	String	Task tag.
job_id	No	String	Task ID.
name	No	String	Virtual avatar model name.
model_resolution	No	String	Model resolution
is_flexus	No	Boolean	Whether the task is a Flexus task.

Request Parameters

Table 8-11 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200**Table 8-12** Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 8-13 Response body parameters

Parameter	Type	Description
count	Integer	Number of virtual avatar model training tasks. Value range: 0-2147483647
jobs	Array of TrainingJobBasicInfo objects	Virtual avatar model training tasks.

Table 8-14 TrainingJobBasicInfo

Parameter	Type	Description
job_id	String	Task ID.
name	String	Virtual avatar model name, which is used as its name in the asset library.

Parameter	Type	Description
state	String	Task status. Options: • WAIT_FILE_UPLOAD: to upload files • AUTO_VERIFYING: auto reviewing... • AUTO_VERIFY_FAILED: Auto review failed. • MANUAL_VERIFYING: manually reviewing... • WAIT_TRAINING_DATA_PREPROCESS: waiting for training data preprocessing... • MANUAL_VERIFY_FAILED: Manual review failed. • MANUAL_VERIFY_SUCCESS: approved and waiting for resource preprocessing • TRAINING_DATA_PREPROCESSING: preprocessing training data... • TRAINING_DATA_PREPROCESS_FAILED: Training data preprocessing failed. • TRAINING_DATA_PREPROCESS_SUCCESS: training data preprocessed and waiting for resource training • TRAINING: training... • TRAIN_FAILED: Training failed. • TRAIN_SUCCESS: training completed and waiting for resource preprocessing • INFERENCE_DATA_PREPROCESSING: preprocessing inference data... • INFERENCE_DATA_PREPROCESS_FAILED: Inference data preprocessing failed. • WAIT_MASK_UPLOAD: waiting for mask upload... • WAIT_MAIN_FILE_UPLOAD: waiting for main file upload... • JOB_SUCCESS: training task completed • MANUAL_STOP_INFERENCE_DATA_PREPROCESS: manually stop inference preprocessing • MANUAL_STOP_TRAIN: manually stop training • MANUAL_STOP_TRAINING_DATA_PREPROCESS: manually stop training preprocessing • WAIT_USER_CONFIRM: waiting for the user to confirm the training result... • JOB_REJECT: task rejected • JOB_PENDING: task suspended

Parameter	Type	Description
		• WAIT_ADMIN_CONFIRM: The task is waiting for the administrator to review. • JOB_FINISH: The task is complete and the status cannot be changed. • COMPILING: compiling... • WAIT_COMPILE: waiting for compilation... • COMPILE_FAILED: Compilation failed. • WAIT_GENERATE_ACTION: waiting for generating an atomic action... • WAIT_ARRANGE: waiting for choreography... • ACTION_GENERATE_DATA_PROCESSING: generating an atomic action... • MANUAL_STOP_ACTION_GENERATE_DATA_PROCESSING: manually terminate action generation • MANUAL_STOP_ACTION_GENERATE_ORI_PROCESSING: manually terminate choreography • ACTION_GENERATE_ORI_PROCESSING: choreographing... • ACTION_GENERATE_DATA_FAILED: Action generation failed. • ACTION_GENERATE_ORI_FAILED: Generating the asset for choreography failed. • ACTION_GENERATE_ORI_SUCCESS: Choreography succeeded. • **GENERATE_ACTION_PREPROCESS_FAILED: Generating the atomic action for choreography failed. • WAIT_ADMIN_CALIBRATION: waiting for the administrator to confirm the action...
asset_id	String	Model asset ID.
project_id	String	Project ID of a model asset.
cover_download_url	String	URL for downloading the virtual avatar model thumbnail. The URL is valid for 24 hours.
last_update_time	String	Indicates the last time when a user updates a task (for example, creates or resubmits a task). The format complies with RFC 3339, for example, 2020-07-30T10:43:17Z.

Parameter	Type	Description
create_time	String	Creation time. The format complies with RFC 3339, for example, 2020-07-30T10:43:17Z.
contact	String	Contact of the virtual avatar training task creator, for example, mobile number or email address.
batch_name	String	Batch name of virtual avatar training tasks.
tags	Array of strings	Tag of a virtual avatar training task.
model_version	String	Virtual avatar model version. The default value is V3 . • V2: V2 model • V3: V3 model Value range: 0-64 Default value: V3.2
matting_type	String	Matting type. The default value is AI . • AI: AI matting • MANUAL: manual matting Default value: AI
model_resolution	String	Virtual avatar model resolution, which defaults to 1080p. • 1080P: 1080p. 1080p or 720p video output is supported. • 4K: 4K. 4K, 1080p, or 720p video output is supported.
app_user_id	String	Customized user ID. This parameter is carried if X-App-UserId is set during task creation.
is_flexus	Boolean	Whether the image training is of the basic edition

Status code: 400

Table 8-15 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error description.

Status code: 500

Table 8-16 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
https://aaa.com/rest/v1/***/digital-human-training-manage/user/jobs?
query_project_id=***&offset=0&limit=10
```

Example Responses

Status code: 200

The information is returned when the request succeeded.

```
{
  "count" : 101,
  "jobs" : [ {
    "job_id" : "646682facddb4912976f19a4d61c6a91",
    "name" : "Name 1",
    "state" : "TRAINING",
    "project_id" : "****",
    "cover_download_url" : "https://example.com/646682facddb4912976f19a4d61c6a91_cover?
param1=XXX&param2=YYY",
    "last_update_time" : "2023-12-09T07:38:09Z",
    "create_time" : "2023-12-08T08:30:56Z",
    "contact" : "1*****",
    "tags" : [ ],
    "model_version" : "V3.2",
    "matting_type" : "AI"
  }, {
    "job_id" : "efc5300ecdba4ea48d1ff13a9d907bc0",
    "name" : "Name 2",
    "state" : "MANUAL_VERIFYING",
    "project_id" : "****",
    "cover_download_url" : "https://example.com/efc5300ecdba4ea48d1ff13a9d907bc0_cover?
param1=XXX&param2=YYY",
    "last_update_time" : "2023-12-09T07:32:46Z",
    "create_time" : "2023-12-09T07:31:37Z",
    "contact" : "1*****",
    "model_version" : "V3",
    "matting_type" : "AI"
  }, {
    "job_id" : "7889dfd55bf14834a35e78c7f0aa0516",
    "name" : "Name 3",
    "state" : "INFERENCE_DATA_PREPROCESS_FAILED",
    "project_id" : "****",
    "cover_download_url" : "https://example.com/7889dfd55bf14834a35e78c7f0aa0516_cover?
param1=XXX&param2=YYY",
```

```
"last_update_time" : "2023-12-09T07:09:02Z",
"create_time" : "2023-12-08T08:34:12Z",
"contact" : "1*****",
"tags" : [ ],
"model_version" : "V3.2",
"matting_type" : "AI"
}, {
  "job_id" : "222509ed63c2498599f519d5ec7ef462",
  "name" : "Name 4",
  "state" : "TRAINING_DATA_PREPROCESS_SUCCESS",
  "project_id" : "****",
  "cover_download_url" : "https://example.com/222509ed63c2498599f519d5ec7ef462_cover?
param1=XXX&param2=YYY",
  "last_update_time" : "2023-12-09T07:08:21Z",
  "create_time" : "2023-12-08T08:33:24Z",
  "contact" : "1*****",
  "tags" : [ ],
  "model_version" : "V3.2",
  "matting_type" : "AI"
}, {
  "job_id" : "dd4a596edc2c44dd881b5e9eff485e21",
  "name" : "Name 5",
  "state" : "TRAINING_DATA_PREPROCESS_SUCCESS",
  "project_id" : "****",
  "cover_download_url" : "https://example.com/dd4a596edc2c44dd881b5e9eff485e21_cover?
param1=XXX&param2=YYY",
  "last_update_time" : "2023-12-09T02:12:01Z",
  "create_time" : "2023-12-08T08:29:25Z",
  "contact" : "1*****",
  "model_version" : "V3.2",
  "matting_type" : "AI"
}, {
  "job_id" : "bf46c9f335b14e84bd028f6acb52686b",
  "name" : "Name 6",
  "state" : "JOB_FINISH",
  "asset_id" : "3174263c6199e0a10d83a257b272ac71",
  "project_id" : "****",
  "cover_download_url" : "https://example.com/bf46c9f335b14e84bd028f6acb52686b_cover?
param1=XXX&param2=YYY",
  "last_update_time" : "2023-12-08T08:37:39Z",
  "create_time" : "2023-11-29T09:39:25Z",
  "contact" : "1*****",
  "model_version" : "V3",
  "matting_type" : "AI"
}, {
  "job_id" : "2f96ddd4fdda40af977c1b1d3b6adca8",
  "name" : "Name 7",
  "state" : "INFERENCE_DATA_PREPROCESS_FAILED",
  "asset_id" : "22741ee4bc4130282835bdc2a4b4ac79",
  "project_id" : "****",
  "cover_download_url" : "https://example.com/2f96ddd4fdda40af977c1b1d3b6adca8_cover?
param1=XXX&param2=YYY",
  "last_update_time" : "2023-12-08T07:26:53Z",
  "create_time" : "2023-10-19T01:13:24Z",
  "contact" : "15312090046",
  "batch_name" : "234",
  "model_version" : "V3",
  "matting_type" : "AI"
}, {
  "job_id" : "e477dcf363234b2f8aa2aad4d8bad46b",
  "name" : "Name 8",
  "state" : "INFERENCE_DATA_PREPROCESS_FAILED",
  "asset_id" : "d36e8df774ae88315911724d4467cb6d",
  "project_id" : "****",
  "cover_download_url" : "https://example.com/e477dcf363234b2f8aa2aad4d8bad46b_cover?
param1=XXX&param2=YYY",
  "last_update_time" : "2023-12-08T01:58:52Z",
  "create_time" : "2023-11-27T06:39:46Z",
  "contact" : "1*****",
```

```
"model_version" : "V3.2",
"matting_type" : "AI"
}, {
  "job_id" : "d8ca20175d5b4ae6b0056c62e4553d36",
  "name" : "Name 9",
  "state" : "INFERENCE_DATA_PREPROCESS_FAILED",
  "asset_id" : "5ff8e2893ffa8ef848050260eb08faa9",
  "project_id" : "****",
  "cover_download_url" : "https://example.com/d8ca20175d5b4ae6b0056c62e4553d36_cover?
param1=XXX&param2=YYY",
  "last_update_time" : "2023-12-04T05:39:24Z",
  "create_time" : "2023-11-06T13:51:09Z",
  "contact" : "1*****",
  "model_version" : "V3.2",
  "matting_type" : "AI"
}, {
  "job_id" : "65e9fb9ac78546268e7d60d5003bfdbc",
  "name" : "Name 10",
  "state" : "INFERENCE_DATA_PREPROCESS_FAILED",
  "asset_id" : "71a0df4bd5966a33818af2b5094cf197",
  "project_id" : "****",
  "cover_download_url" : "https://example.com/65e9fb9ac78546268e7d60d5003bfdbc_cover?
param1=XXX&param2=YYY",
  "last_update_time" : "2023-12-01T07:58:26Z",
  "create_time" : "2023-11-29T11:19:22Z",
  "contact" : "1*****",
  "model_version" : "V3",
  "matting_type" : "AI"
}]
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	The information is returned when the request succeeded.
400	Parameters error, including the error code and its description.
500	Internal service error.

Error Codes

See [Error Codes](#).

8.3 Querying Details About a Virtual Avatar Model Training Task

Function

Queries details of a virtual avatar model training task.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/digital-human-training-manage/user/jobs/{job_id}

Table 8-17 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
job_id	Yes	String	Task ID.

Request Parameters

Table 8-18 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.

Parameter	Mandatory	Type	Description
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 8-19 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 8-20 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.
name	String	Virtual avatar model name, which is used as its name in the asset library.

Parameter	Type	Description
state	String	Task status. Options: • WAIT_FILE_UPLOAD: to upload files • AUTO_VERIFYING: auto reviewing... • AUTO_VERIFY_FAILED: Auto review failed. • MANUAL_VERIFYING: manually reviewing... • WAIT_TRAINING_DATA_PREPROCESS: waiting for training data preprocessing... • MANUAL_VERIFY_FAILED: Manual review failed. • MANUAL_VERIFY_SUCCESS: approved and waiting for resource preprocessing • TRAINING_DATA_PREPROCESSING: preprocessing training data... • TRAINING_DATA_PREPROCESS_FAILED: Training data preprocessing failed. • TRAINING_DATA_PREPROCESS_SUCCESS: training data preprocessed and waiting for resource training • TRAINING: training... • TRAIN_FAILED: Training failed. • TRAIN_SUCCESS: training completed and waiting for resource preprocessing • INFERENCE_DATA_PREPROCESSING: preprocessing inference data... • INFERENCE_DATA_PREPROCESS_FAILED: Inference data preprocessing failed. • WAIT_MASK_UPLOAD: waiting for mask upload... • WAIT_MAIN_FILE_UPLOAD: waiting for main file upload... • JOB_SUCCESS: training task completed • MANUAL_STOP_INFERENCE_DATA_PREPROCESS: manually stop inference preprocessing • MANUAL_STOP_TRAIN: manually stop training • MANUAL_STOP_TRAINING_DATA_PREPROCESS: manually stop training preprocessing • WAIT_USER_CONFIRM: waiting for the user to confirm the training result... • JOB_REJECT: task rejected • JOB_PENDING: task suspended

Parameter	Type	Description
		• WAIT_ADMIN_CONFIRM: The task is waiting for the administrator to review. • JOB_FINISH: The task is complete and the status cannot be changed. • COMPILING: compiling... • WAIT_COMPILE: waiting for compilation... • COMPILE_FAILED: Compilation failed. • WAIT_GENERATE_ACTION: waiting for generating an atomic action... • WAIT_ARRANGE: waiting for choreography... • ACTION_GENERATE_DATA_PROCESSING: generating an atomic action... • MANUAL_STOP_ACTION_GENERATE_DATA_PROCESSING: manually terminate action generation • MANUAL_STOP_ACTION_GENERATE_ORI_PROCESSING: manually terminate choreography • ACTION_GENERATE_ORI_PROCESSING: choreographing... • ACTION_GENERATE_DATA_FAILED: Action generation failed. • ACTION_GENERATE_ORI_FAILED: Generating the asset for choreography failed. • ACTION_GENERATE_ORI_SUCCESS: Choreography succeeded. • **GENERATE_ACTION_PREPROCESS_FAILED: Generating the atomic action for choreography failed. • WAIT_ADMIN_CALIBRATION: waiting for the administrator to confirm the action...
asset_id	String	Model asset ID.
project_id	String	Project ID of a model asset.
cover_download_url	String	URL for downloading the virtual avatar model thumbnail. The URL is valid for 24 hours.
last_update_time	String	Indicates the last time when a user updates a task (for example, creates or resubmits a task). The format complies with RFC 3339, for example, 2020-07-30T10:43:17Z.

Parameter	Type	Description
create_time	String	Creation time. The format complies with RFC 3339, for example, 2020-07-30T10:43:17Z.
contact	String	Contact of the virtual avatar training task creator, for example, mobile number or email address.
batch_name	String	Batch name of virtual avatar training tasks.
tags	Array of strings	Tag of a virtual avatar training task.
model_version	String	Virtual avatar model version. The default value is V3 . • V2: V2 model • V3: V3 model Value range: 0-64 Default value: V3.2
matting_type	String	Matting type. The default value is AI . • AI: AI matting • MANUAL: manual matting Default value: AI
model_resolution	String	Virtual avatar model resolution. The default value is 1080P . • 1080P: supports 1080P and 720P video output. • 4K: supports 4K, 1080P, and 720P video output. Default value: 1080P
app_user_id	String	Customized user ID. This parameter is carried if X-App-UserId is set during task creation.
is_flexus	Boolean	Whether the image training is of the basic edition
training_video_download_url	String	URL for downloading the virtual avatar training video. The URL is valid for 24 hours.
id_card_image_1_download_url	String	URL for downloading the ID card front-side photo. The URL is valid for 24 hours.

Parameter	Type	Description
id_card_image_2_download_url	String	URL for downloading the ID card back-side photo. The URL is valid for 24 hours.
grant_file_download_url	String	URL for downloading the authorization letter. The URL is valid for 24 hours.
action_video_download_url	String	Action video
audio_file_download_url	String	URL for downloading an audio file.
operation_logs	Array of OperationLogInfo objects	Operation logs.
verify_video_matting_info	Array of VerifyVideoMattingInfo objects	Non-cropped area when the crop verification video is being generated.
comment_logs	Array of CommentLogInfo objects	Comment logs.
samples	Array of ActionSampleInfo objects	Action video sample.
is_mask_file_uploaded	Boolean	Indicates whether the mask file is uploaded.
mask_file_download_url	String	URL for downloading the mask. The URL is valid for 24 hours.
verify_video_download_url	String	URL for downloading the video to be reviewed.
markable_video_download_url	String	URL for downloading the tagged video. The URL is valid for 24 hours.
inference_data_process_video_mark_info	InferenceVideoMarkInfo object	Information of virtual avatar inference preprocessing video tag.
inference_data_process_action_mark_info	InferenceActionMarkInfo object	Information of virtual avatar inference preprocessing action tag.
inference_data_process_eye_correction_mark_info	InferenceEyeCorrectionMarkInfo object	Information of virtual avatar inference preprocessing video tag.

Parameter	Type	Description
is_background_replacement	Boolean	Indicates whether to replace the background for a virtual avatar. If yes, training videos require green-screen shooting. Default value: true
worker_type	Array of strings	Compilation task model.
voice_train_job_id	String	Voice training task ID.
flexus_retry_count	Integer	Number of remaining retraining times of a Flexus task. The value decreases by 1 each time the task is retrained. When the value decreases to 0, the task cannot be retrained. Value range: 0-10
audio_source_type	String	Audio source. • VIDEO: audio extracted from a video • AUDIO: audio uploaded separately
supported_service	Array of strings	Service types supported by the model generated by the task. You can select multiple service types. Default value: [VIDEO_2D,LIVE_2D]

Table 8-21 OperationLogInfo

Parameter	Type	Description
operate_time	String	Operation time. The format complies with RFC 3339, for example, 2020-07-30T10:43:17Z.

Parameter	Type	Description
log_type	String	Command output. • USER_CREATE_JOD: Virtual avatar customization started. • USER_VERIFYING_SUBMITTED: video submitted for review • SYSTEM_VERIFY_FAILED: Auto review failed. • SYSTEM_VERIFY_SUCCESS: Auto review succeeded. • ADMIN_VERIFY_SUCCESS: Manually approved. • ADMIN_VERIFY_FAILED: Manual review failed. • SYSTEM_TRAIN_DATA_PREPROCESSING: preprocessing training data... • SYSTEM_TRAIN_DATA_PREPROCESS_FAILED: Preprocessing training data failed. • SYSTEM_TRAIN_DATA_PREPROCESS_SUCCESS: training data preprocessed • SYSTEM_ACTION_GENERATE_DATA_PREPROCESSING: generating the atomic action for choreography... • SYSTEM_ACTION_GENERATE_DATA_SUCCESS: atomic action for choreography generated • SYSTEM_ACTION_GENERATE_ORI_SUCCESS: choreography asset data generated • SYSTEM_ACTION_GENERATE_DATA_FAILED: Generating the atomic action for choreography failed. • SYSTEM_ACTION_GENERATE_ORI_FAILED: Generating the choreography asset data failed. • SYSTEM_ACTION_GENERATE_ORI_PREPROCESSING: generating the choreography asset data... • SYSTEM_TRAINING: Training started. • ADMIN_STOP_TRAINING_DATA_PREPROCESS: manually stop training • ADMIN_STOP_INFERENCE_DATA_PREPROCESS: manually stop inference preprocessing • ADMIN_STOP_TRAIN: manually terminate training • SYSTEM_TRAIN_FAILED: Training failed.

Parameter	Type	Description
		• SYSTEM_TRAIN_SUCCESS: Training succeeded. • SYSTEM_INFERENCE_DATA_PREPROCESSING: preprocessing inference data... • SYSTEM_INFERENCE_DATA_PREPROCESS_FAILED: Inference data preprocessing failed. • SYSTEM_INFERENCE_DATA_PREPROCESS_SUCCESS: inference data preprocessed • SYSTEM_JOB_SUCCESS: task completed • ADMIN_MASK_UPLOADED: mask file uploaded (discarded) • ADMIN_UPDATE_VIDEO: video replacement by administrator • ADMIN_UPDATE_ACTION_VIDEO: replacement of the video for choreography by administrator • ADMIN_RESET: one-click reset by administrator • ADMIN_ACCEPT: approved by administrator • USER_REPAIR: user repairing • SYSTEM_UPDATE_COVER: change the thumbnail • ADMIN_SET_SILENCE_REPEAT_NUM: number of silent rounds set by administrator • SYSTEM_MARKABLE_VIDEO: generate a labeling video • SYSTEM_MASK_VERIFY_VIDEO: generate a verification video • SYSTEM_MASK_VERIFY_VIDEO_SUCCESS: verification video generated • SYSTEM_MASK_VERIFY_VIDEO_FAILED: Verification video generation failed. • SYSTEM_MARKABLE_VIDEO_SUCCESS: labeling video generated • ADMIN_CONFIRM_ACTION: The administrator confirms the action. • ADMIN_STOP_ACTION_GENERATE_DATA_PREPROCESS: manually terminate atomic action generation • ADMIN_STOP_ACTION_GENERATE_ORI_PREPROCESS: manually terminate choreography

Parameter	Type	Description
		• SYSTEM_COMPILE_FAILED: Compilation failed. • SYSTEM_COMPILE_SUCCESS: Compilation succeeded. • SYSTEM_MARKABLE_VIDEO_FAILED: Labeling video generation failed. • ADMIN_UPDATE_COMPILE: The administrator updates the compilation configuration. • ADMIN_UPDATE_INFERENCE_DATA_PROCESS_VIDEO: The administrator updates the time segment information in the inference preprocessing. • SYSTEM_EXECUTE_COMPILE: execute compilation • SYSTEM_MASK_VIDEO_AND_ACTION_TIME_SUCCESS: auto labeled • SYSTEM_MASK_VIDEO_AND_ACTION_TIME_FAILED: Auto labeling failed. • USER_UPDATE_VIDEO: video update by the user • ADMIN_UPDATE_GENERAL_CONFIG: The administrator updates the common configuration. • ADMIN_MASK_ACTION_TIME: labeling by administrator • STOP_COMPILE: manually terminate compilation
log_description	String	Log description, covering review comments if the manual review failed and error messages reported by the DHTS and DHPS.
operate_user	String	Operators. Options: • USER • ADMIN • SYSTEM

Table 8-22 VerifyVideoMattingInfo

Parameter	Type	Description
dx	Integer	X-axis position of the pixel in the upper left corner of the area. Value range: 0-3840
dy	Integer	Y-axis position of the pixel in the upper left corner of the area. Value range: 0-3840
width	Integer	Area width (pixels). Value range: 1-7680
height	Integer	Area height (pixels). Value range: 1-7680
method	String	Resource operation. Options: • RESERVED: video area that does not need to be cropped • DELETE: video area that needs to be cropped • NO_DEGREEN: video area that does not need degreening

Table 8-23 CommentLogInfo

Parameter	Type	Description
operate_time	String	Operation time. The format complies with RFC 3339, for example, 2020-07-30T10:43:17Z.
comment_type	String	• USER_REJECT: Rejection by user. • USER_COMMENT: User comments. • ADMIN_COMMENT: Administrator's reply.
comment_title	String	Title.
comment_message	String	Message.
attachment_download_url	Array of strings	URL for downloading the attachment.

Table 8-24 ActionSampleInfo

Parameter	Type	Description
action_name_zh	String	Atomic action name in Chinese.
action_name_en	String	Atomic action name in English.
action_tag	String	Action tag.
catalog	String	Action category name.
is_selected	Boolean	Whether to select this action. Default value: true
sample_download_url	String	URL for downloading the atomic action sample file. Valid within 24 hours.

Table 8-25 InferenceVideoMarkInfo

Parameter	Type	Description
video_start_time	String	Start time of the inference preprocessing video. Format: HH:MM:SS.mmm.
video_end_time	String	End time of the inference preprocessing video. Format: HH:MM:SS.mmm.

Table 8-26 InferenceActionMarkInfo

Parameter	Type	Description
action_info	Array of ActionMarkItem objects	Actions.

Table 8-27 ActionMarkItem

Parameter	Type	Description
action_start_time	String	Start time of the inference preprocessing video. Format: HH:MM:SS.mmm.
action_end_time	String	End time of the inference preprocessing video. Format: HH:MM:SS.mmm.

Parameter	Type	Description
action_type	String	Action type. Options: • SILENCE • ACTION Value range: 0-64

Table 8-28 InferenceEyeCorrectionMarkInfo

Parameter	Type	Description
eye_correction_start_time	String	Select the start time of inference preprocessing for eye contact correction. Format: HH:MM:SS.mmm.
eye_correction_end_time	String	Select the end time of inference preprocessing for eye contact correction. Format: HH:MM:SS.mmm.

Status code: 400**Table 8-29** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 8-30** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

https://aaa.com/rest/v1/***/digital-human-training-manage/user/jobs/efc5300ecdba4ea48d1ff13a9d907bc0

Example Responses

Status code: 200

The information is returned when the request succeeded.

```
{
  "job_id" : "efc5300ecdba4ea48d1ff13a9d907bc0",
  "name" : "Test Name",
  "state" : "MANUAL_VERIFYING",
  "project_id" : "****",
  "cover_download_url" : "https://example.com/efc5300ecdba4ea48d1ff13a9d907bc0_cover?
param1=XXX&param2=YYY",
  "create_time" : "2023-12-09T07:31:37Z",
  "contact" : "1*****",
  "model_version" : "V3",
  "matting_type" : "AI",
  "model_resolution" : "1080P",
  "training_video_download_url" : "https://example.com/efc5300ecdba4ea48d1ff13a9d907bc0_trainingVideo?
param1=XXX&param2=YYY",
  "id_card_image1_download_url" : "https://example.com/
efc5300ecdba4ea48d1ff13a9d907bc0_idCardImage1?param1=XXX&param2=YYY",
  "id_card_image2_download_url" : "https://example.com/
efc5300ecdba4ea48d1ff13a9d907bc0_idCardImage2?param1=XXX&param2=YYY",
  "grant_file_download_url" : "https://example.com/efc5300ecdba4ea48d1ff13a9d907bc0_grantFile?
param1=XXX&param2=YYY",
  "operation_logs" : [ {
    "operate_time" : "2023-12-09T07:31:37Z",
    "log_type" : "USER_CREATE_JOD",
    "operate_user" : "USER"
  }, {
    "operate_time" : "2023-12-09T07:31:43Z",
    "log_type" : "SYSTEM_MARKABLE_VIDEO",
    "operate_user" : "SYSTEM"
  }, {
    "operate_time" : "2023-12-09T07:31:43Z",
    "log_type" : "USER_VERIFYING_SUBMITTED",
    "operate_user" : "USER"
  }, {
    "operate_time" : "2023-12-09T07:31:43Z",
    "log_type" : "SYSTEM_VERIFY_SUCCESS",
    "operate_user" : "SYSTEM"
  }, {
    "operate_time" : "2023-12-09T07:32:45Z",
    "log_type" : "SYSTEM_MARKABLE_VIDEO_SUCCESS",
    "operate_user" : "SYSTEM"
  } ],
  "comment_logs" : [ ],
  "is_mask_file_uploaded" : false,
  "verify_video_download_url" : "null",
  "markable_video_download_url" : "https://example.com/
efc5300ecdba4ea48d1ff13a9d907bc0_markableData?param1=XXX&param2=YYY",
  "is_background_replacement" : true
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	The information is returned when the request succeeded.
400	Parameters error, including the error code and its description.
500	Internal service error.

Error Codes

See [Error Codes](#).

8.4 Deleting a Virtual Avatar Model Training Task

Function

Deletes a virtual avatar model training task. The videos, ID card photos, authorization files, and model assets related to the training task need to be deleted.

 NOTE

- This API should be called when the task is in one of the following statuses: **WAIT_FILE_UPLOAD, AUTO_VERIFY_FAILED, MANUAL_VERIFYING, MANUAL_VERIFY_FAILED, TRAINING_DATA_PREPROCESS_FAILED, TRAIN_FAILED, INFERENCE_DATA_PREPROCESS_FAILED, JOB_SUCCESS, WAIT_USER_CONFIRM, JOB_REJECT, or JOB_FINISH.**

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v1/{project_id}/digital-human-training-manage/user/jobs/{job_id}

Table 8-31 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
job_id	Yes	String	Task ID.

Request Parameters

Table 8-32 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200**Table 8-33** Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Status code: 400

Table 8-34 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 8-35** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

https://aaa.com/rest/v1/**/digital-human-training-manage/user/jobs/efc5300ecdba4ea48d1ff13a9d907bc0

Example Responses

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	The information is returned when the request succeeded.
400	Parameters error, including the error code and its description.
500	Internal service error.

Error Codes

See [Error Codes](#).

8.5 Updating a Virtual Avatar Model Training Task

Function

Updates a virtual avatar model training task. Training videos and ID photos can be updated if automatic or manual review fails.

NOTE

- This API can be called only in the **AUTO_VERIFY_FAILED** or **MANUAL_VERIFY_FAILED** status.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v1/{project_id}/digital-human-training-manage/user/jobs/{job_id}

Table 8-36 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
job_id	Yes	String	Task ID.

Request Parameters

Table 8-37 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.

Parameter	Mandatory	Type	Description
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 8-38 Request body parameters

Parameter	Mandatory	Type	Description
name	No	String	Virtual avatar model name, which is used as the name of the virtual avatar model asset in the asset library.
contact	No	String	Contact of the virtual avatar training task creator, for example, mobile number or email address.
command_message	No	String	Command type. Options: • UPDATE_VIDEO: updating a video • UPLOAD_VIDEO: uploading a video • CONFIRM_ACTION_VIDEO: confirming the video for choreography • GET_ACTION_VIDEO_MULTIPART: obtaining segments of the video for choreography Value range: 0-64

Parameter	Mandatory	Type	Description
video_multipart_count	No	Integer	Number of uploaded training video segments (These segments are uploaded concurrently, not separately.) Value range: 1-1000 Default value: 1
action_video_multipart_count	No	Integer	Number of uploaded action video segments. Value range: 1-1000
is_background_replacement	No	Boolean	Whether background replacement is required for a virtual avatar. If yes, training videos require green-screen shooting.
batch_name	No	String	Batch name of virtual avatar training tasks.
tags	No	Array of strings	Tag of a virtual avatar training task.
samples_basic_info	No	Array of ActionBasicSampleInfo objects	Information that can be modified in the action video sample.
supported_service	No	Array of strings	Service types supported by the model generated by the task. You can select multiple service types. Default value: [VIDEO_2D,LIVE_2D]
audio_source_type	No	String	Audio source. ● VIDEO: audio extracted from a video ● AUDIO: audio uploaded separately Default value: VIDEO

Table 8-39 ActionBasicSampleInfo

Parameter	Mandatory	Type	Description
action_name_zh	No	String	Atomic action name in Chinese.
action_name_en	No	String	Atomic action name in English.
action_tag	Yes	String	Atomic action tag.
catalog	No	String	Atomic action tag.
is_selected	No	Boolean	Whether to select this action. Default value: true

Response Parameters

Status code: 200

Table 8-40 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 8-41 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.
training_video_upload_url	Array of strings	URL for uploading a virtual avatar training video. The URL becomes invalid after the file is uploaded. The file can be uploaded only once. Note: The video must be in MP4 format with 1080P or 4K resolution (horizontal or portrait). The video length must range from 3 minutes to 10 minutes. Otherwise, the review will fail.
action_video_upload_url	Array of strings	URL for uploading a virtual avatar training video. The URL becomes invalid after the file is uploaded. The file can be uploaded only once. Note: The video must be in MP4 format with 1080p or 4K resolution (horizontal or portrait). The video length must range from 3 minutes to 10 minutes.

Parameter	Type	Description
audio_upload_url	String	URL for uploading audio data for training. The URL becomes invalid after the file is uploaded. The file can be uploaded only once.
cover_upload_url	String	URL for uploading a model thumbnail. The URL becomes invalid after the file is uploaded. The file can be uploaded only once.
id_card_image_1_upload_url	String	URL for uploading the ID card front-side photo. The URL becomes invalid after the file is uploaded. The file can be uploaded only once. Note: Non-NA users must upload the file. Otherwise, the review will fail.
id_card_image_2_upload_url	String	URL for uploading the ID card back-side photo. The URL becomes invalid after the file is uploaded. The file can be uploaded only once. Note: Non-NA users must upload the file. Otherwise, the review will fail.
grant_file_upload_url	String	URL for uploading the authorization letter. The URL becomes invalid after the file is uploaded. The file can be uploaded only once. Note: Non-NA users must upload the file. Otherwise, the review will fail.

Status code: 400**Table 8-42** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500**Table 8-43** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
https://aaa.com/rest/v1/***digital-human-training-manage/user/jobs/efc5300ecdba4ea48d1ff13a9d907bc0
{
  "name" : "Test Role",
  "contact" : "1*****",
  "video_multipart_count" : 2,
  "is_background_replacement" : true
}
```

Example Responses

Status code: 200

The information is returned when the request succeeded.

```
{
  "job_id" : "efc5300ecdba4ea48d1ff13a9d907bc0",
  "training_video_upload_url" : [ "https://example.com/efc5300ecdba4ea48d1ff13a9d907bc0_trainingVideo?
param1=XXX&param2=YYY", "https://example.com/efc5300ecdba4ea48d1ff13a9d907bc0_trainingVideo?
param1=XXX&param2=YYY" ],
  "cover_upload_url" : "https://example.com/efc5300ecdba4ea48d1ff13a9d907bc0_cover?
param1=XXX&param2=YYY",
  "id_card_image1_upload_url" : "https://example.com/
efc5300ecdba4ea48d1ff13a9d907bc0_idCardImage1_tmp?param1=XXX&param2=YYY",
  "id_card_image2_upload_url" : "https://example.com/
efc5300ecdba4ea48d1ff13a9d907bc0_idCardImage2_tmp?param1=XXX&param2=YYY",
  "grant_file_upload_url" : "https://example.com/efc5300ecdba4ea48d1ff13a9d907bc0_grantFile_tmp?
param1=XXX&param2=YYY"
}
```

Status code: 400

```
{
  "error_code" : "MSS.00000003",
  "error_msg" : "Invalid parameter"
}
```

Status code: 500

```
{
  "error_code" : "MSS.00000004",
  "error_msg" : "Internal Error"
}
```

Status Codes

Status Code	Description
200	The information is returned when the request succeeded.
400	Parameters error, including the error code and its description.
500	Internal service error.

Error Codes

See [Error Codes](#).

8.6 Executing a Virtual Avatar Model Training Task as a Tenant

Function

Executes a virtual avatar model training task as a tenant, for example, submitting training videos for review.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/digital-human-training-manage/user/jobs/{job_id}/
command

Table 8-44 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
job_id	Yes	String	Task ID.

Request Parameters

Table 8-45 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.

Parameter	Mandatory	Type	Description
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 8-46 Request body parameters

Parameter	Mandatory	Type	Description
command	Yes	String	Command type. • SUBMITVERIFYING: A video is submitted for review. • CONFIRM_ACCEPT: The user confirms the training result. • CONFIRM_REJECT: The user rejects the training result. • CONFIRM_ANSWER: The user replies. • CONFIRM_PENDING: The user suspends a task. • CONFIRM_ACTIVE: The user activates a task. • GET_MULTIPART_UPLOADED: obtaining the URL for uploading training video segments • CONFIRM_REPAIR: The user initiates a model optimization request. • GET_MULTIPART_UPLOADED: obtaining information about the uploaded training video segments • CONFIRM_MULTIPART_UPLOADED: confirming that all segment files of the training video have been uploaded • GET_ACTION_VIDEO_MULTIPART_UPLOADED: obtaining the URL for uploading segments of the video for choreography • CONFIRM_ACTION_VIDEO_MULTIPART_UPLOADED: checking whether all segments of the video for choreography have been uploaded

Parameter	Mandatory	Type	Description
			NOTE • CONFIRM_ACCEPT, CONFIRM_REJECT, CONFIRM_ANSWER, CONFIRM_PENDING, and CONFIRM_ACTIVE commands are available only for whitelisted NA users. Value range: 0-64
command_message	No	String	Command type. Options: • UPDATE_VIDEO: update a video • UPLOAD_VIDEO: upload a video • CONFIRM_ACTION_VIDEO: confirming the video for choreography • GET_ACTION_VIDEO_MULTIPART: obtain segments of the video for choreography Value range: 0-64 Default value: UPLOAD_VIDEO
comment_data	No	CommentData object	Comment data.

Table 8-47 CommentData

Parameter	Mandatory	Type	Description
comment_title	No	String	Title.
comment_message	No	String	Message.
attachment_name	No	Array of strings	Attachment name.

Response Parameters

Status code: 200

Table 8-48 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID.

Table 8-49 Response body parameters

Parameter	Type	Description
command_result	String	Command execution result. Options: • EXECUTE_SUCCESS: Command execution succeeded. • EXECUTE_FAILED: Command execution failed.
attachment_upload_url	Array of strings	URL for uploading the attachment.
multipart_data	Array of MultipartUploadInfo objects	Information of the uploaded parts of the training video.
execute_failed_msg	String	Description of the command execution failure cause

Table 8-50 MultipartUploadInfo

Parameter	Type	Description
part_number	String	Part number.
etag	String	Part file tag.

Status code: 400**Table 8-51** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500

Table 8-52 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
https://aaa.com/rest/v1/**/digital-human-training-manage/user/jobs/efc5300ecdba4ea48d1ff13a9d907bc0/  
command  
  
{  
  "command" : "CONFIRM_MULTIPART_UPLOADED"  
}
```

Example Responses

Status code: 200

The information is returned when the request succeeded.

```
{  
  "commond_result" : "EXCUTE_SUCCESS"  
}
```

Status code: 400

```
{  
  "error_code" : "MSS.00000003",  
  "error_msg" : "Invalid parameter"  
}
```

Status code: 500

```
{  
  "error_code" : "MSS.00000004",  
  "error_msg" : "Internal Error"  
}
```

Status Codes

Status Code	Description
200	The information is returned when the request succeeded.
400	Parameters error, including the error code and its description.
500	Internal service error.

Error Codes

See [Error Codes](#).

9 Voice Modeling Task Management

9.1 Creating a Voice Training Task (Basic Edition)

Function

This API is used to create a voice training task (basic edition). This API returns an OBS URL for uploading voice files.

Voice files can be uploaded in either of the following ways:

- Compressing voice files and text files into a .zip file for upload: A voice file has been divided into 20 .wav files. Each voice file corresponds to a .txt file. All files are compressed into a .zip file. Voice files are named in the format of *x.wav* (*x* is an integer ranging from 0 to 19). Text files are named in the format of *x.txt* (*x* is an integer ranging from 0 to 19).
- Uploading voice files and text files sentence by sentence: Upload the voice file and text file of a sentence each time, and then call the API for confirming the online recording result to check whether the voice is consistent with the text. After the confirmation, upload and confirm the next sentence.

NOTE

- After the files are uploaded, call the API for submitting a voice training task to start review and training.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/voice-training-manage/user/basic-jobs

Table 9-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Request Parameters

Table 9-2 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 9-3 Request body parameters

Parameter	Mandatory	Type	Description
tag	No	String	Task tag. ● ECOMMERCE ● NEWS ● MARKETING

Parameter	Mandatory	Type	Description
description	No	String	Description, which is displayed in the asset library.
sex	No	String	Voice gender, which can be male or female. • FEMALE • MALE Default value: FEMALE
voice_name	Yes	String	Timbre name. The name is used as the name of the timbre model asset in the asset library.
language	No	String	Training language. Currently, only Chinese is supported. • CN: Chinese • EN: English Default value: CN
create_type	No	String	Task creation mode. • PACKAGE: A .zip file contains all data. • SEGMENT: Data is uploaded sentence by sentence.
phone	No	String	Mobile phone number
dhtms_job_id	No	String	Image modeling task ID
batch_name	No	String	Batch Name

Response Parameters

Status code: 200

Table 9-4 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.

Parameter	Type	Description
training_data_uploading_url	String	URL of the uploaded training data. You need to compress the training data into a .zip file and upload the file to this URL. This parameter is specified when create_type is set to package . NOTE Set content-type to application/zip when uploading files to the OBS URL.
segment_uploading_url	segment_uploading_url object	URL of an upload task sentence by sentence. This parameter is specified when create_type is set to segment .
authorization_letter_uploading_url	String	Upload URL of the authorization letter.

Table 9-5 segment_uploading_url

Parameter	Type	Description
audio_uploading_url	Array of strings	URL for uploading audio files. NOTE Set content-type to audio/wav when uploading files to the OBS URL.
txt_uploading_url	Array of strings	URL for uploading text files. NOTE Set content-type to text/plain when uploading files to the OBS URL.

Status code: 400**Table 9-6** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/3f0924078d1b471c884a5383d4dec9fa/voice-training-manage/user/basic-jobs
{
  "tag": "ECOMMERCE",
  "description": "It is a female voice.",
  "sex": "FEMALE",
```

```
"voice_name" : "Gentle female voice",  
"language" : "CN",  
"create_type" : "PACKAGE"  
}
```

Example Responses

Status code: 200

The information is returned when the request succeeded.

```
{  
  "job_id" : "26f06524-4f75-4b3a-a853-b649a21aaf66",  
  "training_data_uploading_url" : "https://my-bucket/data.zip",  
  "segment_uploading_url" : {  
    "audio_uploading_url" : [ "https://my-bucket/data0.wav" ],  
    "txt_uploading_url" : [ "https://my-bucket/data0.txt" ]  
  },  
  "authorization_letter_uploading_url" : "https://my-bucket/data"  
}
```

Status Codes

Status Code	Description
200	The information is returned when the request succeeded.
400	Invalid parameter.

Error Codes

See [Error Codes](#).

9.2 Creating a Voice Training Task (Advanced Edition)

Function

This API is used to create a voice training task (advanced edition). This API returns an OBS URL for uploading voice files.

Voice files can be uploaded in either of the following ways:

- Compressing voice files and text files into a .zip file for upload: A voice file has been divided into 100 .wav files. Each voice file corresponds to a .txt file. All files are compressed into a .zip file. Voice files are named in the format of x.wav (x is an integer ranging from 0 to 99). Text files are named in the format of x.txt (x is an integer ranging from 0 to 99).
- Uploading voice files and text files sentence by sentence: Upload the voice file and text file of a sentence each time, and then call the API for confirming the online recording result to check whether the voice is consistent with the text. After the confirmation, upload and confirm the next sentence.

 NOTE

- After the files are uploaded, call the API for submitting a voice training task to start review and training.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/voice-training-manage/user/middle-jobs

Table 9-7 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Request Parameters

Table 9-8 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Parameter	Mandatory	Type	Description
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 9-9 Request body parameters

Parameter	Mandatory	Type	Description
tag	No	String	Task tag. • ECOMMERCE • NEWS • MARKETING
description	No	String	Description, which is displayed in the asset library.
sex	No	String	Voice gender, which can be male or female. • FEMALE • MALE Default value: FEMALE
voice_name	Yes	String	Timbre name. The name is used as the name of the timbre model asset in the asset library.
language	No	String	Training language. Currently, only Chinese is supported. • CN: Chinese • EN: English Default value: CN
create_type	No	String	Task creation mode. • PACKAGE: A .zip file contains all data. • SEGMENT: Data is uploaded sentence by sentence.
phone	No	String	Mobile phone number
dhtms_job_id	No	String	Image modeling task ID
batch_name	No	String	Batch Name

Response Parameters

Status code: 200

Table 9-10 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.
training_data_uploading_url	String	URL of the uploaded training data. You need to compress the training data into a .zip file and upload the file to this URL. This parameter is specified when create_type is set to package . NOTE Set content-type to application/zip when uploading files to the OBS URL.
segment_uploading_url	segment_uploading_url object	URL of an upload task sentence by sentence. This parameter is specified when create_type is set to segment .
authorization_letter_uploading_url	String	Upload URL of the authorization letter.

Table 9-11 segment_uploading_url

Parameter	Type	Description
audio_uploading_url	Array of strings	URL for uploading audio files. NOTE Set content-type to audio/wav when uploading files to the OBS URL.
txt_uploading_url	Array of strings	URL for uploading text files. NOTE Set content-type to text/plain when uploading files to the OBS URL.

Status code: 400

Table 9-12 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/3f0924078d1b471c884a5383d4dec9fa/voice-training-manage/user/middle-jobs
{
  "tag": "ECOMMERCE",
  "description": "It is a female voice.",
  "sex": "FEMALE",
  "voice_name": "Gentle female voice",
  "language": "CN",
  "create_type": "PACKAGE"
}
```

Example Responses

Status code: 200

The information is returned when the request succeeded.

```
{
  "job_id": "abcdefg",
  "training_data_uploading_url": "https://my-bucket/data.zip",
  "segment_uploading_url": {
    "audio_uploading_url": [ "https://my-bucket/data0.wav" ],
    "txt_uploading_url": [ "https://my-bucket/data0.txt" ]
  },
  "authorization_letter_uploading_url": "https://my-bucket/data"
}
```

Status Codes

Status Code	Description
200	The information is returned when the request succeeded.
400	Invalid parameter.

Error Codes

See [Error Codes](#).

9.3 Creating a Voice Training Task (Premium Edition)

Function

This API is used to create a voice training task (premium edition). This API returns an OBS URL for uploading voice files.

- The voice file is a long audio file in .wav format.
Only voice files can be compressed into a .zip file for upload.

NOTE

- After the files are uploaded, call the API for submitting a voice training task to start review and training.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/voice-training-manage/user/advance-jobs

Table 9-13 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Request Parameters

Table 9-14 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 9-15 Request body parameters

Parameter	Mandatory	Type	Description
tag	No	String	Task tag. • ECOMMERCE • NEWS • MARKETING
description	No	String	Description, which is displayed in the asset library.

Parameter	Mandatory	Type	Description
sex	No	String	Voice gender, which can be male or female. • FEMALE • MALE Default value: FEMALE
voice_name	Yes	String	Timbre name. The name is used as the name of the timbre model asset in the asset library.
language	No	String	Training language. Currently, only Chinese is supported. • CN: Chinese • EN: English Default value: CN
create_type	No	String	Task creation mode. • PACKAGE: A .zip file contains all data. • SEGMENT: Data is uploaded sentence by sentence.
phone	No	String	Mobile phone number
dhtms_job_id	No	String	Image modeling task ID
batch_name	No	String	Batch Name

Response Parameters

Status code: 200

Table 9-16 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.

Parameter	Type	Description
training_data_uploading_url	String	URL of the uploaded training data. You need to compress the training data into a .zip file and upload the file to this URL. This parameter is specified when create_type is set to package . NOTE Set content-type to application/zip when uploading files to the OBS URL.
segment_uploading_url	segment_uploading_url object	URL of an upload task sentence by sentence. This parameter is specified when create_type is set to segment .
authorization_letter_uploading_url	String	Upload URL of the authorization letter.

Table 9-17 segment_uploading_url

Parameter	Type	Description
audio_uploading_url	Array of strings	URL for uploading audio files. NOTE Set content-type to audio/wav when uploading files to the OBS URL.
txt_uploading_url	Array of strings	URL for uploading text files. NOTE Set content-type to text/plain when uploading files to the OBS URL.

Status code: 400**Table 9-18** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/3f0924078d1b471c884a5383d4dec9fa/voice-training-manage/user/advance-jobs
{
  "tag": "ECOMMERCE",
  "description": "It is a female voice.",
  "sex": "FEMALE",
```

```
"voice_name" : "Gentle female voice",  
"language" : "CN",  
"create_type" : "PACKAGE"  
}
```

Example Responses

Status code: 200

The information is returned when the request succeeded.

```
{  
  "job_id" : "abcdefg",  
  "training_data_uploading_url" : "https://my-bucket/data.zip",  
  "segment_uploading_url" : {  
    "audio_uploading_url" : [ "https://my-bucket/data0.wav" ],  
    "txt_uploading_url" : [ "https://my-bucket/data0.txt" ]  
  },  
  "authorization_letter_uploading_url" : "https://my-bucket/data"  
}
```

Status Codes

Status Code	Description
200	The information is returned when the request succeeded.
400	Invalid parameter.

Error Codes

See [Error Codes](#).

9.4 Querying Voice Training Tasks

Function

Queries voice training tasks.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/voice-training-manage/user/jobs

Table 9-19 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Table 9-20 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts. Value range: 0-2147483647 Default value: 0
limit	No	Integer	Number of items displayed on each page. Value range: 1-100 Default value: 10
create_until	No	String	Filter the records whose creation time is not later than the entered time.
create_since	No	String	Filter the records whose creation time is not earlier than the entered time.
state	No	String	Task status. By default, all statuses are selected. Multiple statuses can be queried. Use commas (,) to separate them. For example, state=FAILED,WAITING.
job_id	No	String	Task ID.
voice_name	No	String	Voice name.
tag	No	String	Task tag.

Parameter	Mandatory	Type	Description
job_type	No	String	Training type. • BASIC: basic edition (20 sentences) • MIDDLE: advanced edition (100 sentences) • ADVANCE: premium edition • THIRD_PARTY: third-party DupDub • THIRD_PARTY_LJZN: third-party AudioX • FLEXUS: Flexus edition, using large model feature extraction

Request Parameters

Table 9-21 Request header parameters

Parameter	Mandatory	Type	Description
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 9-22 Response body parameters

Parameter	Type	Description
count	Integer	Total number of tasks that meet the query criteria. Value range: 0-2147483647
jobs	Array of TrainingJobInfo objects	Virtual avatar model training tasks.

Table 9-23 TrainingJobInfo

Parameter	Type	Description
job_type	String	Training type. ● BASIC: basic edition (20 sentences) ● MIDDLE: advanced edition (100 sentences) ● ADVANCE: premium edition ● THIRD_PARTY: third-party DupDub ● THIRD_PARTY_LJZN: third-party AudioX ● FLEXUS: Flexus edition, using large model feature extraction
job_id	String	Task ID.
app_user_id	String	User ID.
voice_name	String	Timbre name. The name is used as the name of the timbre model asset in the asset library.
sex	String	Gender. ● FEMALE ● MALE
language	String	Language.
state	String	Task status. ● CREATING: The task is being created. ● SYSTEM_AUDITING: The task is being reviewed. ● AUDITING: The task is being manually reviewed. ● WAITING_SPLIT: The task is waiting for trimming. ● SPLITTING: The trimming is in progress. ● SPLIT_FAILED: The trimming failed. ● ANNOTATING: The annotation is in progress. ● WAITING: The task is waiting for training. ● PROCESSING: The task is being trained. ● RESULT_REVIEW: review result ● AUDIT_FAILED: The review failed and the system waits for the user to reupload data. ● FAILED: Task execution failed. ● SUCCEED: The task has been completed.

Parameter	Type	Description
reject_times	Integer	Number of times that the status occurs in the current task. Value range: 1-10
asset_id	String	ID of the timbre model in the asset library. This parameter is displayed when the task status is successful.
job_failed_code	String	An error code is displayed when a task fails.
job_failed_reason	String	The failure cause is displayed when a task fails.
create_time	Long	Task creation time. Value range: 1-2147483647
lastupdate_time	Long	Time when the task status is updated. Value range: 1-2147483647
voice_authorization_url	String	Link to the user's authorization letter.
create_type	String	Task creation mode. ● PACKAGE: A .zip file contains all data. ● SEGMENT: Data is uploaded sentence by sentence.
tag	String	Task tag. ● ECOMMERCE ● NEWS ● MARKETING
phone	String	Mobile phone number
dhtms_job_id	String	Image modeling task ID
batch_name	String	Batch Name

Status code: 400

Table 9-24 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

GET https://{endpoint}/v1/3f0924078d1b471c884a5383d4dec9fa/voice-training-manage/user/jobs

Example Responses

Status code: 200

The information is returned when the request succeeded.

```
{
  "count" : 2147483647,
  "jobs" : [ {
    "job_type" : "BASIC",
    "job_id" : "abcdefg",
    "app_user_id" : "123qwe",
    "voice_name" : "Female voice",
    "sex" : "FEMALE",
    "language" : "CN",
    "state" : "WAITING",
    "asset_id" : "my_asset_id",
    "job_failed_code" : "MSS.00000000",
    "job_failed_reason" : "error reason",
    "create_time" : 2147483647,
    "lastupdate_time" : 2147483647,
    "voice_authorization_url" : "https://bucket/data",
    "create_type" : "PACKAGE",
    "tag" : "ECOMMERCE"
  } ]
}
```

Status Codes

Status Code	Description
200	The information is returned when the request succeeded.
400	Invalid parameter.

Error Codes

See [Error Codes](#).

9.5 Submitting a Voice Training Task

Function

This API is used to submit a training task. After this API is called, task review starts. After the review is complete, the model waits for training.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/voice-training-manage/user/jobs/{job_id}

Table 9-25 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
job_id	Yes	String	Task ID.

Request Parameters

Table 9-26 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.

Parameter	Mandatory	Type	Description
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 9-27 Request body parameters

Parameter	Mandatory	Type	Description
tag	No	String	Task tag. • ECOMMERCE • NEWS • MARKETING
description	No	String	Description, which is displayed in the asset library.
sex	No	String	Voice gender, which can be male or female. • FEMALE • MALE
voice_name	No	String	Timbre name, which is used as the name of the timbre model asset in the asset library.
language	No	String	Training language. Currently, only Chinese is supported. • CN: Chinese • EN: English
phone	No	String	Mobile phone number
app_user_id	No	String	Third-party user ID

Response Parameters

Status code: 400

Table 9-28 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/3f0924078d1b471c884a5383d4dec9fa/voice-training-manage/user/jobs/26f06524-4f75-4b3a-a853-b649a21aaf66
```

Example Responses

None

Status Codes

Status Code	Description
200	OK
400	Abnormal training parameters.

Error Codes

See [Error Codes](#).

9.6 Querying Voice Training Task Details

Function

Queries voice training task details.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/voice-training-manage/user/jobs/{job_id}

Table 9-29 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
job_id	Yes	String	Task ID.

Request Parameters

Table 9-30 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 9-31 Response body parameters

Parameter	Type	Description
job_type	String	Training type. ● BASIC: basic edition (20 sentences) ● MIDDLE: advanced edition (100 sentences) ● ADVANCE: premium edition ● THIRD_PARTY: third-party DupDub ● THIRD_PARTY_LJZN: third-party AudioX ● FLEXUS: Flexus edition, using large model feature extraction
job_id	String	Task ID.
app_user_id	String	User ID.
voice_name	String	Timbre name. The name is used as the name of the timbre model asset in the asset library.
sex	String	Gender. ● FEMALE ● MALE
language	String	Language.
state	String	Task status. ● CREATING: The task is being created. ● SYSTEM_AUDITING: The task is being reviewed. ● AUDITING: The task is being manually reviewed. ● WAITING_SPLIT: The task is waiting for trimming. ● SPLITTING: The trimming is in progress. ● SPLIT_FAILED: The trimming failed. ● ANNOTATING: The annotation is in progress. ● WAITING: The task is waiting for training. ● PROCESSING: The task is being trained. ● RESULT_REVIEW: review result ● AUDIT_FAILED: The review failed and the system waits for the user to reupload data. ● FAILED: Task execution failed. ● SUCCEED: The task has been completed.

Parameter	Type	Description
reject_times	Integer	Number of times that the status occurs in the current task. Value range: 1-10
asset_id	String	ID of the timbre model in the asset library. This parameter is displayed when the task status is successful.
job_failed_code	String	An error code is displayed when a task fails.
job_failed_reason	String	The failure cause is displayed when a task fails.
create_time	Long	Task creation time. Value range: 1-2147483647
lastupdate_time	Long	Time when the task status is updated. Value range: 1-2147483647
voice_authorization_url	String	Link to the user's authorization letter.
create_type	String	Task creation mode. ● PACKAGE: A .zip file contains all data. ● SEGMENT: Data is uploaded sentence by sentence.
tag	String	Task tag. ● ECOMMERCE ● NEWS ● MARKETING
phone	String	Mobile phone number
dhtms_job_id	String	Image modeling task ID
batch_name	String	Batch Name

Status code: 400

Table 9-32 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
GET https://{endpoint}/v1/3f0924078d1b471c884a5383d4dec9fa/voice-training-manage/user/jobs/26f06524-4f75-4b3a-a853-b649a21aaf66
```

Example Responses

Status code: 200

The information is returned when the request succeeded.

```
{
  "job_type": "BASIC",
  "job_id": "abcdefg",
  "app_user_id": "123qwe",
  "voice_name": "Female voice",
  "sex": "FEMALE",
  "language": "CN",
  "state": "WAITING",
  "asset_id": "my_asset_id",
  "job_failed_code": "MSS.00000000",
  "job_failed_reason": "error reason",
  "create_time": 2147483647,
  "lastupdate_time": 2147483647,
  "voice_authorization_url": "https://bucket/data",
  "create_type": "PACKAGE",
  "tag": "ECOMMERCE"
}
```

Status Codes

Status Code	Description
200	The information is returned when the request succeeded.
400	Abnormal training parameters.

Error Codes

See [Error Codes](#).

9.7 Deleting a Voice Training Task

Function

Deletes a voice training task.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v1/{project_id}/voice-training-manage/user/jobs/{job_id}

Table 9-33 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
job_id	Yes	String	Task ID.

Request Parameters

Table 9-34 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when the request is sent. This parameter is mandatory for AK/SK authentication. The format is YYYYMMDD'T'HHMMSS'Z'.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 400

Table 9-35 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
DELETE https://{endpoint}/v1/3f0924078d1b471c884a5383d4dec9fa/voice-training-manage/user/jobs/26f06524-4f75-4b3a-a853-b649a21aaf66
```

Example Responses

None

Status Codes

Status Code	Description
200	The information is returned when the request succeeded.
400	Abnormal training parameters.

Error Codes

See [Error Codes](#).

9.8 Querying Task Operation Logs

Function

Queries task operation logs.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/voice-training-manage/user/jobs/{job_id}/op-logs

Table 9-36 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
job_id	Yes	String	Task ID.

Table 9-37 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts. Value range: 0-2147483647 Default value: 0
limit	No	Integer	Number of items displayed on each page. Value range: 1-100 Default value: 10

Request Parameters

None

Response Parameters

Status code: 200

Table 9-38 Response body parameters

Parameter	Type	Description
count	Integer	Total number of operation logs that meet the query criteria Value range: 0-2147483647
operations	Array of OperationLogItem objects	Operation Log List

Table 9-39 OperationLogItem

Parameter	Type	Description
time	Long	Operation time Value range: 0-2147483647
action	String	Operation name. The existing actions can be CREATE_JOB (create a task), COMMIT_JOB (submit a task), SYSTEM_AUDIT_PASS (approval by the system), or ADMIN_AUDIT_PASS (approval by the administrator). AUDIT_NOT_PASS (approval failed), MOUNTING_FINISH (training completed), UPLOADING_MODEL (uploading voice model), COMPLETE_JOB (task completed)
operator	String	Operator, USER (user), ADMIN (administrator), SYSTEM (user)
external_info	OpExternalInfo object	Additional information about operation logs.

Table 9-40 OpExternalInfo

Parameter	Type	Description
review_id_list	Array of strings	Review detail IDs

Status code: 400**Table 9-41** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
200	OK
400	Abnormal training parameters

Error Codes

See [Error Codes](#).

9.9 Obtaining the URL for Uploading a Voice File

Function

Obtains the URL for uploading a voice file.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/voice-training-manage/user/jobs/{job_id}/uploading-address-url

Table 9-42 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
job_id	Yes	String	Task ID.

Request Parameters

None

Response Parameters

Status code: 200

Table 9-43 Response body parameters

Parameter	Type	Description
segment_url	segment_url object	URL of an upload task by sentence.
package_url	package_url object	URL for uploading an entire package.
authorization_letter_uploading_url	String	Upload URL of the authorization letter.

Table 9-44 segment_url

Parameter	Type	Description
audio_uploading_url	Array of strings	URL for uploading audio files. NOTE Set content-type to audio/wav when uploading files to the OBS URL.
txt_uploading_url	Array of strings	URL for uploading text files. NOTE Set content-type to text/plain when uploading files to the OBS URL.

Table 9-45 package_url

Parameter	Type	Description
training_data_uploading_url	String	URL of the uploaded training data. You need to compress the training data into a .zip file and upload the file to this URL. NOTE Set content-type to application/zip when uploading files to the OBS URL.

Status code: 400**Table 9-46** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
GET https://{endpoint}/v1/3f0924078d1b471c884a5383d4dec9fa/voice-training-manage/user/jobs/26f06524-4f75-4b3a-a853-b649a21aaf66/uploading-address-url
```

Example Responses

Status code: 200

The information is returned when the request succeeded.

```
{
  "segment_url" : {
    "audio_uploading_url" : [ "https://my-bucket/data0.wav" ],
    "txt_uploading_url" : [ "https://my-bucket/data0.txt" ]
  },
  "package_url" : {
    "training_data_uploading_url" : "https://my-bucket/data.zip"
  },
  "authorization_letter_uploading_url" : "https://my-bucket/data"
}
```

Status Codes

Status Code	Description
200	The information is returned when the request succeeded.
400	Training exception.

Error Codes

See [Error Codes](#).

9.10 Obtaining the Review Result of a Voice Training Task

Function

Obtains the review result of a voice training task.

Calling Method

For details, see [Calling APIs](#).

URI

```
GET /v1/{project_id}/voice-training-manage/user/jobs/{job_id}/audit-result
```

Table 9-47 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
job_id	Yes	String	Task ID.

Request Parameters

None

Response Parameters

Status code: 200

Table 9-48 Response body parameters

Parameter	Type	Description
system_audit_result	system_audit_result object	Auto review result.
admin_audit_result	admin_audit_result object	Administrator review result.

Table 9-49 system_audit_result

Parameter	Type	Description
audit_time	Long	Operation time. Value range: 0-2147483647
errors	Array of errors objects	Error list.

Table 9-50 errors

Parameter	Type	Description
audio_name	String	Audio file name.
text_name	String	Text file name.
error_code	String	Error code.

Parameter	Type	Description
error_message	String	Error information.

Table 9-51 admin_audit_result

Parameter	Type	Description
message	String	Review information.
attachment_name	String	Attachment name.
attachment_url	String	URL for downloading the attachment.
audit_time	Long	Operation time. Value range: 0-2147483647

Status code: 400**Table 9-52** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
GET https://{endpoint}/v1/3f0924078d1b471c884a5383d4dec9fa/voice-training-manage/user/jobs/26f06524-4f75-4b3a-a853-b649a21aaf66/audit-result
```

Example Responses

Status code: 200

The information is returned when the request succeeded.

```
{
  "system_audit_result" : {
    "audit_time" : 123,
    "errors" : [ {
      "audio_name" : "audio_0.wav",
      "text_name" : "text_0.txt",
      "error_code" : "MSS.12345678",
      "error_message" : "error description"
    } ]
  },
}
```

```
"admin_audit_result" : {  
  "message" : "message",  
  "attachment_name" : "attachment_file_name",  
  "attachment_url" : "https://attachment_download_url",  
  "audit_time" : 123  
}
```

Status Codes

Status Code	Description
200	The information is returned when the request succeeded.
400	Training exception.

Error Codes

See [Error Codes](#).

9.11 Confirming the Online Recording Result

Function

Confirms the online recording result.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/voice-training-manage/user/training-segment

Table 9-53 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Table 9-54 Query Parameters

Parameter	Mandatory	Type	Description
job_id	Yes	String	Task ID.

Parameter	Mandatory	Type	Description
index	Yes	Integer	Statement index. Value range: 0-1024

Request Parameters

None

Response Parameters

Status code: 200

Table 9-55 Response body parameters

Parameter	Type	Description
confirm_result	Boolean	Whether the confirmation is successful.
unmatched_in_dex_hit	Array of integers	Text index that does not match the explanation. Value range: 0-4096

Status code: 400

Table 9-56 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
POST https://{endpoint}/v1/3f0924078d1b471c884a5383d4dec9fa/voice-training-manage/user/training-segment?job_id=26f06524-4f75-4b3a-a853-b649a21aaf66&index=1
```

Example Responses

Status code: 200

OK

```
{  
  "confirm_result": false,
```

```
"unmatched_index_hit" : [ 4096 ]  
}
```

Status Codes

Status Code	Description
200	OK
400	Invalid parameter.

Error Codes

See [Error Codes](#).

9.12 Obtaining the Confirmed Online Recording Result

Function

Obtains the confirmed online recording result.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/voice-training-manage/user/training-segment

Table 9-57 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Table 9-58 Query Parameters

Parameter	Mandatory	Type	Description
job_id	Yes	String	Task ID.

Request Parameters

None

Response Parameters

Status code: 200

Table 9-59 Response body parameters

Parameter	Type	Description
confirmed_index	Array of integers	Confirmed statement index. Value range: 0-1024

Status code: 400

Table 9-60 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Example Requests

```
GET https://{endpoint}/v1/3f0924078d1b471c884a5383d4dec9fa/voice-training-manage/user/training-segment?job_id=26f06524-4f75-4b3a-a853-b649a21aaf66
```

Example Responses

Status code: 200

OK

```
{  
  "confirmed_index" : [ 1 ]  
}
```

Status Codes

Status Code	Description
200	OK
400	Invalid parameter.

Error Codes

See [Error Codes](#).

10 TTS Management

10.1 Creating a TTS Preview Task

Function

Generates an audio file to preview the content to be broadcasted. Third-party timbre preview is charged. For details about the billing standard, see <https://marketplace.huaweicloud.com/intl/contents/939bf377-3005-472b-a4e2-383911e6102f>.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/ttsc/audition

Table 10-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Request Parameters

Table 10-2 Request header parameters

Parameter	Mandatory	Type	Description
X-Request-Id	No	String	Request ID, which identifies the request of one stream and is used for fault tracing and locating. You are advised to use a UUID. If this parameter is not carried, a request ID is automatically generated.
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when a request is sent. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 10-3 Request body parameters

Parameter	Mandatory	Type	Description
text	Yes	String	Text to be composited.
emotion	Yes	String	Timbre ID.

Parameter	Mandatory	Type	Description
speed	No	Integer	Speaking speed. The value defaults to 100 and ranges from 50 to 200 . NOTE 100 indicates the normal speaking speed of an adult, which is about 250 words per minute. 50 indicates 0.5x speaking speed, 100 indicates normal speaking speed, and 200 indicates 2x speaking speed. Value range: 50-200 Default value: 100
pitch	No	Integer	Pitch. The value defaults to 100 and ranges from 50 to 200 . Value range: 50-200 Default value: 100
volume	No	Integer	Volume. The value defaults to 140 and ranges from 90 to 240 . Value range: 90-240 Default value: 140

Response Parameters

Status code: 200

Table 10-4 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.

Status code: 400

Table 10-5 Response body parameters

Parameter	Type	Description
error_code	String	Return code. ● MSS.000000001: failure ● MSS.000000002: internal error ● MSS.000000003: invalid parameter ● MSS.000000004: invalid access. The access is not authenticated or fails to be authenticated.
error_msg	String	Return result description
request_id	String	Unique ID of the request.

Status code: 500**Table 10-6** Response body parameters

Parameter	Type	Description
error_code	String	Return code. ● MSS.000000001: failure ● MSS.000000002: internal error ● MSS.000000003: invalid parameter ● MSS.000000004: invalid access. The access is not authenticated or fails to be authenticated.
error_msg	String	Return result description
request_id	String	Unique ID of the request.

Example Requests

```
POST https://{endpoint}/v1/3f0924078d1b471c884a5383d4dec9fa/ttsc/audition
{
  "text" : "Hello, everyone. I'm Sarah.",
  "emotion" : "376f46b0a21e435f92247a6e9f82857f",
  "speed" : 100,
  "pitch" : 100,
  "volume" : 140
}
```

Example Responses

Status code: 200

Succeeded.

```
{  
  "job_id" : "26f06524-4f75-4b3a-a853-b649a21aaf66"  
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Invalid parameter.
500	Server error.

Error Codes

See [Error Codes](#).

10.2 Obtaining a TTS Preview File

Function

Obtains the download URL of the TTS preview file. The returned list contains the preview file that has been generated.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/ttsc/audition-file/{job_id}

Table 10-7 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .
job_id	Yes	String	Task ID.

Request Parameters

Table 10-8 Request header parameters

Parameter	Mandatory	Type	Description
X-Request-Id	No	String	Request ID, which identifies the request of one stream and is used for fault tracing and locating. You are advised to use a UUID. If this parameter is not carried, a request ID is automatically generated.
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. You can obtain the token by calling the IAM API used to obtain a user token. Value of X-Subject-Token in the response header.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Time when a request is sent. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Response Parameters

Status code: 200

Table 10-9 Response body parameters

Parameter	Type	Description
is_file_complete	Boolean	Whether the preview file has been generated. If this parameter is set to false , this API needs to be called every 5 seconds to obtain the preview file.

Parameter	Type	Description
message	String	Error message.
files	Array of AuditionFile objects	List of preview files.

Table 10-10 AuditionFile

Parameter	Type	Description
download_url	String	Link for downloading a preview file. The validity period is one hour.

Status code: 400**Table 10-11** Response body parameters

Parameter	Type	Description
error_code	String	Return code. ● MSS.000000001: failure ● MSS.000000002: internal error ● MSS.000000003: invalid parameter ● MSS.000000004: invalid access. The access is not authenticated or fails to be authenticated.
error_msg	String	Return result description
request_id	String	Unique ID of the request.

Status code: 500

Table 10-12 Response body parameters

Parameter	Type	Description
error_code	String	Return code. ● MSS.000000001: failure ● MSS.000000002: internal error ● MSS.000000003: invalid parameter ● MSS.000000004: invalid access. The access is not authenticated or fails to be authenticated.
error_msg	String	Return result description
request_id	String	Unique ID of the request.

Example Requests

```
GET https://{endpoint}/v1/3f0924078d1b471c884a5383d4dec9fa/ttsc/audition-file/a60fe9d851f84036a5b7cfc3b0c1339e
```

Example Responses

Status code: 200

Succeeded.

```
{
  "is_file_complete" : true,
  "files" : [ {
    "download_url" : "https://aaa"
  }, {
    "download_url" : "https://bbb"
  } ]
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Invalid parameter.
500	Server error.

Error Codes

See [Error Codes](#).

11 Appendix

11.1 Status Codes

Table 11-1 describes the status codes that may be returned when a MetaStudio API is called.

Table 11-1 Status codes

Status Code	Description
200 OK	The request has succeeded.
201 Created	The request for creating a resource has been fulfilled.
202 Accepted	The request has been accepted for handling, but the handling has not been completed.
204 No Content	The request has been fulfilled, but the HTTP response does not contain a response body.
400 Bad Request	The request is invalid. Do not retry the request before modifying it.
401 Unauthorized	The status code is returned after the client provides the authentication information, indicating that the authentication information is incorrect or invalid.
403 Forbidden	The request has been rejected. The server has received and understood the request but it refused to respond, because the request is set to deny access. Do not retry the request before modifying it.
404 Not Found	The requested resource cannot be found. Do not retry the request before modifying it.

Status Code	Description
405 Method Not Allowed	The request contains one or more methods not allowed for the resource. Do not retry the request before modifying it.
406 Not Acceptable	The server cannot fulfill the request sent by the client according to its content characteristics.
407 Proxy Authentication Required	This status code is similar to 401, but the client must first authenticate itself with the proxy.
408 Request Timeout	The client failed to send a request to the server within the time limit. The client may repeat the request without modifying it at any time later.
409 Conflict	The request cannot be handled due to a conflict with the status of the resource. This status code indicates that the resource that the client is attempting to create already exists, or that the requested update cannot be fulfilled due to the conflict.
500 Internal Server Error	The server is able to receive but unable to understand the request.
501 Not Implemented	The server does not support the requested function.
502 Bad Gateway	The server that acts as a gateway or proxy received an invalid request from a remote server.
503 Service Unavailable	The requested service is invalid. Do not retry the request before modifying it.
504 Gateway Timeout	A gateway timeout error occurred.

11.2 Error Codes

If an error code starting with APIGW is returned after you call an API, rectify the fault by referring to the instructions provided in [API Gateway Error Codes](#).

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.45000001	The file is missing.	Asset file missing.	Check whether the role model is valid in the user request parameters.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.45000002	Error environment.	Error environment.	This error is not triggered currently. Ignore it.
400	MSS.45000003	Unsupported video.	Unsupported uploaded video.	Check whether the user video is complete and whether there are error frames.
400	MSS.45000004	Unsupported asset type.	Unsupported asset type.	Determine the specific unsupported uploaded file based on the description.
400	MSS.45000005	Unsupported image.	Unsupported uploaded background image.	Check whether the background image is supported.
400	MSS.45000006	Process initialization failed.	Process initialization failed.	This error is not triggered currently. Ignore it.
400	MSS.45000007	Download failed. (Additional information such as the URL may appear.)	Invalid download URL.	Check whether the download URL is valid based on the error description.
400	MSS.45000008	Unsupported audio.	Unsupported audio.	This error is not triggered currently. Ignore it.
400	MSS.45000009	Invalid RTMP URL.	Invalid RTMP URL.	Check the RTMP URL.
400	MSS.450000010	RTMP stream push failed.	RTMP stream push interrupted.	Check whether the RTMP URL is normal.
400	MSS.450000011	Video size too large.	The uploaded video cannot be larger than 1 GB.	Upload a smaller video file.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.4500001 2	Too many images.	Too many foreground images uploaded. Upload up to 100 images.	Upload fewer images.
400	MSS.4500001 3	Unsupported image format.	Unsupported image format.	Change the image format to a supported one.
400	MSS.4500001 4	Image parsing failed.	Some uploaded foreground images cannot be parsed.	Replace the images that cannot be parsed.
400	MSS.4500001 5	Unsupported JSON format of the task.	Unsupported format of the task content delivered by the MPS service.	Contact technical support.
400	MSS.4500001 6	External error of the TTS service.	Incorrect text in the user's script.	Rectify the fault following the error message.
400	MSS.4500001 7	File reading failed.	Read the ONNX file failed.	Contact technical support.
400	MSS.4500001 8	Incorrect frame sequence number of the model file.	Incorrect frame sequence number of the model file.	This error is not triggered currently. Ignore it.
400	MSS.4500001 9	Decompress the file failed.	Decompress the model file failed.	Contact technical support.
400	MSS.4500002 0	The image resolution exceeds 4K.	The resolution of the uploaded image exceeds 4K, which is not supported.	Upload an image of lower resolution.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.45000021	External inference error.	Initialize the inference module failed.	Contact technical support.
400	MSS.45000022	Models of different types cannot be used together.	The landscape model and the portrait model cannot be used together.	Use models of the same type.
400	MSS.45000023	The customer does not join the RTC room for a long time.	Operations such as closing the page will cause exit from the RTC room. After the timeout interval expires, the worker automatically ends the task.	Ask the user not to close the page for a long time.
500	MSS.45001000	Undefined internal error.	Internal service error.	Contact technical support.
500	MSS.45001001	TTS task request failed.	TTS request failed.	Contact technical support.
500	MSS.45001002	No joiner watches the livestream for a long time.	Join the RTC room failed.	Contact technical support.
500	MSS.45001004	HuBERT Base model not found.	HuBERT Base model not found.	Contact technical support.
500	MSS.45001005	Model initialization failed.	Model initialization failed.	Contact technical support.
500	MSS.45001006	Inference error.	Inference error.	Contact technical support.
500	MSS.45001007	Parse the task information provided by MPS failed.	Parse the task information provided by MPS failed.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.45001008	Invalid model file type.	Invalid model file type.	Contact technical support.
400	MSS.47030001	Knowledge base not found.	Knowledge base not found.	Query with a valid knowledge base ID.
400	MSS.47030004	Duplicate knowledge base ID bound to the role.	Duplicate knowledge base ID bound to the role.	Do not bind a duplicate knowledge base ID to the role.
400	MSS.47030005	Duplicate knowledge base type bound to the role.	Duplicate knowledge base type bound to the role.	Do not bind a duplicate knowledge base type to the role.
400	MSS.47030006	Unsupported knowledge base type.	Unsupported knowledge base type.	Use a valid knowledge base type.
400	MSS.47030007	The knowledge base type does not match.	The knowledge base type does not match.	Bind a knowledge base ID with a matched knowledge base type.
400	MSS.47030008	Q&A library name already exists.	Q&A library name already exists.	Use a new Q&A library name.
400	MSS.47030009	Too many Q&A libraries.	Too many Q&A libraries.	Reduce the number of Q&A libraries.
400	MSS.47030010	Too many Q&A pairs.	Too many Q&A pairs.	Reduce the number of Q&A pairs.
400	MSS.47030011	Q&A pair not found.	Q&A pair not found.	Use a correct Q&A pair ID.
400	MSS.47030013	Empty Q&A pair ID.	Empty Q&A pair ID.	Use a correct Q&A pair ID.
400	MSS.47030014	Too many similar questions.	Too many similar questions.	Reduce the number of similar questions.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47030015	Standard question already exists.	Standard question already exists.	Each standard question should be unique.
400	MSS.47030016	The Q&A pair is not belong to the Q&A library	The Q&A pair is not belong to the Q&A library	Leave the Q&A pair ID blank or enter a correct Q&A pair ID.
400	MSS.47030018	Similar question too long.	Similar question too long.	Shorten the similar question.
400	MSS.47030019	Invalid format of the similar question.	Invalid format of the similar question.	Set the similar question in a valid format.
400	MSS.47030020	Similar question already exists.	Similar question already exists.	Each similar question should be unique.
400	MSS.47030021	The standard question and similar question are the same.	The standard question and similar question are the same.	The standard question and similar question cannot be the same.
400	MSS.47030022	Empty Q&A pair list.	Empty Q&A pair list.	Provide correct Q&A pair information in the list.
400	MSS.47030023	Too many Q&A pairs in the list.	Too many Q&A pairs in the list.	Reduce the number of Q&A pairs in the list.
400	MSS.47030024	Import the Q&A pair failed.	Import the Q&A pair failed.	Contact technical support.
400	MSS.47030025	Delete the knowledge base failed.	Delete the knowledge base failed.	Contact technical support.
400	MSS.47030026	Delete the Q&A pair failed.	Delete the Q&A pair failed.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47030027	The configuration failed the review due to sensitive information in the input content.	The configuration failed the review due to sensitive information in the input content.	Modify the configuration and delete sensitive information.
400	MSS.47030041	Too many roles.	Too many roles.	Reduce the number of roles.
400	MSS.47030042	Role not found.	Role not found.	Use a correct role ID.
400	MSS.47030043	No permission to access the role configuration.	No permission to access the role configuration.	Access the role configuration of the current tenant.
400	MSS.47030044	Role service configuration for this language already exists.	Role service configuration for this language already exists.	Provide the role service configuration for another language.
400	MSS.47030045	Role service configuration not found.	Role service configuration not found.	Enter a valid role service configuration ID.
400	MSS.47030047	The role name already exists	The role name already exists	Configure an role name that does not exist.
400	MSS.47030048	The count of question answer library with role business exceeds the upper limit	The count of question answer library with role business exceeds the upper limit	The number of Q&A libraries associated with the role business cannot exceed the upper limit.
400	MSS.47030049	The count of document library with role business exceeds the upper limit	The count of document library with role business exceeds the upper limit	The number of document libraries associated with the interaction assistant cannot exceed the upper limit

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47030050	Duplicate role business language exist	Duplicate role business language exist	The language associated with the service configuration of the role must be unique
400	MSS.47030051	role prompt is empty	role prompt is empty	Configure a correct prompt word for the role.
400	MSS.47030053	The language of the role service configuration does not match the knowledge base language.	The language of the role service configuration does not match the knowledge base language.	Associate the role service configuration with a knowledge base that matches the language.
400	MSS.47030064	Unsupported language type.	Unsupported language type.	Use a supported language type.
400	MSS.47030065	Document library name already exists.	Document library name already exists.	Use a new document library name.
400	MSS.47030066	Too many knowledge bases.	Too many knowledge bases.	Reduce the number of knowledge bases.
400	MSS.47030070	Empty file.	Empty file.	Upload a valid file.
400	MSS.47030071	Invalid file name.	Invalid file name.	Use a valid file name.
400	MSS.47030072	Invalid file format.	Invalid file format.	Use a valid file type.
400	MSS.47030073	Invalid file size.	Invalid file size.	Check the file size.
400	MSS.47030074	File already exists.	File already exists.	Select another file.
400	MSS.47030075	File not found.	File not found.	Contact technical support.
400	MSS.47030077	File upload failed.	File upload failed.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47030078	Invalid Excel file format.	Invalid Excel file format.	Select another file.
400	MSS.47030079	Invalid number of rows in the Excel file.	Invalid number of rows in the Excel file.	Check the number of rows in the file.
400	MSS.47030080	Unsupported document segmentation status.	Unsupported document segmentation status.	Try again later.
400	MSS.47030081	Document segmentation task not found.	Document segmentation task not found.	Contact technical support.
400	MSS.47030082	Document preview failed.	Document preview failed.	Contact technical support.
400	MSS.47030083	document segment start failed	document segment start failed	Contact technical support.
400	MSS.47030084	File content is empty	File content is empty	Select the correct document.
400	MSS.47030085	The count of document exceeds the upper limit	The count of document exceeds the upper limit	Contact technical support.
400	MSS.47030086	document segment param chunkType invalid	document segment param chunkType invalid	Set the parameters correctly.
400	MSS.47030087	document segment param separators invalid	document segment param separators invalid	Contact technical support.
400	MSS.47030088	update document segment info failed	update document segment info failed	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47030089	document segment not support edit	document segment not support edit	Contact technical support.
400	MSS.47030090	list document segment info failed	list document segment info failed	Contact technical support.
400	MSS.47030091	Delete document segment failed.	Delete document segment failed.	Contact technical support.
400	MSS.47030100	Too many LLM configurations	Too many LLM configurations	Reduce the number of LLM configurations.
400	MSS.47030101	LLM configuration name already exists.	LLM configuration name already exists.	Use a new LLM configuration name.
400	MSS.47030102	Invalid LLM URL format.	Invalid LLM URL format.	Configure the LLM URL in a valid format.
400	MSS.47030103	LLM configuration not found.	LLM configuration not found.	Use a valid LLM configuration ID.
400	MSS.47030105	The large language model config has been used by role	The large language model config has been used by role	Cancel the association between the large language model configuration and the interaction assistant role.
400	MSS.47030106	Failed to chat with large language model	Failed to chat with large language model	Check whether the interaction assistant configuration is correct.
400	MSS.47030107	The large language model config id is empty	The large language model config id is empty	Enter a correct large language model configuration ID.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47030110	The count of plugin config exceeds the upper limit	The count of plugin config exceeds the upper limit	The number of configured plug-ins cannot exceed the upper limit.
400	MSS.47030111	The plugin provider already exists	The plugin provider already exists	Select a plug-in configuration vendor that has not been configured
400	MSS.47030112	Invalid plugin provider	Invalid plugin provider	Configure a correct plug-in configuration vendor.
400	MSS.47030113	Invalid plugin address	Invalid plugin address	Configure the correct plug-in configuration address
400	MSS.47030114	The plugin config does not exist	The plugin config does not exist	Enter a correct plug-in configuration ID
400	MSS.47030116	Duplicate plugin config type exist	Duplicate plugin config type exist	The interaction assistant role cannot be associated with duplicate plug-in configuration types
400	MSS.47030117	The plugin config id is empty	The plugin config id is empty	Enter a correct plug-in configuration ID
400	MSS.47030118	Invalid plugin type	Invalid plugin type	Configure a correct plug-in configuration type
400	MSS.47030119	The weather query plugin is not support	The weather query plugin is not support	Select the correct weather plug-in
400	MSS.47030120	The web search plugin is not support	The web search plugin is not support	Select the correct network search plug-in.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.4703012 1	The default weather query plugin is not support	The default weather query plugin is not support	Contact technical support
400	MSS.4703012 2	The default web search plugin is not support	The default web search plugin is not support	Contact technical support
403	MSS.4703000 2	No permission to access the knowledge base configuration.	No permission to access the knowledge base configuration.	Access the knowledge base configuration of the current tenant.
403	MSS.4703000 3	The knowledge base has been used by a role.	The knowledge base has been used by a role.	Unbind the knowledge base from the role.
403	MSS.4703001 2	No permission to access the Q&A pair configuration.	No permission to access the Q&A pair configuration.	Access the Q&A pair configuration of the current tenant.
403	MSS.4703004 6	No permission to access the role service configuration.	No permission to access the role service configuration.	Access the role service configuration of the current tenant.
403	MSS.4703006 8	No permission to access the document library configuration.	No permission to access the document library configuration.	Access the document library configuration of the current tenant.
403	MSS.4703007 6	No permission to perform file operations.	No permission to perform file operations.	Contact technical support.
403	MSS.4703010 4	No permission to access the LLM configuration.	No permission to access the LLM configuration.	Access the LLM configuration of the current tenant.

Status Code	Error Codes	Error Message	Description	Solution
403	MSS.47030115	No permission to access the plugin configuration	No permission to access the plugin configuration	Access the plug-in configuration of the tenant
403	MSS.47030123	The plugin config has been used by role	The plugin config has been used by role	Please disassociate the plug-in configuration from the interaction assistant role
500	MSS.47030060	Internal handling error.	Internal handling error.	Contact technical support.
500	MSS.47030061	Access the database failed.	Access the database failed.	Contact technical support.
500	MSS.47030062	Call content review failed.	Call content review failed.	Contact technical support.
400	MSS.00020004	Project ID not found.	Empty project ID in the tenant account token.	Check whether the account token was obtained properly.
400	MSS.00020005	Tenant information not found.	Tenant information not found.	Users need to access the virtual avatar service page or interface once.
400	MSS.00020012	Insufficient total quota.	The quota allocated to the user exceeds the total quota.	Reduce the quota allocated.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.0002500 1	Incorrect resource allocation.	Incorrect resource allocation by the SP.	1. Check whether the parameters called for the SP to allocate resources are abnormal. 2. Check whether the allocatable quota of the SP exceeds their maximum allocatable quota.
400	MSS.0002500 2	Too many resources activated.	Quantity of resources activated by the SP exceeds the resource quantity.	Reduce the quantity of resources to activate.
400	MSS.0002500 3	Resource has expired. (The current time is later than the latest resource activation time.)	Resource activated by the SP has expired. The current time is later than the resource expiration time.	Check whether the resource has expired. If yes, activate other normal resources.
400	MSS.0002500 4	Insufficient quota.	The quantity of pay-per-use resources allocated by the SP exceeds their maximum allocable quota.	Check the remaining resources in the pay-per-use resource package. Allocate other resources or make purchases.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.00025006	Insufficient SP resources.	The quantity of allocated or reclaimed resources exceeds the maximum allocatable or reclaimable quota.	Reduce the number of resources to allocate or reclaim.
400	MSS.00025008	The customer name already exists in the SP.	The current customer has been associated with another SP.	Contact the customer to check whether the customer has been associated with another SP. If yes, contact the SP to disassociate the customer and try again.
401	MSS.00020002	Token parsing failed.	Token parsing failed.	Obtain the token of the IAM account again and try again.
401	MSS.00020010	No administrator permissions.	Only an administrator can call the administrator URL.	Apply for becoming an administrator.
401	MSS.00022007	Account blacklisted.	The account is blacklisted and the API calling is restricted.	Contact the operations personnel to remove the account from the blacklist.
401	MSS.00023001	Insufficient permissions.	The parameters in the token are invalid or the required permissions are insufficient.	Check whether the account token is normal and whether the account token has the corresponding permissions.

Status Code	Error Codes	Error Message	Description	Solution
401	MSS.00023003	The account is frozen or restricted.	The account is frozen or restricted.	Check whether the account is restricted. If you have any questions, contact technical support.
403	MSS.00020006	The project ID in the token does not match that in the path.	The project ID in the token does not match that in the path.	Check whether the token and project ID in the API call belong to the same user project.
403	MSS.00020009	Invalid parameters.	Invalid parameters.	Refer to the API document to check parameters.
403	MSS.00020011	Insufficient quota.	Insufficient purchased resource quantity or quota.	1. Check whether the purchased resources are sufficient. 2. Check whether the allocated quota is sufficient.
403	MSS.00022001	Insufficient virtual avatar image modeling quota.	Insufficient virtual avatar image modeling quota.	Increase the virtual avatar image modeling quota.
403	MSS.00022002	Insufficient visual motion capture time.	Insufficient visual motion capture time.	Check the resource quantity.
403	MSS.00022003	Insufficient livestream quota.	Insufficient livestream quota.	Check the resource quantity.
403	MSS.00022004	Insufficient video production quota.	Insufficient video production quota.	Check the resource quantity.
403	MSS.00022005	Insufficient TTSA content.	Insufficient TTSA content.	Check the resource quantity.
403	MSS.00022006	About to expire.	About to expire.	Check the resource quantity.

Status Code	Error Codes	Error Message	Description	Solution
403	MSS.00022008	Statement not signed.	You have not signed the privacy statement for your account.	Sign the privacy statement before calling the API.
403	MSS.00022009	Account frozen.	IAM account frozen.	Check whether the IAM account is frozen.
403	MSS.00022010	Real-name authentication not completed.	The IAM account has not completed real-name authentication.	Complete real-name authentication for the account.
403	MSS.00024001	Privilege not found.	You do not have the permission to call the API.	Check whether the account has the permission to call the API. If not, contact the operations personnel to apply for the permission.
403	MSS.00024002	Quota not found.	Quota not found.	Contact technical support.
403	MSS.00024003	The app user does not have the permission.	App user authentication failed.	Contact technical support.
403	MSS.00025005	SP permission not found.	SP permission not found.	Assign the user the SP permission.
500	MSS.00020001	Internal server error.	Internal server error.	Contact technical support.
500	MSS.00020007	Obtain lock failed.	Obtain lock failed.	Contact technical support.
500	MSS.00021002	CBC order not found.	CBC order not found.	Contact technical support.
500	MSS.00021003	Resource to be unfrozen does not exist.	Resource to be unfrozen does not exist.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.00021004	Resource to be deleted does not exist.	Resource to be deleted does not exist.	Contact technical support.
500	MSS.00021005	CBC unfreezing failed.	CBC unfreezing failed.	Contact technical support.
500	MSS.00021006	CBC deletion failed.	CBC deletion failed.	Contact technical support.
500	MSS.00021008	CBC resource unavailable.	CBC resource unavailable.	Contact technical support.
500	MSS.00021009	Resource not found.	Resource not found.	Contact technical support.
500	MSS.00021010	Resource to be frozen does not exist.	Resource to be frozen does not exist.	Contact technical support.
500	MSS.00021011	Resource not found.	Resource type not found.	Contact technical support.
500	MSS.00021012	CBC subscription failed.	CBC subscription failed.	Contact technical support.
500	MSS.00021014	IAM calling error.	IAM calling error.	Contact technical support.
500	MSS.00021015	Generate the certificate failed.	Generate the certificate failed.	Contact technical support.
500	MSS.00021016	Token verification failed.	Token verification failed.	Obtain a valid token.
500	MSS.00021101	Create asset information from CBC failed.	Call the CBC API failed.	Contact technical support.
500	MSS.00021103	Create asset information from SMN failed.	Call the SMN API failed.	Contact technical support.
500	MSS.00021104	Freeze the deposit failed.	Freeze the deposit failed.	Top up the account.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.00021105	Risk control verification failed.	Risk control verification failed.	Contact technical support.
500	MSS.000212001	Clear DAC resources failed.	Clear DAC resources failed.	Contact technical support.
500	MSS.000212002	Set asset quota in DAC failed.	Set asset quota in DAC failed.	Contact technical support.
500	MSS.000212004	Set VdsQuotas in CJMS failed.	Set VdsQuotas in CJMS failed.	Contact technical support.
500	MSS.000212005	Request BLS failed.	Request BLS failed.	Contact technical support.
500	MSS.000212006	The CJMS usage reaches the upper limit.	The CJMS usage reaches the upper limit.	Contact technical support.
500	MSS.000212007	Set the MPS quota failed.	Set the MPS quota failed.	Contact technical support.
500	MSS.000212008	Set the quota on VCMS failed.	Set the quota on VCMS failed.	Contact technical support.
500	MSS.000212009	Set the quota on DHTM failed.	Set the quota on DHTM failed.	Contact technical support.
500	MSS.00025007	Customer information not found.	Customer information not found.	Log in to the MetaStudio console.
500	MSS.00025009	User associated with an SP.	User associated with an SP.	Unbind the user from the original SP.
500	MSS.00025010	The tenant is an SP.	The tenant is already an SP.	Remove the SP permission of the user.
503	MSS.00020003	MongoDB operation failed.	Execute the SQL statement failed.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
503	MSS.00020008	Service unavailable.	Connection failed.	Contact technical support.
503	MSS.00021001	IAM unavailable.	Connect to IAM failed.	Contact technical support.
503	MSS.00021102	CBC unavailable.	Connect to CBC failed.	Contact technical support.
503	MSS.00023002	Invalid quota configuration.	Invalid quota configuration parameters.	Modify the parameters.
500	MSS.42000007	Virtual human inference failed.	Virtual human inference failed.	Contact technical support.
400	MSS.47010001	Dialog not found.	Dialog not found.	Use a correct dialog ID.
400	MSS.47010011	Task ID already exists.	Task ID already exists.	Try again later or contact technical support.
400	MSS.47010019	Too many skills.	Too many skills.	Contact technical support to increase the maximum quantity.
400	MSS.47010020	Skill name already exists.	Skill name already exists.	Use a new skill name.
400	MSS.47010021	Skill ID already exists.	Skill ID already exists.	Use a new skill ID.
400	MSS.47010022	Skill not found.	Skill not found.	Use a correct skill ID.
400	MSS.47010024	Q&A pair topic already exists.	Q&A pair topic already exists.	Configure another topic.
400	MSS.47010026	Too many Q&A pairs.	Too many Q&A pairs.	Contact technical support to increase the maximum quantity.
400	MSS.47010027	Q&A pair not found.	Q&A pair not found.	Use a correct question ID.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47010029	Question already exists.	Question already exists.	Set a new question.
400	MSS.47010030	Question not found.	Question not found.	Use a correct question ID.
400	MSS.47010032	Empty question list.	Empty question list.	Enter a correct question list.
400	MSS.47010033	Application name already exists.	Application name already exists.	Use a new application name.
400	MSS.47010034	Application not found.	Application not found.	Use a correct application ID.
400	MSS.47010041	Activation code not found.	Activation code not found.	Use a correct activation code ID or configure a new activation code.
400	MSS.47010049	Slider verification code not found.	Slider verification code not found.	Obtain another slider verification code.
400	MSS.47010050	Slider verification failed.	Slider verification failed.	Use another slider verification code.
400	MSS.47010051	Too many failures of slider verification.	Too many failures of slider verification.	Obtain another slider verification code.
400	MSS.47010052	Activation code already exists.	Activation code already exists.	Only one activation code can be configured for each robot.
400	MSS.47010054	The agency is not found and cannot be removed.	The agency is not found and cannot be removed.	Contact technical support.
400	MSS.47010059	Dialog ID already exists.	Dialog ID already exists.	Use a new dialog ID.
400	MSS.47010060	Greeting not found.	Greeting not found.	Use a correct greeting ID.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.4701006 2	Greeting already exists.	Greeting already exists.	Only one greeting can be configured for each robot.
400	MSS.4701006 4	Too many alternative questions.	Too many alternative questions.	Contact technical support to increase the maximum quantity.
400	MSS.4701006 5	Dialog task ends abnormally.	Dialog task ends abnormally.	Contact technical support.
400	MSS.4701006 6	Frequently asked question not found.	Frequently asked question not found.	Use a valid frequently asked question ID for query or check whether the frequently asked question is correctly set.
400	MSS.4701006 8	Too many frequently asked questions.	Too many frequently asked questions. Contact the development team.	Contact technical support.
400	MSS.4701006 9	Frequently asked question already exists.	Frequently asked question already exists.	Set another frequently asked question.
400	MSS.4701007 1	The configuration failed the review due to sensitive information in the input content.	The configuration failed the review due to sensitive information in the input content.	Modify the configuration and delete sensitive information.
400	MSS.4701007 2	Empty Q&A pair list.	Empty Q&A pair list.	Use correct Q&A pair information.
400	MSS.4701007 3	Too many Q&A pairs in the list.	Too many Q&A pairs in the list.	Reduce the number of Q&A pairs in the list.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47010074	Import the Q&A pair failed.	Import the Q&A pair failed.	Modify the import configuration according to the failure cause.
400	MSS.47010075	Empty Q&A pair ID.	Empty Q&A pair ID.	Use a correct Q&A pair ID.
400	MSS.47010076	Empty parameter sisHotWords.	Empty parameter sisHotWords.	Use a correct sisHotWords.
400	MSS.47010077	Keyword record already exists.	Keyword record already exists.	Only one keyword record can be created for the same region or language.
400	MSS.47010078	The queried keyword record is not found or does not allow for access.	The queried keyword record is not found or does not allow for access.	Check the keyword record and permission.
400	MSS.47010080	The request parameter does not contain vocabularyId.	The request parameter does not contain vocabularyId.	Use a correct vocabularyId.
400	MSS.47010081	The request parameter does not contain sisProjectId.	The request parameter does not contain sisProjectId.	Use a correct sisProjectId.
400	MSS.47010082	The request parameter does not contain language.	The request parameter does not contain language.	Use a correct language.
400	MSS.47010090	Empty app ID.	Empty app ID.	Use a correct app ID.
400	MSS.47010091	Empty App Key.	Empty App Key.	Use a correct App Key.
400	MSS.47010092	Empty App Secret.	Empty App Secret.	Use a correct App Secret.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47010093	Invalid App Type.	Invalid App Type.	Use a correct App Type.
400	MSS.47010094	Empty DupDub configuration.	Empty DupDub configuration.	Use a correct DupDub configuration.
400	MSS.47010095	Invalid Region.	Invalid Region.	Use a correct Region.
400	MSS.47010097	Invalid CBS project ID.	Invalid CBS project ID.	Use a correct CBS project ID.
400	MSS.47010098	Application creation failed due to the empty role ID.	Application creation failed due to the empty role ID.	Use a correct role ID.
400	MSS.47010102	Empty robot ID.	Empty robot ID.	Use a correct robot ID.
400	MSS.47010110	CBS application verified but there is no agency.	CBS application verified but there is no agency.	No agency for the CBS application. Create an agency to ensure good functionality.
400	MSS.47010129	Invalid interaction interconnection type.	Invalid interaction interconnection type.	Use a correct interaction interconnection type.
400	MSS.47010130	Empty third-party language model configuration.	Empty third-party language model configuration.	Use a correct third-party language model configuration.
400	MSS.47010131	Empty third-party language model URL.	Empty third-party language model URL.	Use a correct third-party language model URL.
400	MSS.47010134	Invalid third-party language model URL.	Invalid third-party language model URL.	Configure a valid third-party language model URL.
400	MSS.47010135	Invalid end-of-sentence pause.	Invalid end-of-sentence pause.	Configure a valid end-of-sentence pause.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47010137	Invalid permission type.	Invalid permission type.	Use a valid permission type.
400	MSS.47010140	Invalid SIS Region.	Invalid SIS Region.	Use a valid SIS Region.
400	MSS.47010143	Language unsupported.	Language unsupported.	Select a supported language.
400	MSS.47010149	Unsupported ASR type.	Unsupported ASR type.	Configure a valid ASR type.
400	MSS.47010152	Invalid extended parameter format.	Invalid extended parameter format.	Use a valid extended parameter format.
400	MSS.47010153	Property not found.	Property not found.	No need to handle.
400	MSS.47010154	Hold message already exists.	Hold message already exists. Modify it and try again.	Modify it and try again.
400	MSS.47010155	Too many hold messages.	Too many hold messages. Contact the administrator.	Contact the administrator.
400	MSS.47010156	Hold message not found.	Hold message not found. Contact the administrator.	Contact the administrator.
400	MSS.47010158	Unsupported intent.	Unsupported intent. Contact the administrator.	Contact the administrator.
400	MSS.47010159	Hold message too long.	Hold message too long. Contact the administrator.	Contact the administrator.
400	MSS.47010160	Invalid hold message type.	Invalid hold message type. Contact the administrator.	Contact the administrator.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47010163	Application not associated with an interactive dialog room ID.	Application not associated with an interactive dialog room ID.	Application not associated with an interactive dialog room ID.
400	MSS.47010202	SDK resources for voice wakeup not found.	SDK resources for voice wakeup not found.	Ensure that there are SDK resources for voice wakeup in the OBS bucket and the information is correct.
400	MSS.47010203	Insufficient resources for voice wakeup in the current dialog.	Insufficient resources for voice wakeup in the current dialog.	Ensure that there are sufficient resources for voice wakeup.
400	MSS.47010204	Invalid OS parameter type.	Invalid OS parameter type.	Configure the parameter osType correctly.
400	MSS.47010206	Verification failed. Check the application information.	Verification failed. Check the application information.	Verification failed. Check the application information.
400	MSS.47010208	The application type does not match the application information.	The application type does not match the application information.	The application type does not match the application information. Check whether the type is iFLYTEK Spark.
400	MSS.47010209	The application type does not match the application information.	The application type does not match the application information.	The application type does not match the application information. Check whether the type is AIUI.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47010211	The dialog requires iFLYTEK app approval.	The dialog requires iFLYTEK app approval.	The dialog requires iFLYTEK app approval.
400	MSS.47010220	Empty smart brain configuration.	Empty smart brain configuration.	Configure the smart brain correctly.
401	MSS.47010043	Activation code authentication failed.	Activation code authentication failed.	Use a valid activation code to log in.
401	MSS.47010046	Authentication using a one-off authentication code failed.	Authentication using a one-off authentication code failed.	Use a valid one-off authentication code.
401	MSS.47010105	Invalid token information.	Invalid token information.	Use a valid token.
403	MSS.47010009	No permission to access.	No permission to access.	Use an API on which you have the permission.
403	MSS.47010023	No permission to access the skill configuration.	No permission to access the skill configuration.	Access the skill configuration of the current tenant.
403	MSS.47010028	No permission to access the Q&A pair configuration.	No permission to access the Q&A pair configuration.	Access the Q&A pair configuration of the current tenant.
403	MSS.47010031	No permission to access the question configuration.	No permission to access the question configuration.	Access the question configuration of the current tenant.
403	MSS.47010035	No permission to access the application configuration.	No permission to access the application configuration.	Access the application configuration of the current tenant.

Status Code	Error Codes	Error Message	Description	Solution
403	MSS.47010042	No permission to access the activation code configuration.	No permission to access the activation code configuration.	Access the activation code configuration of the current tenant.
403	MSS.47010044	Too many activation code authentication failures. This operation is not allowed currently.	Too many activation code authentication failures. This operation is not allowed currently.	Use a valid activation code to log in after the account is unlocked.
403	MSS.47010045	Activation code expired.	Activation code expired.	Contact technical support to reset the validity period of the activation code.
403	MSS.47010047	Too many failures of authentication using a one-off authentication code. This operation is not allowed currently.	Too many failures of authentication using a one-off authentication code. This operation is not allowed currently.	Use a valid one-off authentication code to log in after the account is unlocked.
403	MSS.47010058	No permission for this agency operation.	No permission for this agency operation.	Use an account with the Security Administrator permission.
403	MSS.47010061	No permission to access the greeting configuration.	No permission to access the greeting configuration.	Access the greeting configuration of the current tenant.
403	MSS.47010063	No permission to view the dialog information.	No permission to view the dialog information.	View dialog information of the current tenant.

Status Code	Error Codes	Error Message	Description	Solution
403	MSS.47010067	No permission to access the frequently asked question configuration.	No permission to access the frequently asked question configuration.	Access the frequently asked question configuration of the current tenant.
403	MSS.47010088	No permission to access this tenant ID.	No permission to access this tenant ID.	Use a valid tenant ID.
403	MSS.47010142	No permission to use this application type.	No permission to use this application type.	Use a valid application type.
403	MSS.47010151	Too many uploaded log files.	Too many uploaded log files.	Try again later or contact technical support.
403	MSS.47010157	No permission to configure a hold message.	No permission to configure a hold message. Contact the administrator.	Contact the administrator.
403	MSS.47010210	The verification service is busy. Please try again later.	The verification service is busy. Please try again later.	The verification service is busy. Please try again later.
429	MSS.47010004	Requests are sent too frequently.	Requests are sent too frequently.	Do not send requests frequently.
500	MSS.47010003	System handling failed.	System handling failed.	Contact technical support.
500	MSS.47010005	Query the tenant information failed.	Query the tenant information failed.	N/A

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.47010006	Subscribed resource expired and the dialog task is disabled.	Subscribed resource expired and the dialog task is disabled.	Top up your account.
500	MSS.47010007	Read data failed.	Read data failed.	Contact technical support.
500	MSS.47010008	Tenant data cleared and the task is stopped.	Tenant data cleared and the task is stopped.	N/A
500	MSS.47010025	Create the Q&A pair topic ID failed.	Create the Q&A pair topic ID failed.	Contact technical support.
500	MSS.47010036	Export the skill configuration failed.	Export the skill configuration failed.	Contact technical support.
500	MSS.47010037	Start the intelligent interaction task failed.	Start the intelligent interaction task failed.	Contact technical support.
500	MSS.47010038	End the intelligent interaction task failed.	End the intelligent interaction task failed.	Contact technical support.
500	MSS.47010039	Query intelligent interaction tasks failed.	Query intelligent interaction tasks failed.	Contact technical support.
500	MSS.47010040	Update the intelligent interaction task failed.	Update the intelligent interaction task failed.	Contact technical support.
500	MSS.47010048	Generate the slider verification code failed.	Generate the slider verification code failed.	Contact technical support.
500	MSS.47010053	Create the agency failed.	Create the agency failed.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.47010055	Query agencies failed.	Query agencies failed.	Contact technical support.
500	MSS.47010056	Query tenant IDs failed.	Query tenant IDs failed.	Contact technical support.
500	MSS.47010070	Content review failed.	Content review failed.	Contact technical support.
500	MSS.47010083	Delete the agency failed.	Delete the agency failed.	Contact technical support.
500	MSS.47010100	Internal error.	Internal error.	Contact technical support.
500	MSS.47010161	Perform operations on OBS failed.	Perform operations on OBS failed.	Contact technical support.
500	MSS.47010170	Dialog ending timed out.	Dialog ending timed out.	Contact technical support.
500	MSS.47010205	Verification failed. Try again later.	Verification failed. Try again later.	Verification failed. Try again later.
400	MSS.47010096	Invalid CBS agency.	Invalid CBS agency.	Check whether the CBS agency is normal.
400	MSS.47010103	Dialog request failed due to an unsupported operation.	Dialog request failed due to an unsupported operation.	Carry a supported operation command in the dialog request.
400	MSS.47010106	Establish a dialog connection failed due to invalid parameters.	Establish a dialog connection failed due to invalid parameters.	The request for establishing a dialog connection must contain correct parameter information.
400	MSS.47010109	Start the dialog failed because the dialog is not in the waitConnect status.	Start the dialog failed because the dialog is not in the waitConnect status.	This is an internal error and does not affect the service. No action is required.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47010114	Third-party text control failed because the text length exceeds the maximum.	Third-party text control failed because the text length exceeds the maximum.	Ensure supported text length for third-party text control.
400	MSS.47010115	Third-party text control failed because the value of the parameter seq is lower than the minimum value.	Third-party text control failed because the value of the parameter seq is lower than the minimum value.	Ensure the correct parameter seq for third-party text control.
400	MSS.47010116	Unsupported operation command.	Unsupported operation command.	Use a supported operation command.
400	MSS.47010117	The parameter payload carried in the dialog request is empty.	The parameter payload carried in the dialog request is empty.	Carry the correct parameter payload in the dialog request.
400	MSS.47010118	The parameter data carried in the dialog request is empty.	The parameter data carried in the dialog request is empty.	Carry the correct parameter data in the dialog request.
400	MSS.47010123	Dialog stopped.	Dialog stopped.	N/A
400	MSS.47010128	Invalid role ID of DupDub.	Invalid role ID of DupDub.	Configure a valid role ID.
400	MSS.47010132	Unsupported application type.	Unsupported application type.	Use a supported application.
400	MSS.47010133	Dialog with the LLM failed.	Dialog with the LLM failed.	Contact technical support.
400	MSS.47010145	Question text too long.	Question text too long.	Shorten the question text.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47010146	Empty question text.	Empty question text.	Fill in question text.
400	MSS.47010148	Invalid interaction type.	Invalid interaction type.	Invalid interaction type. Check the parameters.
400	MSS.47010150	Too many requests sent to Mobvoi.	Too many requests sent to Mobvoi.	Contact Mobvoi to increase the maximum concurrency.
400	MSS.47015007	The application type of the dialog task is not third-party control.	The application type of the dialog task is not third-party control.	Set the application type of the dialog task to third-party control.
400	MSS.47015008	The application type of the dialog task is AIUI but does not match the configured application information.	The application type of the dialog task is AIUI but does not match the configured application information.	Check the configuration.
400	MSS.47015009	The application type of the dialog task is iFLYTEK Spark but does not match the configured application information.	The application type of the dialog task is iFLYTEK Spark but does not match the configured application information.	Check the configuration.
400	MSS.47015011	Empty media service address.	Empty media service address.	Contact technical support.
400	MSS.47015016	Text for avatar control too long.	Text for avatar control too long.	Text for avatar control too long.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47015018	Mobvoi ASR authentication failed. Check whether the account and AppSecret are correct.	Mobvoi ASR authentication failed. Check whether the account and AppSecret are correct.	Mobvoi ASR authentication failed. Check whether the account and AppSecret are correct.
401	MSS.47010127	DupDub authentication failed.	DupDub authentication failed.	Check the DupDub configuration.
401	MSS.47015013	Authentication failed.	Check the authentication information.	Authentication failed. Check whether the authentication information is correct.
403	MSS.47010144	Not in text mode.	Not in text mode.	The interaction mode is not in text mode. Check the mode.
403	MSS.47010147	Text Q&A is not allowed in the current status.	Text Q&A is not allowed in the current status.	Text Q&A is not allowed in the current status.
403	MSS.47015005	Too many WebSocket connections of the task.	Too many WebSocket connections of the task.	Contact technical support.
403	MSS.47015006	Too many WebSocket connections of the instance.	Too many WebSocket connections of the instance.	Contact technical support.
403	MSS.47015010	Start the dialog with third-party control failed.	Start the dialog with third-party control failed.	Check the application type of the dialog or select a supported control mode.
403	MSS.47015014	There is ongoing text control. Please wait.	There is ongoing text control. Please wait.	There is ongoing text control. Please wait.

Status Code	Error Codes	Error Message	Description	Solution
403	MSS.47015015	ASR is unavailable due to arrears. Contact the administrator.	ASR is unavailable due to arrears. Contact the administrator.	ASR is unavailable due to arrears. Contact the administrator.
403	MSS.47015017	This operation is not supported by a third-party large model that controls the virtual avatar. Try with the control API.	This operation is not supported by a third-party large model that controls the virtual avatar. Try with the control API.	This operation is not supported by a third-party large model that controls the virtual avatar. Try with the control API.
500	MSS.47010002	RPC request command not found.	RPC request command not found.	Contact technical support.
500	MSS.47010101	Message parsing failed.	Message parsing failed.	Contact technical support.
500	MSS.47010104	The connection to the third-party app timed out.	The connection to the third-party app timed out.	Check whether the third-party app is correctly configured or contact technical support.
500	MSS.47010107	Error information returned by the third-party app.	Error information returned by the third-party app.	Contact technical support.
500	MSS.47010111	Starting the dialog failed because the worker has been disconnected.	Starting the dialog failed because the worker has been disconnected.	Contact technical support.
500	MSS.47010112	Send the dialog message failed.	Send the dialog message failed.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.47010119	channelRecord of pod communication not found.	channelRecord of pod communication not found.	Try again. If the error persists for a long time, contact technical support.
500	MSS.47010120	Insufficient interaction authorization of iFLYTEK.	Insufficient interaction authorization of iFLYTEK.	Contact iFLYTEK customer service.
500	MSS.47010121	Insufficient interaction tokens of iFLYTEK.	Insufficient interaction tokens of iFLYTEK.	Contact iFLYTEK customer service.
500	MSS.47010122	Internal RPC communication failed.	Internal RPC communication failed.	Try again or contact technical support.
500	MSS.47010124	AIUI configuration authentication failed.	AIUI configuration authentication failed.	Contact the administrator.
500	MSS.47010125	Spark configuration authentication failed.	Spark configuration authentication failed.	Contact the administrator.
500	MSS.47010126	Insufficient access times or authorization tokens of DupDub.	Insufficient access times or authorization tokens of DupDub.	Contact the administrator to add authorization tokens.
500	MSS.47010136	Incorrect configuration in iFLYTEK application scenarios.	Incorrect configuration in iFLYTEK application scenarios.	Contact the administrator.
500	MSS.47010141	SIS agency error.	SIS agency error.	Contact the administrator.
500	MSS.47010200	Create the voice transmission thread failed.	Create the voice transmission thread failed.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.47015001	Connect to the management plane service failed.	Connect to the management plane service failed.	Contact technical support.
500	MSS.47015012	Media negotiation failed.	Media negotiation failed.	Contact technical support.
400	MSS.10000001	System error. Contact technical support.	System error. Contact technical support.	Contact technical support.
400	MSS.10000002	Request JSON error.	Request JSON error.	Check the request body JSON.
400	MSS.10000003	The parameter violated the verification constraint.	The parameter violated the verification constraint.	Check the validity of the input parameter.
400	MSS.10001002	Invalid URL parameter.	Invalid URL parameter.	Check the URL validity.
400	MSS.10001006	Asset creation task failed.	Asset creation task failed.	Create a new asset creation task.
400	MSS.10001007	Asset file size cannot exceed 5,242,880 bytes.	Asset file size cannot exceed 5,242,880 bytes.	Compress the file or replace it with a smaller one.
400	MSS.10001008	The main asset file already exists.	The main asset file already exists.	Do not upload the main file repeatedly.
400	MSS.10001009	The asset thumbnail file already exists.	The asset thumbnail file already exists.	Do not upload the thumbnail file repeatedly.
400	MSS.10001010	Asset unavailable.	Asset unavailable.	Use an asset in the ACTIVED status.
400	MSS.10001012	The asset file already exists.	The asset file already exists.	Do not upload the file repeatedly.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.10001013	Invalid asset status change.	Invalid asset status change.	Only assets in the ACTIVED or UNACTIVED status can be updated.
400	MSS.10001014	Incorrect asset status update.	Incorrect asset status update.	Asset status can only be changed to ACTIVED or UNACTIVED.
400	MSS.10001016	The file does not exist in OBS.	The file does not exist in OBS.	Upload the file to OBS.
400	MSS.10001017	Obtain token failed.	Obtain token failed.	Contact technical support.
400	MSS.10001018	File upload failed.	File upload failed.	Contact technical support.
400	MSS.10001019	Image rejected.	Image rejected.	Use a compliant image.
400	MSS.10001020	Abnormal SFS cache file processing.	Abnormal SFS cache file processing.	Contact technical support.
400	MSS.10001022	Obtain lock failed.	Obtain lock failed.	Contact technical support.
400	MSS.10001024	Total file size too large.	Total file size too large.	Purchase an asset package.
400	MSS.10001025	The {0} file does not exist.	The {0} file does not exist.	Use a supported file format.
400	MSS.10001026	The {0} file already exists.	The {0} file already exists.	Use a supported file format.
400	MSS.10001027	{0} files: more than {1}.	{0} files: more than {1}.	Use a supported file format.
400	MSS.10001028	The file type does not match {0}.	The file type does not match {0}.	Use a supported file format.
400	MSS.10001030	The transfer task does not exist.	The transfer task does not exist.	Query correct transfer tasks.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.10001031	The asset transfer task timed out.	The asset transfer task timed out.	Use a correct transfer task.
400	MSS.10001033	Too many files are being created.	Too many files are being created.	Among files that are being created, confirm them or delete unnecessary ones.
400	MSS.10001034	Invalid file format.	Invalid file format.	Use a supported file format.
400	MSS.10001035	The text contains sensitive content.	The text contains sensitive content.	Use compliant text.
400	MSS.10001036	The product material list does not contain related thumbnail assets.	The product material list does not contain related thumbnail assets.	Use an image in the material list as the product's thumbnail.
400	MSS.10001037	The product material list contains unavailable assets.	The product material list contains unavailable assets.	Do not use an abnormal asset as a material.
400	MSS.10001038	The product material list contains unmatched assets.	The product material list contains unmatched assets.	Do not use assets whose types do not match the material requirements as materials.
400	MSS.10001039	The product material list contains duplicate asset.	The product material list contains duplicate asset.	Do not use duplicate asset as a material.
400	MSS.10001040	The associated asset added to the product material list is unavailable.	The associated asset added to the product material list is unavailable.	Use activated assets as product materials.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.10001041	Product not found.	Product not found.	Check the product data or add a product.
400	MSS.10001042	Too many product materials.	Too many product materials.	Do not exceed the upper limit of materials.
400	MSS.10001043	Invalid SFS service type.	Invalid SFS service type.	Use a valid cache service type.
400	MSS.10001044	Copy asset file failed.	Copy asset file failed.	Contact technical support.
400	MSS.10001045	The name of the asset file to be copied is too long.	The name of the asset file to be copied is too long.	Shorten the name of the asset file to be copied.
400	MSS.10001046	Invalid authorization token.	Invalid authorization token.	Check the token validity.
400	MSS.10001047	Authorization token has expired.	Authorization token has expired.	Check the token validity.
400	MSS.10001048	{0} files are not supported.	{0} files are not supported.	Use a supported file format.
404	MSS.10001001	Asset not found.	Asset not found.	Check the asset metadata or add an asset.
404	MSS.10001004	Asset file not found.	Asset file not found.	Check the asset metadata or add an asset file.
404	MSS.10001011	Main asset file not found.	Main asset file not found.	Check the main asset file.
500	MSS.10000004	Public communication failure.	Public communication failure.	Contact technical support.
500	MSS.100000032	Read the video review result failed.	Read the video review result failed.	Contact technical support.
500	MSS.10000101	An IAM service error occurred.	An IAM service error occurred.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.10000102	An OBS service error occurred.	An OBS service error occurred.	Contact technical support.
500	MSS.10000103	A content moderation service error occurred.	A content moderation service error occurred.	Contact technical support.
500	MSS.10000104	A CAS service error occurred.	A CAS service error occurred.	Contact technical support.
500	MSS.10000105	A DAP service error occurred.	A DAP service error occurred.	Contact technical support.
400	MSS.20050004	Obtain asset information failed.	Obtain asset information failed.	Contact technical support.
400	MSS.20050005	Obtain asset information failed due to invalid asset ID or project ID.	Obtain asset information failed due to invalid asset ID or project ID.	Check the asset ID or project ID.
400	MSS.20050013	Obtain task information failed due to invalid task ID or project ID.	Obtain task information failed due to invalid task ID or project ID.	Check the task ID and project ID.
400	MSS.20050015	WebSocket request failed.	WebSocket request failed.	Check whether the WebSocket message sent is empty.
400	MSS.20050029	AK/SK not configured for DupDub.	AK/SK not configured for DupDub.	Configure an AK/SK for DupDub.
400	MSS.20050035	Invalid AK/SK for DupDub.	Invalid AK/SK for DupDub.	Change the AK/SK.
401	MSS.20050023	WebSocket API authentication failed.	WebSocket API authentication failed.	Check the authentication information.

Status Code	Error Codes	Error Message	Description	Solution
429	MSS.20050025	Asynchronous language task creation reaches the rate limit.	Asynchronous language task creation reaches the rate limit.	Try again later.
500	MSS.20050012	Generate the preview audio failed.	Generate the preview audio failed.	Contact technical support.
500	MSS.20050028	The algorithm side returns a failure message.	The algorithm side returns a failure message.	Contact technical support.
500	MSS.20050032	TTS returns a failure message.	TTS returns a failure message.	Contact technical support.
500	MSS.20050033	DupDub returns a failure message.	DupDub returns a failure message.	Contact technical support.
500	MSS.20050034	TTS failed.	TTS failed.	Contact technical support.
400	MSS.47040010	Knowledge base not found.	Knowledge base not found.	Use a valid knowledge base ID.
400	MSS.47040012	The knowledge base type does not match.	The knowledge base type does not match.	Use a valid knowledge base type.
400	MSS.47040013	Empty Q&A pair list.	Empty Q&A pair list.	Provide correct Q&A pair information in the list.
400	MSS.47040014	Too many Q&A pairs in the list.	Too many Q&A pairs in the list.	Reduce the number of Q&A pairs in the list.
400	MSS.47040015	Too many questions in the list.	Too many questions in the list.	Reduce the number of questions in the list.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47040016	Import the Q&A pair failed.	Import the Q&A pair failed.	Contact technical support.
400	MSS.47040040	Role service configuration not found.	Role service configuration not found.	Ensure the role service configuration is correct.
400	MSS.47040041	Role not found.	Role not found.	Configure the role correctly.
400	MSS.47040050	Query the embedding failed due to the empty query.	Query the embedding failed due to the empty query.	Provide the correct query information.
403	MSS.47040011	No permission to access the knowledge base configuration.	No permission to access the knowledge base configuration.	Access the knowledge base configuration of the current tenant.
403	MSS.47040042	No permission to access the role configuration.	No permission to access the role configuration.	Access the role configuration of the current tenant.
500	MSS.47040001	Internal handling error.	Internal handling error.	Contact technical support.
500	MSS.47040002	Access the database failed.	Access the database failed.	Contact technical support.
500	MSS.47040052	Obtain the embedding model failed.	Obtain the embedding model failed.	Contact technical support.
400	MSS.41000001	Incorrect task status.	The task cannot be executed due to incorrect task status.	Check the task status.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.41000002	Incorrect request (invalid task name).	Check whether the task name contains special characters.	Check whether the task name contains special characters.
400	MSS.41000004	Too many training tasks.	Too many training tasks.	Delete old tasks.
400	MSS.41000014	Obtain the OBS segmentation URL failed.	OBS segmentation failed.	Resubmit the task or contact technical support.
400	MSS.41000018	The task cannot be found or cannot be deleted.	The task cannot be found or cannot be deleted.	Check whether the task exists and whether the task is running.
403	MSS.41000012	Too many concurrent tasks.	Too many concurrent tasks.	Submit a new task after the previous task is complete.
403	MSS.41000023	Insufficient resources.	Insufficient resources.	Purchase resources.
404	MSS.41000003	Task not found.	Training task not found.	Check whether the task ID is correct.
500	MSS.41000005	Identity authentication failed.	Automatic identity authentication failed.	Check whether the person in the video is the ID card owner.
500	MSS.41000007	Invalid training video duration.	Invalid training video duration.	Check the uploaded video.
500	MSS.41000015	Obtain the OBS uploadid failed.	Obtain the OBS uploadid failed.	Resubmit the task or contact technical support.
500	MSS.41000016	Asset query failed.	Asset query failed.	Check whether the trained model is deleted or contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.41000017	Asset update failed.	Asset update failed.	Check whether the model is deleted or contact technical support.
500	MSS.41000019	Obtain the instance lock failed.	Obtain the instance lock failed.	Check whether Redis is abnormal.
400	MSS.20020001	The task status does not allow this operation.	Check the task status.	Check whether the task status is correct.
400	MSS.20020002	The task has been deleted or does not exist.	The task has been deleted or does not exist.	Check whether the task information is correct.
400	MSS.20020004	The training data is incorrect. Check and submit the data again.	The training data is incorrect. Check and submit the data again.	Check whether the training data meets the requirements.
400	MSS.20020005	Training failed.	Training failed.	Contact technical support.
400	MSS.20020007	Invalid file format.	Invalid file format.	Upload a valid file.
400	MSS.20020008	Too many ongoing tasks. Try again later.	Too many ongoing tasks. Try again later.	Too many ongoing tasks. Try again later.
400	MSS.20020010	Invalid authorization letter. Check and upload it again.	Invalid authorization letter. Check and upload it again.	Invalid authorization letter. Check and upload it again.
400	MSS.20020011	Invalid uploaded audio file format. Use a valid format and upload as instructed.	Invalid uploaded audio file format. Use a valid format and upload as instructed.	Invalid uploaded audio file format. Use a valid format and upload as instructed.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.20020012	Invalid file format in the package.	Invalid file format in the package.	Invalid file format in the package. Submit a package with supported file formats.
400	MSS.20020013	Upload a valid ZIP package.	Upload a valid ZIP package.	Upload a valid ZIP package.
400	MSS.20020014	Insufficient quota.	Insufficient quota.	Purchase more quota.
400	MSS.20020015	The uploaded text is not in the selected language. Upload text in the selected language.	The uploaded text is not in the selected language. Upload text in the selected language.	Check whether the text and voice are consistent and upload the text again.
400	MSS.20020016	The number of WAV and TXT files in the package does not meet the requirements.	The number of WAV and TXT files in the package does not meet the requirements.	Upload the script again as instructed.
400	MSS.20020017	The number of WAV files in the package does not meet the requirements.	The number of WAV files in the package does not meet the requirements.	Upload the script again as instructed.
400	MSS.20020018	The uploaded audio cannot be parsed into a WAV file. Upload the audio in a supported format.	The uploaded audio cannot be parsed into a WAV file. Upload the audio in a supported format.	Check the audio format and upload the audio in a supported format.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.20020022	Too many files in the package. Remove unnecessary files and upload the package again.	Too many files in the package. Remove unnecessary files and upload the package again.	Remove unnecessary files and upload the package again.
400	MSS.20020023	Compressed package too large. Check the files in it and upload the package again.	Compressed package too large. Check the files in it and upload the package again.	Ensure that the package content is correct and upload the package again.
400	MSS.20020024	Compressed package too large.	Compressed package too large.	Check the files in the compressed package and upload the package again.
400	MSS.20020025	The compressed package can contain only one directory, and all training data must be stored in the same directory. Check the package and upload it again.	The compressed package can contain only one directory, and all training data must be stored in the same directory. Check the package and upload it again.	Remove unnecessary directories and upload the package again.
400	MSS.20020026	Do not use special characters such as \:*<> \\ to name files in the compressed package.	Do not use special characters such as \:*<> \\ to name files in the compressed package.	Correct the file name and upload the package again.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.20020027	The training data does not exist.	The training data does not exist.	Upload training data.
400	MSS.20020028	The uploaded audio does not match the text. Check and upload the audio again.	The uploaded audio does not match the text. Check and upload the audio again.	Upload an audio that matches the text.
400	MSS.20020029	Unsupported audio file duration.	Unsupported audio file duration.	Upload an audio file of the required duration.
400	MSS.20020030	The pre-uploaded file is not found in the OBS bucket.	The pre-uploaded file is not found in the OBS bucket.	Upload a file first.
400	MSS.20020031	The uploaded file is not the same as the pre-uploaded one.	The uploaded file is not the same as the pre-uploaded one.	Upload a valid file.
400	MSS.20020032	Generate a preview audio file failed.	Generate a preview audio file failed.	Generate a preview audio file again.
400	MSS.20020033	No sample audio found in the asset.	No sample audio found in the asset.	Please contact the administrator.
400	MSS.20020034	Audio trimming based on the labeling information failed.	Audio trimming based on the labeling information failed.	Please contact the administrator.
400	MSS.20020035	Audio trimming using JSS failed.	Audio trimming using JSS failed.	Please contact the administrator.
400	MSS.20020036	No labeled file uploaded by JSS.	No labeled file uploaded by JSS.	Please contact the administrator.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.20020040	The number of audio files in the uploaded attachment is different from that of text files.	The number of audio files in the uploaded attachment is different from that of text files.	Check whether the number of TXT files is the same as that of WAV files in the uploaded attachment.
400	MSS.20020043	Select at least one style tag.	Select at least one style tag.	Select an audio file as the default one.
200	MSS.20010113	The photo failed the review.	The photo contains sensitive content.	Check the photo.
200	MSS.20010114	The file failed the review.	The task file contains sensitive content.	Check the file.
200	MSS.20010138	The heartbeat of the task was lost.	The heartbeat of the livestream timed out.	Contact technical support.
200	MSS.20010146	The heartbeat of the intelligent interaction task failed.	The heartbeat of the intelligent interaction task failed.	Contact technical support.
200	MSS.20010157	The material was blocked because it contains sensitive information. Select another material.	The material was blocked because it contains sensitive information. Select another material.	Check the material file.
200	MSS.47000000	Succeeded.	Succeeded.	Succeeded.
200	MSS.50000001	Internal error.	Undefined internal error.	Contact technical support.
200	MSS.50000002	TTS task failed.	TTS task request failed.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
200	MSS.50001001	No face found in the input image.	No front face identified in the input photo.	Upload a photo that contains a front face.
200	MSS.50001002	Invalid WAV file.	Invalid WAV file uploaded for audio control.	Upload a valid WAV audio file.
200	MSS.50001003	Invalid Base64 code of the image.	The input photo is abnormal after Base64 decoding.	Upload a photo that can be properly displayed after Base64 decoding.
200	MSS.50001004	Audio too short.	The WAV audio file uploaded for audio control is too short.	Upload a longer audio file.
200	MSS.50001005	Invalid image file or unsupported format.	Unsupported photo file format.	Upload a photo file in a valid format.
200	MSS.50001006	Improper proportion of the face in the input photo.	Improper proportion of the face in the input photo.	Upload a photo in which the proportion of the face ranges from 2% to 70%.
200	MSS.50001007	Video upload failed.	Video upload failed after the video was created.	Contact technical support.
200	MSS.50001008	Upload image failed.	Thumbnail upload failed after the video was created.	Contact technical support.
200	MSS.50001009	Obtain the upload URL failed.	Obtain the upload URL failed after the video was created.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
200	MSS.50001010	Image download failed.	Obtain the input photo failed.	Contact technical support.
200	MSS.50001011	Load the audio file failed.	Obtain the input audio failed.	Contact technical support.
200	MSS.50001012	Text too long.	Unsupported input text length.	Upload text of fewer than 1,800 characters.
200	MSS.50001013	Audio file too large.	Unsupported input audio size.	Upload an audio file smaller than 11 MB.
200	MSS.50001014	Image file too large.	Unsupported input image size.	Upload an image smaller than 48 MB.
200	MSS.50001015	More than one face identified.	More than one face identified. Currently, only a photo with one face in it can be used to control the virtual avatar.	Upload an image with one face in it.
200	MSS.50001016	Face rotation angle too large. A front face image is required.	Unsupported face rotation angle in the input photo.	Upload a photo that contains a front face.
200	MSS.50001017	The face is incomplete or not a natural one.	The face in the input photo is incomplete or not a natural one.	Upload a photo with a complete natural face in it.

Status Code	Error Codes	Error Message	Description	Solution
200	MSS.50001018	Mouth opening degree too large.	Unsupported mouth opening degree in the input photo. Currently, only a photo with a person's mouth closed in it can be used to control the virtual avatar.	Upload a photo with a person's mouth closed.
400	MSS.20010005	Duplicate script name.	Duplicate script name.	Do not use duplicate script name.
400	MSS.20010008	Duplicate asset name.	Duplicate asset name.	Do not use duplicate asset name.
400	MSS.20010016	The assets in the script contain multiple rendering engines.	The assets in the script contain multiple rendering engines.	Check the asset engine attribute to ensure that the assets in a script use the same engine.
400	MSS.20010025	Request DHIS failed (for virtual avatar meetings).	Request DHIS failed (for virtual avatar meetings).	Contact technical support.
400	MSS.20010031	Duplicate live room name.	Duplicate live room name.	Change the room name.
400	MSS.20010045	Room information not found.	Room information not found.	Check whether the entered room information is correct.
400	MSS.20010066	Complete tasks cannot be modified.	Complete tasks cannot be modified.	Complete tasks cannot be modified.
400	MSS.20010067	Audio file not found.	Audio file not found.	Check audio_config.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.20010070	Field verification error.	Field verification error.	Check whether the parameter * is correctly configured.
400	MSS.20010073	script_id cannot be empty for audio control.	script_id cannot be empty for audio control.	script_id cannot be empty for audio control.
400	MSS.20010074	The intelligent interaction task is not found or has expired.	The intelligent interaction task is not found or has expired.	Check whether the task exists or has expired.
400	MSS.20010083	Interaction rule library not found.	Interaction rule library not found.	Check whether the rule library parameters are correctly configured.
400	MSS.20010084	Duplicate interaction rule library name.	Duplicate interaction rule library name.	Change the rule library name and try again.
400	MSS.20010087	No event callback configuration.	No event callback configuration.	Check whether event callback has been configured.
400	MSS.20010093	Invalid URL.	Invalid URL.	Check whether the URL is correct.
400	MSS.20010101	Download external assets repeatedly failed.	Download external assets repeatedly failed.	Check whether the URL is correct.
400	MSS.20010103	Total size of video files too large (* > upper limit *).	Total size of video files too large (* > upper limit *).	Change the number or size of video files.
400	MSS.20010104	Total size of image files too large (* > upper limit *).	Total size of image files too large (* > upper limit *).	Change the number or size of image files.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.20010105	Total size of audio files too large (* > upper limit *).	Total size of audio files too large (* > upper limit *).	Change the number or size of audio files.
400	MSS.20010106	Too many video files in the script *** (* > upper limit *).	Too many video files in the script *** (* > upper limit *).	Change the number of videos in the script *.
400	MSS.20010107	Too many video files in the interaction rule * (* > upper limit *).	Too many video files in the interaction rule * (* > upper limit *).	Change the number of videos in the rule *.
400	MSS.20010108	Too many text characters (* > upper limit) in the paragraphs of this live room.	Too many text characters (* > upper limit) in the paragraphs of this live room.	Shorten the script of this live room.
400	MSS.20010109	Too many text characters in the paragraphs of the script * (* paragraphs > upper limit *).	Too many text characters in the paragraphs of the script * (* paragraphs > upper limit *).	Reduce the number of text characters of the script *.
400	MSS.20010110	Invalid parameter in interaction rule *. {error message}	Invalid parameter in interaction rule *. {error message}	Modify the incorrect parameter * in the rule *.
400	MSS.20010119	Resource * has been used and cannot be deleted.	Resource * has been used and cannot be deleted.	Contact technical support.
400	MSS.20010120	The photo size exceeds 16 MB.	The photo size exceeds 16 MB.	Use a photo smaller than 16 MB.
400	MSS.20010131	Timbre ID unavailable. Check the timbre ID.	Timbre ID unavailable. Check the timbre ID.	Check the timbre asset ID.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.20010136	Uploaded file too large.	Uploaded file too large.	Check the file size.
400	MSS.20010140	Invalid asset ID.	Invalid asset ID.	Check the parameter.
400	MSS.20010142	Insufficient quota.	Insufficient quota for photo-based virtual avatar video production.	Purchase more quota.
400	MSS.20010143	When the background is an image, background_config cannot be set to null.	When the background is an image, background_config cannot be set to null.	Check the parameter.
400	MSS.20010144	Insufficient quota.	Insufficient 4K resources for 2D videos.	Purchase more quota.
400	MSS.20010145	Image resolution exceeds 4K.	Image resolution exceeds 4K.	Check the image resolution.
400	MSS.20010147	Command delivery failed.	Command delivery failed.	Contact technical support.
400	MSS.20010148	Duplicate interaction room name.	Duplicate interaction room name.	Change the room name.
400	MSS.20010151	Invalid parameter. Error details: {0}	Invalid parameter. Error details: {0}	Check the parameter.
400	MSS.20010152	Invalid parameter during room creation.	Invalid parameter during room creation.	Check the parameter.
400	MSS.20010153	No timbre available and text cannot be inserted.	No timbre available and text cannot be inserted.	Check the live room configuration.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.20010155	Use a correct {ASSET_TYPE} asset.	Use a correct {ASSET_TYPE} asset.	Check the asset type.
400	MSS.20010156	Too many characters in the script.	Too many characters in the script.	Too many characters in the script.
401	MSS.20010039	Report livestreaming authentication failed.	Report livestreaming authentication failed.	Contact technical support.
401	MSS.20010054	Livestreaming reporting event has expired.	Livestreaming reporting event has expired.	Contact technical support.
401	MSS.20010077	The authentication information of the livestreaming reporting event has expired for a long time and cannot be updated.	The authentication information of the livestreaming reporting event has expired for a long time and cannot be updated.	Contact technical support.
403	MSS.20010056	Too many ongoing virtual avatar video production tasks. Try again later.	Too many ongoing virtual avatar video production tasks. Try again later.	Try again later.
403	MSS.20010065	Insufficient livestream quota of the current tenant.	Insufficient livestream quota of the current tenant.	Contact technical support or purchase a livestreaming package.
403	MSS.20010075	Insufficient intelligent interaction quota.	Insufficient intelligent interaction quota.	Contact technical support or purchase an intelligent interaction package.

Status Code	Error Codes	Error Message	Description	Solution
403	MSS.20010076	Intelligent interaction task has expired.	Intelligent interaction task has expired.	Task has expired.
403	MSS.20010082	Edit the preset template failed.	Edit the preset template failed.	Check whether you have the administrator permissions.
403	MSS.20010091	Too many ongoing photo-based virtual avatar video production tasks. Try again later.	Too many ongoing photo-based virtual avatar video production tasks. Try again later.	Try again later.
403	MSS.20010092	Too many ongoing virtual avatar business card video production tasks. Try again later.	Too many ongoing virtual avatar business card video production tasks. Try again later.	Try again later.
403	MSS.20010115	You are not in the whitelist of photo-based virtual avatar video production.	Contact the administrator to add you to the whitelist of photo-based virtual avatar video production.	Contact technical support.
403	MSS.20010116	You are not in the whitelist of virtual avatar business card video production.	Contact the administrator to add you to the whitelist of virtual avatar business card video production.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
403	MSS.20010132	Insufficient quota.	Insufficient business card quota of the current tenant.	Purchase more quota.
403	MSS.20010133	Insufficient quota.	Insufficient virtual avatar video production quota of the current tenant.	Purchase more quota.
403	MSS.20010135	Too many concurrent dialogs.	Too many concurrent dialogs.	Check the number of ongoing tasks and the concurrency configuration.
403	MSS.20010139	Insufficient quota.	Insufficient tenant resources.	Purchase more quota.
403	MSS.20010154	Insufficient quota.	No livestream resources available.	Purchase more quota.
404	MSS.20010009	Task not found.	Task not found.	Trigger a new video compositing task.
404	MSS.20010079	Input ID not found.	Input ID not found.	Check the input parameter.
429	MSS.20010011	Too many video production tasks. Create a task later.	Too many video production tasks. Create a task later.	Create a video production task later.
429	MSS.20010035	Insufficient livestream resources.	Insufficient livestream resources.	Insufficient livestream resources. Contact technical support.
429	MSS.20010102	Insufficient worker quota.	Insufficient worker quota.	Insufficient livestream resources. Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.20010001	The name contains special characters.	The name contains special characters.	Remove invalid characters from the name.
500	MSS.20010003	No template matched.	No template matched.	Check whether the enumeration is correct.
500	MSS.20010006	Text failed the review.	Text failed the review.	Contact technical support.
500	MSS.20010007	Sensitive words included.	Sensitive words included.	Remove sensitive words from the script.
500	MSS.20010010	DAC query failed.	DAC query failed.	Contact technical support.
500	MSS.20010012	The scene does not support the presentation material.	The scene does not support the presentation material.	Check the scene tag.
500	MSS.20010013	The role model does not match the action.	The role model does not match the action.	Check whether the role model and action have the same style_id.
500	MSS.20010014	Presentation material not found.	Presentation material not found.	Presentation material permanently deleted.
500	MSS.20010015	XML file parsing failed.	XML file parsing failed.	The text contains unclosed XML tags.
500	MSS.20010017	The script name and video task name contain sensitive words.	The script name and video task name contain sensitive words.	Check the script name.
500	MSS.20010018	DHMS query failed.	DHMS query failed.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.20010019	The video name asset_name contains invalid characters.	The video name asset_name contains invalid characters.	Modify the asset_name field.
500	MSS.20010020	Use a valid scene (SCENE) asset.	Use a valid scene (SCENE) asset.	Use a valid scene (SCENE) asset.
500	MSS.20010021	Use a valid model (HUMAN_MODEL) asset.	Use a valid model (HUMAN_MODEL) asset.	Use a valid model (HUMAN_MODEL) asset.
500	MSS.20010022	Use a valid action (ANIMATION) asset.	Use a valid action (ANIMATION) asset.	Use a valid action (ANIMATION) asset.
500	MSS.20010023	Video being composited...	Video being composited...	The video is being composited.
500	MSS.20010024	Confirm the file upload failure (internally).	Confirm the file upload failure (internally).	Contact technical support.
500	MSS.20010026	Audio file in the script does not exist.	Audio file in the script does not exist.	Check whether the audio file has been uploaded.
500	MSS.20010027	The virtual avatar task must contain shoo_scripts.	The virtual avatar task must contain shoo_scripts.	The virtual avatar task must contain shoo_scripts.
500	MSS.20010030	The livestream name contains invalid characters.	The livestream name contains invalid characters.	Change the live room name.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.20010032	The livestream description contains sensitive words.	The livestream description contains sensitive words.	Modify the live room description.
500	MSS.20010033	The script description contains sensitive words.	The script description contains sensitive words.	Remove sensitive words from the script.
500	MSS.20010034	The script paragraph title contains sensitive words.	The script paragraph title contains sensitive words.	Remove sensitive words from the paragraph title.
500	MSS.20010036	There are ongoing livestreaming tasks in the live room.	There are ongoing livestreaming tasks in the live room.	There are ongoing livestreaming tasks in the live room.
500	MSS.20010037	The livestreaming task has expired.	The livestreaming task has expired.	The livestreaming task has expired.
500	MSS.20010038	The livestream rule contains sensitive words.	The livestream rule contains sensitive words.	Remove sensitive words from the rule.
500	MSS.20010040	NATS message sending failed.	NATS message sending failed.	Contact technical support.
500	MSS.20010041	NATS message subscription failed.	NATS message subscription failed.	Contact technical support.
500	MSS.20010042	NATS message deletion failed.	NATS message deletion failed.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.20010043	NATS internal error.	NATS internal error.	Contact technical support.
500	MSS.20010044	Virtual avatar asset unavailable.	Virtual avatar asset unavailable.	Virtual avatar asset unavailable. Replace the asset.
500	MSS.20010046	Livestreaming task not found.	Livestreaming task not found.	Livestreaming task not found.
500	MSS.20010047	Asset not found.	Asset not found.	Asset not found.
500	MSS.20010048	The task is not in the WAITING status and cannot be operated.	The task is not in the WAITING status and cannot be operated.	The task is not in the WAITING status and cannot be operated.
500	MSS.20010049	The image Base64 file format can only be JPG, JPEG, or PNG.	The image Base64 file format can only be JPG, JPEG, or PNG.	The image Base64 file format can only be JPG, JPEG, or PNG.
500	MSS.20010050	Invalid asset information. Check the virtual avatar ID.	Invalid asset information. Check the virtual avatar ID.	Invalid asset information. Check the virtual avatar ID.
500	MSS.20010051	The livestreaming task does not exist or has expired.	The livestreaming task does not exist or has expired.	The livestreaming task does not exist or has expired.
500	MSS.20010052	Modify the script failed.	Modify the script failed.	Contact technical support.
500	MSS.20010053	Invalid command. Check the parameter command.	Invalid command. Check the parameter command.	Check the parameter command.
500	MSS.20010055	The reply contains sensitive words.	The reply contains sensitive words.	Remove sensitive words from the reply.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.20010057	Too many overlays of images, videos, and the model.	Too many overlays of images, videos, and the model.	Too many overlays of images, videos, and the model.
500	MSS.20010058	An avatar model must be overlaid.	An avatar model must be overlaid.	An avatar model must be overlaid.
500	MSS.20010059	The livestreaming task does not exist or has expired.	The livestreaming task does not exist or has expired.	The livestreaming task does not exist or has expired.
500	MSS.20010060	Request TMS failed.	Request TMS failed.	Contact technical support.
500	MSS.20010068	Download external assets failed.	Download external assets failed.	Contact technical support.
500	MSS.20010069	Live room unavailable.	Live room unavailable.	Contact technical support.
500	MSS.20010071	Asset unavailable.	Asset unavailable.	Contact technical support.
500	MSS.20010072	Too many script pages.	Too many script pages.	Reduce the number of script pages.
500	MSS.20010078	Livestream callback failed.	Livestream callback failed.	Contact technical support.
500	MSS.20010080	Content review failed.	Content review failed.	Contact technical support.
500	MSS.20010081	Create the script preview image failed.	Create the script preview image failed.	Contact technical support.
500	MSS.20010085	The current model is of 1080p and cannot be used in a 4K video.	The current model is of 1080p and cannot be used in a 4K video.	The current model is of 1080p and cannot be used in a 4K video.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.20010086	text_config cannot be null when text control is used.	text_config cannot be null when text control is used.	text_config cannot be null when text control is used.
500	MSS.20010088	Load the language to check failed.	Load the language to check failed.	Contact technical support.
500	MSS.20010089	The uploaded text is empty.	The uploaded text is empty.	Check whether the text is entered.
500	MSS.20010090	Read the language failed.	Read the language failed.	Contact technical support.
500	MSS.20010094	Read the stream of external assets failed.	Read the stream of external assets failed.	Contact technical support.
500	MSS.20010095	The external asset is not completely downloaded.	The external asset is not completely downloaded.	Contact technical support.
500	MSS.20010096	The model ID cannot be empty.	The model ID cannot be empty.	The model ID cannot be empty.
500	MSS.20010097	The photo cannot be empty.	The photo cannot be empty.	The photo cannot be empty.
500	MSS.20010098	A non-2D model is used.	A non-2D model is used.	A non-2D model is used.
500	MSS.20010099	The livestreaming task is not in the running status. The task ID is *** and the status is ***.	The livestreaming task is not in the running status. The task ID is *** and the status is ***.	The livestreaming task is not in the running status. The task ID is *** and the status is ***.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.20010100	Interaction rule library not found. The room name is ****.	Interaction rule library not found. The room name is ****.	Check whether the parameters are correct.
500	MSS.20010111	The audio asset does not exist or is unavailable.	The audio asset does not exist or is unavailable.	Check the audio information.
500	MSS.20010112	Content for text control cannot be empty.	Content for text control cannot be empty.	Content for text control cannot be empty.
500	MSS.42000001	Internal error.	Internal error.	Contact technical support.
500	MSS.42000002	TTS failed.	TTS failed.	Check the timbre permission and configuration.
500	MSS.42000003	Model loading failed.	Model loading failed.	Check whether the model file is valid.
500	MSS.42000005	Invalid action file.	Invalid action file.	Check whether the action file is valid.
500	MSS.42001001	Decompress the model file failed.	Decompress the model file failed.	Check whether the model file is in ZIP format.
500	MSS.42001002	Invalid audio file format.	Invalid audio file format.	Check whether the audio file format is valid.
500	MSS.42001003	Mask file not found.	Mask file not found.	Check whether the mask file is valid.
500	MSS.42001004	Abnormal ORI file of the 4K model.	Abnormal ORI file of the 4K model.	Check whether the ORI file of the 4K model.
500	MSS.42001005	Audio length is 0.	Audio length is 0.	Check whether the text matches the timbre or whether the audio length is 0.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.47000001	Internal error of the MSS-DHICIS service.	Internal service error.	Contact technical support.
500	MSS.47000002	Abnormal inference service.	Abnormal inference service.	Contact technical support.
500	MSS.47000003	An error occurred during task preparation.	An error occurred during task preparation.	Contact technical support.
500	MSS.47000004	Model loading failed.	Model loading failed.	Contact technical support.
500	MSS.47000005	Join the RTC room failed.	Join the RTC room failed.	Contact technical support.
500	MSS.47000006	Abnormal manager service.	Abnormal manager service.	Contact technical support.
500	MSS.47000007	An external command is received to end the task.	An external command is received to end the task.	Contact technical support.
500	MSS.47000008	Execute the command for subscription failed.	Execute the command for subscription failed.	Contact technical support.
500	MSS.47000009	Inference status timed out.	Inference status timed out.	Contact technical support.
500	MSS.47000010	Abnormal ICS service.	Abnormal ICS service.	Contact technical support.
400	MSS.60010007	Original preview file not found.	Original preview file not found.	Check the reason why the file was not found.
400	MSS.60010008	Uploaded preview image too large.	Uploaded preview image too large.	Upload an image of lower resolution.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.60010009	Too many previews generated in a day.	Too many previews generated in a day.	Wait until the restriction is lifted.
400	MSS.60010010	Too many ongoing preview tasks.	Too many ongoing preview tasks.	Wait until other tasks are completed.
400	MSS.60020007	Create a training task in JSS failed.	Create a training task in JSS failed.	Check the exception details.
500	MSS.10010011	Invalid image content.	Invalid image content.	Use a compliant image.
500	MSS.10010012	The text contains sensitive content.	The text contains sensitive content.	Use compliant text.
500	MSS.10010013	Handling timed out.	Handling timed out.	Contact technical support.
500	MSS.10010014	The task timed out or does not exist.	The task timed out or does not exist.	Contact technical support.
500	MSS.10010015	Invalid file type.	Invalid file type.	Upload a file of a valid type.
500	MSS.10010016	Too many PowerPoint slides.	Too many PowerPoint slides.	Reduce the number of PowerPoint slides to upload.
500	MSS.10010017	Command execution failed.	Command execution failed.	Contact technical support.
500	MSS.10010018	Thumbnail conversion failed.	Thumbnail conversion failed.	Contact technical support.
500	MSS.10010020	File not found.	File not found.	Contact technical support.

11.3 Obtaining a Project ID

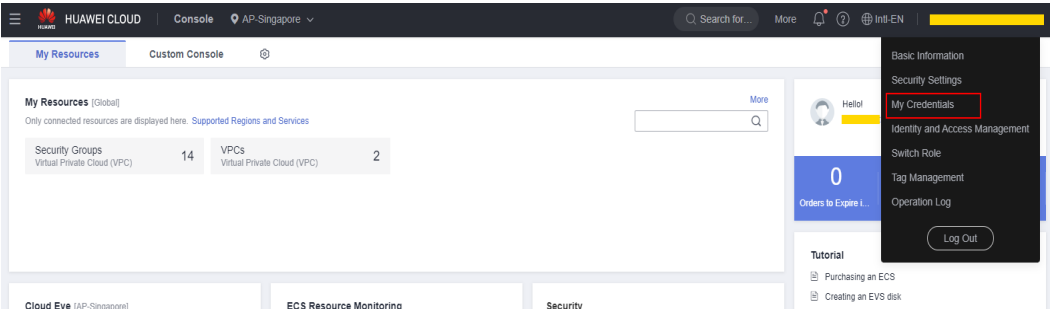
A project ID is required for some URLs when an API is called. You can obtain a project ID using either of the following methods:

- [Obtaining a Project ID from the Console](#)
- [Obtaining a Project ID by Calling an API](#)

Obtaining a Project ID from the Console

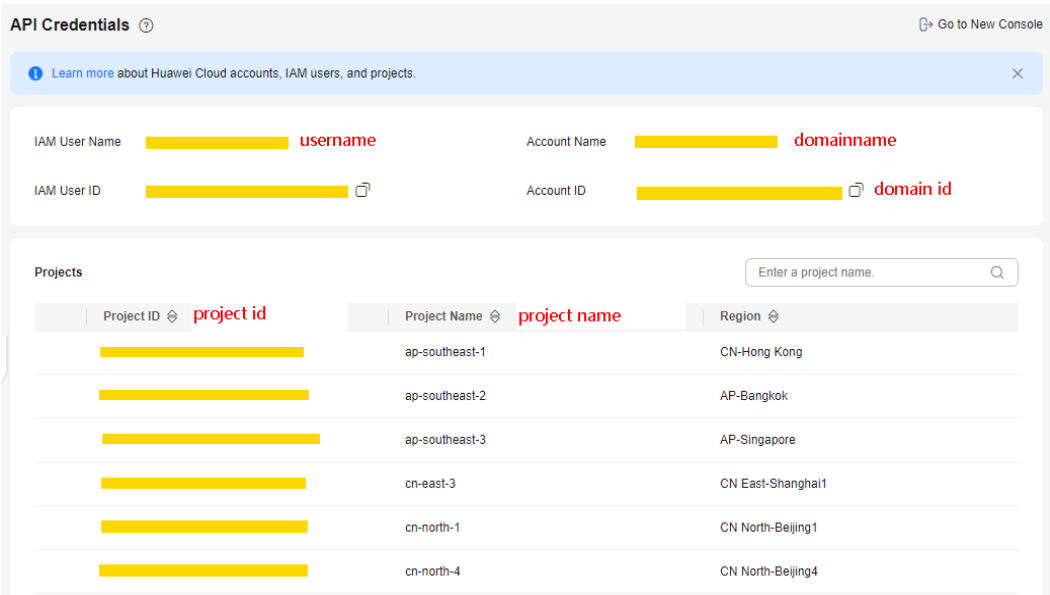
- Step 1
- Log in to the [console](#).
- Step 2
- Hover over the username in the upper right corner and select **My Credentials** from the drop-down list.

Figure 11-1 Console



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

Figure 11-2 Obtaining a project ID



----End

Obtaining a Project ID by Calling an API

You can obtain a project ID by calling the API for [querying project information](#).

The API for obtaining a project ID is **GET** <https://{Endpoint}/v3/projects/>. *{Endpoint}* indicates the endpoint of IAM, which can be obtained from [Before You Start](#). For details about API authentication, see [Authentication](#).

The following is an example response. The value of **id** under **projects** is the project ID.

```
{
  "projects": [
    {
      "domain_id": "65382450e8f64ac0870cd180d14e684b",
      "is_domain": false,
      "parent_id": "65382450e8f64ac0870cd180d14e684b",
      "name": "region01",
      "description": "",
      "links": {
        "next": null,
        "previous": null,
        "self": "https://www.example.com/v3/projects/a4a5d4098fb4474fa22cd05f897d6b99"
      },
      "id": "a4a5d4098fb4474fa22cd05f897d6b99",
      "enabled": true
    }
  ],
  "links": {
    "next": null,
    "previous": null,
    "self": "https://www.example.com/v3/projects"
  }
}
```

11.4 Obtaining an Account ID

An account ID is required for some URLs when an API is called. To obtain an account ID, perform the following steps:

- 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.

On the **API Credentials** page, obtain the account ID.

Figure 11-3 Obtaining an account ID

API Credentials ⓘ

ⓘ Learn more about HUAWEI CLOUD accounts, IAM users, and projects.

IAM User Name

Account Name

IAM User ID

Account ID

Projects

Project ID ⓘ	Project Name ⓘ	Region ⓘ
	cn-north-1	CN North-Beijing1
	cn-north-4	CN North-Beijing4
	cn-east-3	CN East-Shanghai1
	cn-east-2	CN East-Shanghai2
	cn-south-1	CN South-Guangzhou

----End

11.5 HTTP Commands for Controlling Livestreaming

Virtual avatar livestreaming can be taken over by humans using HTTP APIs. After the takeover by humans, the virtual avatar can speak as instructed by either of the following methods:

- By input text. Run **INSERT_PLAY_SCRIPT** to insert a script as the answer to be given by the virtual avatar. When the virtual avatar remains unchanged, so do the background. Its parameter structure is defined as [PlayTextInfo](#).
- By input audio. Run **INSERT_PLAY_AUDIO** to insert an audio as the answer to be given by the virtual avatar. When the virtual avatar remains unchanged, so do the background. Its parameter structure is defined as [PlayAudioInfo](#).

Commands for the API for [controlling virtual avatar intelligent livestreaming](#):

- When the command is **GET_CURRENT_PLAYING_SCRIPTS**, the scripts of the current round are queried. Its response structure is defined as [LivePlayingScriptList](#).
- When the command is **CLEAN_UP_INSERT_COMMAND**, unplayed insertion commands will be cleared. Its parameter structure is defined as [CleanUpInsertCommand](#).

PlayTextInfo

Table 11-2 PlayTextInfo

Paramet er	Mandat ory	Type	Description
text_conf ig	No	Table 11-3 object	Script configuration.

Parameter	Mandatory	Type	Description
play_type	No	String	Playback mode. Options: • APPEND: adding a playback request at the end of the playback queue • INSERT: inserting a playback request between two audio files or at the end of the text that is being played • PLAY_NOW: inserting a playback request immediately after the instruction is received. That is, the playback can be started before the current text playback is completed. Default value: PLAY_NOW The value contains 0 to 32 characters.
play_role	No	String	Playback role. Options: • STREAMER: streamer • CO_STREAMER: co-streamer Default value: STREAMER The value contains 0 to 32 characters.
rule_index	No	String	When the interaction callback triggers the insertion of an audio reply, the index of the triggered interaction rule is carried. The value contains 0 to 64 characters.

Table 11-3 TextConfig

Parameter	Mandatory	Type	Description
text	Yes	String	Script. The value contains 1 to 131,072 characters. The following modes are supported: • Text-only mode Example: Hello, everyone. I'm Sara, a virtual streamer. • Tag mode The tag mode uses Speech Synthesis Markup Language (SSML). Tags to be used are as follows: – < speak >: This tag is the root node of all text. All text that needs to call SSML tags must be contained in the < speak > < /speak > tag pair. – < emotion >: emotion tag, which takes effect for one or more specified sentences. The tag starts at the beginning of a sentence and ends at the end of the sentence. The format is < emotion type="emotion tag" >. The value of type can be HAPPY, SAD, CALM, or ANGER. – < insert-action >: action tag. You can insert an action at a specified position of the text. The format is < insert-action id="Action asset ID" name="Action name" tag="Action ID" />. The action asset information is obtained using the asset library API. – < break >: pause tag. You can insert a pause at a specified position of the text. The format is < break time="Pause duration" />, in milliseconds. The minimum value is 200 ms. – < phoneme >: The multi-pronunciation word tag can specify the pronunciation of one Chinese character. Only one Chinese character is allowed between the start and end of the tag. The property can be set to Chinese

Parameter	Mandatory	Type	Description
			Pinyin, and the tone is represented by 1, 2, 3, or 4. The format is \<phoneme ph="pinyin"/>character \</phoneme>. NOTE - Example: <speak> <emotion type="HAPPY"><insert-action id="2692ea5d095caaafcfed21dc4590b701" name="fingertips of both hands touched" tag="system_female_animation_0026"/>Hello.<break time="200ms"/>I'm a MetaStudio AI virtual avatar. </emotion>I'll show you<phoneme ph="liao3">how</phoneme>MetaStudio works. </speak> - Only the <break> and <phoneme> tags take effect for virtual avatar video production.

PlayAudioInfo

Table 11-4 PlayAudioInfo

Parameter	Mandatory	Type	Description
audio_url	No	String	Audio URL. The value contains 0 to 2,048 characters.
play_type	No	String	Playback mode. Options: APPEND: adding a playback request at the end of the playback queue INSERT: inserting a playback request between two audio files or at the end of the text that is being played PLAY_NOW: inserting a playback request immediately after the instruction is received. That is, the playback can be started before the current text playback is completed. Default value: APPEND The value contains 0 to 32 characters.

Parameter	Mandatory	Type	Description
play_role	No	String	Playback role. Options: • STREAMER: streamer • CO_STREAMER: co-streamer Default value: STREAMER The value contains 0 to 32 characters.
rule_index	No	String	When the interaction callback triggers the insertion of an audio reply, the index of the triggered interaction rule is carried. The value contains 0 to 64 characters.

LivePlayingScriptList

Table 11-5 LivePlayingScriptList

Parameter	Mandatory	Type	Description
scene_scripts	No	Array of Table 11-6	Scripts. Array length: 1–100

Table 11-6 LivePlayingScriptInfo

Parameter	Mandatory	Type	Description
script_name	No	String	Script name. The value contains 1 to 256 characters.
model_asset_id	No	String	Virtual avatar model asset ID. The value contains 0 to 64 characters.
shoot_scripts	No	Array of Table 11-7	Video shooting scripts. Array length: 0–100

Table 11-7 LivePlayingShootScriptItem

Parameter	Mandatory	Type	Description
sequence_no	No	Integer	Script No. The value ranges from 0 to 2,147,483,647 .
title	No	String	Paragraph title. The value contains 0 to 256 characters.

CleanUpInsertCommand

Table 11-8 CleanUpInsertCommand

Parameter	Mandatory	Type	Description
command_ids	No	Array of strings	Command IDs. If this parameter is left blank, all unplayed insertion commands will be cleared. The value contains 1 to 64 characters. Array length: 0–100.

11.6 RTSA Commands for Controlling Livestreaming

The RTSA commands for controlling livestreaming are described as follows:

- [Virtual Avatar Livestreaming Status Changes](#)
- [RTSA Command Definition](#)

Virtual Avatar Livestreaming Status Changes

[Figure 11-4](#) shows how the virtual avatar livestreaming status changes.

Figure 11-4 Livestreaming status changes

The flowchart is described as follows:

- **PREPROCESSING:** The image model loading starts on MetaStudio.
- **PLAY_READY:** The image model has been loaded. In this case, the virtual avatar is in a silent status, and waits for an instruction to start reading the script.
- **PROCESSING:** working status of a virtual avatar. The virtual avatar livestreams as instructed by the text or audio preset in the livestreaming task.
- **PLAY_PAUSE:** The virtual avatar livestreaming is paused. In this case, the virtual avatar is in a silent status, and waits for an instruction to resume reading the script.
- **TAKE_OVER:** The livestreaming task is taken over by a human. MetaStudio obtains the audio of the stream from the RTC channel and controls the virtual avatar livestreaming in real time.
- **PLAY_END:** The livestreaming task ends.

RTSA Command Definition

1. The **RTC User Render** user sends a server status notification through the COMMAND channel.

Code example:

```
{
  "message_type": "state_notify",
  "state": "PREPROCESSING",
}
```

In the preceding code, **state** indicates the livestreaming task status. The options are as follows:

- **PREPROCESSING:** The livestreaming task is being prepared.
 - **PLAY_READY:** The livestreaming task is ready. The virtual avatar remains silent and waits for an instruction to start reading the script.
 - **PROCESSING:** The livestreaming task is ongoing.
 - **PLAY_PAUSE:** The virtual avatar stops speaking and remains silent.
 - **TAKE_OVER:** The livestreaming task is being taken over by a human.
 - **PLAY_END:** The livestreaming task ends.
2. The streamer can send an instruction for livestreaming control.

Code example:

```
{
  "message_type" : "live_control",
  "command" : "play_start",
  "params" : {
    "timing" : "NOW",
  }
}
```

The parameters are described as follows:

- **command:** instruction for livestreaming control. The options are as follows:
 - **get_current_state:** obtaining the status of the current livestreaming task
 - **play_start:** The virtual avatar starts reading the script.
 - **play_pause:** The virtual avatar pauses the script reading and remains silent.
 - **play_resume:** The virtual avatar resumes reading the script.
 - **voice_start:** starting the real-time virtual avatar voice playback
 - **voice_end:** ending the real-time virtual avatar voice playback
- **timing:** time when an instruction for livestreaming control is executed. The options are as follows:
 - **NOW:** The instruction is executed immediately.
 - **SENTENCE_END:** The current instruction is executed after the virtual avatar finishes reading a complete sentence.

11.7 SSML Definition of Text Control

Text control on MetaStudio uses Speech Synthesis Markup Language (SSML) to control the behaviors of virtual avatars, including actions, emotions, and multi-pronunciation words and pauses of TTS voice synthesis.

For the basic definition of SSML, see [Speech Synthesis Markup Language \(SSML\) Version 1.0](#). On this basis, MetaStudio extends some fields to control virtual avatars.

MetaStudio SSML currently supports the following capabilities:

- Text pronunciation control during TTS voice synthesis

The following tags are included:

- `< speak >< / speak >` is the root node of the SSML text.
- `< break / >` is used for mute pause. You can set the pause duration.
- `< phoneme >< / phoneme >` is used to mark multi-pronunciation words.
- `< say-as >< / say-as >` is used to specify the reading method of digits or English letters.
- `< sub >< / sub >` is used to set the alias of the marked text, that is, the alternative reading method.
- `< prosody >< / prosody >` is used to control the local speaking speed.
- `< word >< / word >` is used to set the selected text to the continuous reading mode.

 NOTE

MetaStudio contains multiple TTS timbres. The SSML tag capabilities supported by each timbre are different. You can obtain the tags supported by each timbre by calling the API for querying asset details.

speak

- Description**

`< speak >< / speak >`: Root node of the SSML text.

- Syntax**

`< speak >`Enter the text with an SSML tag. `< / speak >`

- Property**

None

- Tag relationship**

`< speak >` can contain text and tags, including `< break >`, `< phoneme >`, `< say-as >`, and `< sub >`.

break

- Description**

`break`: Inserts a mute pause at any position.

- Syntax**

`< break time="String" / >`

- Property**

Table 11-9 Property description

Property Name	Property Type	Property Value	Mandatory	Description
time	String	Value range: 200 ms to 10s	No	Mute pause duration, in milliseconds.

Property Name	Property Type	Property Value	Mandatory	Description
strength	String	Options: • none: no rhythm • x-weak: very short rhythm • weak: short rhythm • medium: medium rhythm • strong: long rhythm • x-strong: very long rhythm	No	Definition of rhythm

- **Tag relationship**

Any other tag cannot be contained.

- **Example value**

One sentence<break time="200ms"/>another sentence
One sentence<break strength="strong"/>another sentence

phoneme

- **Description**

<phoneme></phoneme>: Pronunciation of a multi-pronunciation Chinese or English word

- **Syntax**

<phoneme ph="string">Text </phoneme>
The <phoneme ph="W EH1 DH AH0">weather</phoneme> is very good.

- **Property**

Table 11-10 Property description

Property Name	Property Type	Property Value	Mandatory	Description
ph	String	Pinyin or phoneme	Yes	• When you enter Chinese Pinyin, the tone is represented by 1, 2, 3, or 4. The value 5 indicates no tone. • CMU Pronouncing Dictionary • Example 1: The ph value of tian qi is tian1 qi4. • Example 2: The ph value of weather is wɛəðə(r).

- **Tag relationship**

Text can be included but any other tag cannot.

- **Example value**

The<phoneme ph="tian1 qi4">weather</phoneme>is good today.

 NOTE

Obtain the Pinyin JS library based on Chinese characters. For details, see [pinyin-pro](#).

say-as

- **Description**

<say-as></say-as>: Specifies text as a specific type of content, or spells an English word character by character.

- **Syntax**

<say-as interpret-as="string">Digit or word</say-as>

- **Property**

Table 11-11 Property description

Property Name	Property Type	Property Value	Mandatory	Description
interpret-as	String	• number: number • date: date • figure: value • phone: phone number • english: English word • spell: spelling an English word character by character	Yes	The content is interpreted as a given type of reading method.

- **Tag relationship**

Text can be included but any other tag cannot.

- **Example value**

<say-as interpret-as="number">123</say-as>
<say-as interpret-as="date">2022/3/8</say-as>
<say-as interpret-as="figure">175 cm</say-as>
<say-as interpret-as="phone">151 12345678</say-as>
<say-as interpret-as="english">Hello</say-as>
<say-as interpret-as="spell">Hello</say-as><!-- Read: H E L L O -->

sub

- **Description**

: Finds an alternative reading method.

- **Syntax**

_{Text}

- **Property**

Table 11-12 Property description

Property Name	Property Type	Property Value	Mandatory	Description
alias	String	Alternative word	Yes	Replace the content of the tag with this value for reading.

- **Tag relationship**

Text can be included but any other tag cannot.

- **Example value**

What is actually read is Paul.

```
<sub alias="Paul">Paul</sub> is German.
```

prosody

- **Description**

<prosody></prosody>: Controls the local speaking speed.

- **Syntax**

```
<prosody rate="50">Text </prosody>
```

- **Property**

Table 11-13 Property description

Property Name	Property Type	Property Value	Mandatory	Description
rate	String	Percentage of the speaking speed. The value ranges from 50 to 200. Example: 50, indicating that the reading speed is 0.5 times the normal speed.	Yes	Speaking speed

- **Tag relationship**

Text can be included but any other tag cannot.

- **Remarks**

```
<prosody rate="50"> Hello, everyone. I'm a MetaStudio virtual avatar.</prosody>
```

word

- **Description**

<word></word>: Sets the selected text to the continuous reading mode. The selected text cannot contain punctuations or spaces.

- **Syntax**
<word>Text</word>
- **Property**
None
- **Tag relationship**
Text can be included but any other tag cannot.
- **Remarks**
<word>Hello, everyone. I'm a MetaStudio virtual avatar.</word>

11.8 System Asset Tag Definition

The API for [querying assets](#) allows using tags to classify virtual avatar models.

[Table 11-14](#) describes the values and details of **tags**.

Table 11-14 tags

tags Value Type	Description
Virtual human type	Options: • VIRTUAL_AVATARS: virtual avatar • VIRTUAL_HUMANS: virtual human • REALISTIC_VIRTUAL_HUMAN: realistic virtual human
Gender	Options: • MALE: male • FEMALE: female
Posture	Options: • FULL-BODY: full body • HALF-BODY: half body • STANDING: standing • SITTING: sitting • FRONT_PHOTO: front view • SIDE_PHOTO: side view

tags Value Type	Description
Field	Options: • NEWS: news • BUSINESS: commerce • E_COMMERCE: e-commerce • MARKETING: marketing • KNOWLEDGE: knowledge • EDUCATION: education • MEDICAL: healthcare • SPORTS: sports
Region	Options: • ASIAN: Asia Pacific • WESTERN: Europe and America • MIDDLE-EASTERNER: Middle East • AFRICAN: Africa • LATINO: Latin America
Resolution	Options: • 1080P • 4K

11.9 Supported Fonts

Subtitles added to videos created on MetaStudio have certain fonts. See [Table 11-15](#).

Table 11-15 Fonts supported by MetaStudio

Font Name	Supported Language
Adelle_Sans_Global Adelle_Sans_Global_Bold	Chinese, English, German, French, Turkish, Tagalog, Japanese, Italian, Malay, Russian, Vietnamese, Finnish, Dutch, Spanish, Indonesian, Arabic, and Portuguese

Font Name	Supported Language
HarmonyOS_Sans_SC HarmonyOS_Sans_SC_Black HarmonyOS_Sans_SC_Bold HarmonyOS_Sans_SC_Light HarmonyOS_Sans_SC_Medium HarmonyOS_Sans_SC_Regular HarmonyOS_Sans_SC_Thin	Chinese, English, German, French, Turkish, Tagalog, Japanese, Italian, Malay, Russian, Vietnamese, Finnish, Dutch, Spanish, Indonesian, Arabic, and Portuguese
Maitree Maitree_Light Maitree_Medium	English, German, French, Turkish, Tagalog, Italian, Malay, Thai, Vietnamese, Finnish, Dutch, Spanish, Indonesian, and Portuguese
Noto_Sans_CJK_KR_Bold Noto_Sans_CJK_KR_Regular	Chinese, English, German, French, Turkish, Tagalog, Japanese, Italian, Malay, Russian, Korean, Vietnamese, Finnish, Dutch, Spanish, Indonesian, and Portuguese

11.10 Resource Types

Resource types in MetaStudio billing include commercial resources and PoC test resources that need to be allocated by the administrator.

Table 11-16 Commercial resource types (tenant subscription)

Type	Resource Name	Unit	Billing Mode	Resource Type Code	Remarks
Virtual Avatars	Virtual avatar image modeling	Image	One-off payment	hws.resource.type.metastudio.avatarmodeling.number	-
	Virtual avatar image modeling (premium edition)	Image	One-off payment	hws.resource.type.metastudio.avatarmodeling.advanced	Not available

Type	Resource Name	Unit	Billing Mode	Resource Type Code	Remarks
	Virtual avatar voice modeling (basic edition)	Voice	One-off payment	hws.resource.type.metastudio.modeling.voice.onebasic	-
	Virtual avatar voice modeling (advanced edition)	Voice	One-off payment	hws.resource.type.metastudio.modeling.voice.onemiddle	-
	Virtual avatar voice modeling (premium edition)	Voice	One-off payment	hws.resource.type.metastudio.modeling.voice.advance	-
	Flexus virtual avatar	Avatar	One-off payment	hws.resource.type.metastudio.modeling.flexus.avatar.number	Including: - One real-scene virtual avatar - One voice 120-minute video production NOTE Sub-resource types after splitting: - video_time_flexus_2d_model: Flexus video production - modeling_count_2d_model_flexus: Flexus image modeling - voice_clone_flexus: Flexus voice modeling
	Virtual avatar video production	Min	Pay-per-use	hws.resource.type.metastudio.modeling.avatarvideo.duration	-

Type	Resource Name	Unit	Billing Mode	Resource Type Code	Remarks
	60-minute package for virtual avatar video production	Package	One-off payment	hws.resource.type.metastudio.avatarmodeling.videopacket	-
	60-minute trial package for video production	Package	One-off payment	hws.resource.type.metastudio.modeling.avatarvideo.smb.duration60	-
	Flexus virtual avatar video production	Min	Pay-per-use	hws.resource.type.metastudio.modeling.flexus.avatarvideo.dur	-
	Photo-based virtual avatar video production	Min	Pay-per-use	hws.resource.type.metastudio.modeling.photoavatarvideo.duration	-
	Virtual avatar business card production	Card	Pay-per-use	hws.resource.type.metastudio.modeling.avatarcard	-
	Virtual avatar livestreaming	Live stream	Yearly/Monthly	hws.resource.type.metastudio.modeling.avatarlive.channel	-

Type	Resource Name	Unit	Billing Mode	Resource Type Code	Remarks
	Virtual avatar livestreaming	Hour	Pay-per-use	hws.resource.type.metastudio.modeling.avatarlive.duration	-
	Virtual avatar livestreaming (industry edition)	Live stream	Yearly/Monthly	hws.resource.type.metastudio.modeling.avatarliveindustry.channel	-
	Virtual avatar livestreaming package (for enterprises)	Package	One-off payment	hws.resource.type.metastudio.modeling.enterpriselivepackage	Including: • 5 images • 5 voices • 5 videos NOTE In the query API, business_type is used to distinguish the three types.
	Virtual avatar intelligent interaction (basic edition)	Dialog	Yearly/Monthly	hws.resource.type.metastudio.modeling.interaction.basic.channel	-
	Virtual avatar intelligent interaction (professional edition)	Dialog	Yearly/Monthly	hws.resource.type.metastudio.modeling.interaction.pro.channel	Not available
TTS	TTS of one million characters	10,000 characters	Pay-per-use	hws.resource.type.metastudio.modeling.voice.synthetics	-

Type	Resource Name	Unit	Billing Mode	Resource Type Code	Remarks
Asset Management	Asset management	GB	Yearly/Monthly	hws.resource.type.metastudio.assetmanaging.basic	-

Table 11-17 Commercial resource types (allocated by the SP)

Type	Resource Name	Unit	Billing Mode	Resource Type Code	Remarks
Virtual Avatars	Virtual avatar image modeling	Image	One-off payment	hws.resource.type.metastudio.avatarmodeling.customised	-
	Virtual avatar voice modeling (basic edition)	Voice	One-off payment	hws.resource.type.metastudio.modeling.voice.onebasic.customised	-
	Virtual avatar voice modeling (advanced edition)	Voice	One-off payment	hws.resource.type.metastudio.modeling.voice.onemiddle.customised	-
	Virtual avatar voice modeling (premium edition)	Voice	One-off payment	hws.resource.type.metastudio.modeling.voice.advance.customised	-

Type	Resource Name	Unit	Billing Mode	Resource Type Code	Remarks
	Virtual avatar video production	Min	One-off payment	hws.resource.type.metastudio.modeling.avatarvideo.customised	-
	60-minute package for virtual avatar video production	Min	One-off payment	hws.resource.type.metastudio.modeling.avatarvideo.duration60	Validity period: 3 months NOTE Discarded
	60-minute package for virtual avatar video production	Min	One-off payment	hws.resource.type.metastudio.modeling.avatarvideo.time60	Validity period: 1 year
	600-minute package for virtual avatar video production	Min	One-off payment	hws.resource.type.metastudio.modeling.avatarvideo.duration600	Validity period: 6 months NOTE Discarded
	600-minute package for virtual avatar video production	Min	One-off payment	hws.resource.type.metastudio.modeling.avatarvideo.time600	Validity period: 1 year

Type	Resource Name	Unit	Billing Mode	Resource Type Code	Remarks
	6000-minute package for virtual avatar video production	Min	One-off payment	hws.resource.type.metastudio.modeling.avatarvideo.duration6000	Validity period: 1 year
	Photo-based virtual avatar video production	Min	One-off payment	hws.resource.type.metastudio.modeling.photoavatar.customised	-
	60-minute package for photo-based virtual avatar video production	Min	One-off payment	hws.resource.type.metastudio.modeling.photoavatar.duration60	Validity period: 3 months NOTE Discarded
	60-minute package for photo-based virtual avatar video production	Min	One-off payment	hws.resource.type.metastudio.modeling.photoavatar.time60	Validity period: 1 year

Type	Resource Name	Unit	Billing Mode	Resource Type Code	Remarks
	600-minute package for photo-based virtual avatar video production	Min	One-off payment	hws.resource.type.metastudio.modeling.photoavatar.duration600	Validity period: 6 months NOTE Discarded
	600-minute package for photo-based virtual avatar video production	Min	One-off payment	hws.resource.type.metastudio.modeling.photoavatar.time600	Validity period: 1 year
	6000-minute package for photo-based virtual avatar video production	Min	One-off payment	hws.resource.type.metastudio.modeling.photoavatar.duration6000	Validity period: 1 year
	Virtual avatar business card production	Card	One-off payment	hws.resource.type.metastudio.modeling.avatarcard.customised	-
	Package of 50 virtual avatar business cards	Package	One-off payment	hws.resource.type.metastudio.modeling.avatarcard.number50	Validity period: 3 months NOTE Discarded

Type	Resource Name	Unit	Billing Mode	Resource Type Code	Remarks
	Package of 50 virtual avatar business cards	Package	One-off payment	hws.resource.type.metastudio.modeling.avatarcard.num50	Validity period: 1 year
	Package of 300 virtual avatar business cards	Package	One-off payment	hws.resource.type.metastudio.modeling.avatarcard.number300	Validity period: 6 months NOTE Discarded
	Package of 300 virtual avatar business cards	Package	One-off payment	hws.resource.type.metastudio.modeling.avatarcard.num300	Validity period: 1 year
	Package of 500 virtual avatar business cards	Package	One-off payment	hws.resource.type.metastudio.modeling.avatarcard.number500	Validity period: 1 year

Table 11-18 PoC test resources (allocated by the administrator to tenants)

Type	Resource Name	Unit	Resource Type Code	Remarks
Virtual Avatars	Virtual avatar image modeling	Image	modeling_count_2d_model	-

Type	Resource Name	Unit	Resource Type Code	Remarks
	Flexus virtual avatar image modeling	Image	modeling_count_2d_model_flexus	-
	Virtual avatar image modeling (premium edition)	Image	modeling_count_2d_model_advance	Not available
	Virtual avatar voice modeling (basic edition)	Voice	voice_clone_basic	-
	Virtual avatar voice modeling (advanced edition)	Voice	voice_clone_middle	-
	Virtual avatar voice modeling (premium edition)	Voice	voice_clone_advance	-
	Flexus virtual avatar voice modeling	Voice	voice_clone_flexus	-

Type	Resource Name	Unit	Resource Type Code	Remarks
	Virtual avatar video production	Min	video_time_2d_model	-
	Flexus virtual avatar video production	Min	video_time_flexus_2d_model	-
	Virtual avatar video production (attractive edition)	Min	video_time_easy_2d_model	-
	Photo-based virtual avatar video production	Min	video_time_photo	-
	Virtual avatar business card production	Card	business_card_count	-
	Virtual avatar livestreaming	Hour	live_time_2d_model	-
	Virtual avatar livestreaming	Livestream	live_periodic_ncj_2d_model	-

Type	Resource Name	Unit	Resource Type Code	Remarks
	Virtual avatar intelligent interaction (basic edition)	Dialog	chat_basic_ncj_2d_model	-
	Virtual avatar intelligent interaction (professional edition)	Dialog	chat_advanced_ncj_2d_model	Not available
TTS	TTS of one million characters	10,000 characters	synthetics_sound	-
Asset Management	Asset management	GB	asset_managing_basic	-

11.11 Using the Java Code to Generate the MD5 Value of the File Content

The MD5 value of the file content is the Base64-encoded 128-bit MD5 digest of the message according to RFC 1864.

The following is an example of the Java code used to generate the MD5 value of the file content:

```
import java.io.BufferedReader;
import java.io.FileInputStream;
import java.io.IOException;
import java.security.MessageDigest;
import java.security.NoSuchAlgorithmException;
import java.util.Base64;

public class DacBase64Main {
    public static void main(String[] args) throws NoSuchAlgorithmException, IOException {
```

```
MessageDigest messageDigest = MessageDigest.getInstance("MD5");
FileInputStream fileInputStream = new FileInputStream("File address");
BufferedInputStream bufferedInputStream = new BufferedInputStream(fileInputStream);
final byte[] buffer = new byte[1024];
int read;
while ((read = bufferedInputStream.read(buffer, 0, 1024)) > -1) {
    messageDigest.update(buffer, 0, read);
}
byte[] digest = messageDigest.digest();
String md5 = Base64.getEncoder().encodeToString(digest);
System.out.println(md5);
}
```

11.12 Preset Timbre IDs

See [Table 11-19](#).

Table 11-19 Preset timbre IDs

Timbre Name	Asset ID (CN East-Shanghai1)	Asset ID (CN North-Beijing4)	Asset ID (AP-Singapore)
Yunge	075494c45b5aef529d55cd2a456e6076	0a4b548fd8d2d6998e1fc3fffb29f9bc	cbcfbfa73488876ce507144c87307440
Yunfeng	d8cd17100beaf4c2d09355731ebe7e37	1f6cbd6dd68da7a74c367942c639056f	0e174aace7bde1d3012c3dd9467ab70a
Friendly female	39b9cedccec1f19b33d8f7ce1a6d35b9	f6f13895eaa9da542f0f5de52a3711d9	ed5e360ed686b4b392f06f4421f418ce
-	b5a86ef6c4fa5279df67c9eb52538aff	b6a3482d2cdc1d519eb37d319ad1d7b8	-
Chatting female	f5e6a13eab4443fa85421191ad061780	c41f12c125f24c834ed3ae7c1fdae456	12afb770ad8ce65b98c40702025f7b84
Female anchor	6df2e6343169dad6c8cb1d25f3badff5	020b4004c9602a5c30705b30b4764081	0fa34f05a32395f1cd6ae4f2a4bfacce
Mysterious male	dd15f2a2986c045d1375c1728f938243	305442831dba3f3861e8d50fc8d69865	ba2125d2831d9a6ca6296edcac25555e
Mysterious female	456fb1f8e6ea1618ac691fdc5aa18ee7	3c8a297ae090add35a08e3bfc99aaa15	2ea534727ebee3c0724f96d0d117fc48

Timbre Name	Asset ID (CN East-Shanghai1)	Asset ID (CN North-Beijing4)	Asset ID (AP-Singapore)
Outgoing male	180254e8f35b3768af2cb702c7bc1755	c8c05a77ab6fd6afecab33fc24699581	73f63c6abe6cabbc28267c1dc8038e9f
Yunyi	7dda959a91d8593ef37ce2b994f4880e	f7f79183a0b1d88d61880a120a1a0f0f	1fd7374e358af873e4a4bb05f8c4c235
Humorous female	9c6f836c6391c58524ff3ff7c6aba8b5	f5f4ed3d8351282387b6527b260a59a9	c69775062ce1a1191027d03f5a782cd8
Natural female	8cb4acf103b1fc0c9ad79ec490ba3f8f	855618f54e75a9ff0e02d6e46bbd468b	bde34f7290367752f0def8d55d27e4e3
Daniel	640145fefbc86785f7c41f90d8731c65	c06a2ab5403100a9eabea6b18502dad3	ebf158d617237c3f2edc246a9097a366
English male	483e5bf24a61c3517aaad516a6478187	92bb2c46bebbc8fef070ebfb299a971	c0cabbde14a19e45c7981d16fa102133
Emma	e3623c3d911bc3bfdbcdff51ab8d86f6	aca15f9fe7912b2d5d8eb827f2d1327b	06a6f6c8c8a54bcb2b14c97f4bc58d38
English female	fabe7d4559f5c376782cf1fb7455f829	3c811f6cd442baaa943b43525261f576	8ffdfc20f667cbd946a67d8abcf8ea6e
-	dd849d1ae89304fa50b26a9725865f55	b6e1386d420d4f9aec9d921e0f729bd6	-
-	1420ad5e8b924ef3e4de4e46865aa6af	31f11ff899cae0be94d79966ca4cfa2a	-
David	b49a4cec2f9477fc70ac900879daa430	901765135bd92747d90c310ca2407b3a	6145cdc8562be9f0e0973b4d91a16ccb
-	556106fa3f3d10b60b882a4d43b0c078	2f8413b43529d562f1874c67b8ddb99a	-
-	c0898109a5a0640f0552f7c664bce3ee	e8f6a3ebe4b9011a28b17c464c4ac7df	-

Timbre Name	Asset ID (CN East-Shanghai1)	Asset ID (CN North-Beijing4)	Asset ID (AP-Singapore)
-	6a3224811f74c22023a9737c516bbc49	2e168cb3720e3dae053fa481d437c90f	-
Devin	b94455b5ca5a26537443395f03647b71	e58cab1e6e5c2d4d7dc528678b5721ed	710d6b0e97b1f5f0bff8576016a2134ced
-	42021051dfe2fad8c2fbc45fb37b0a83	81660c15661e91190bbb8c64c2daf079	-
-	e5d0fde4770531089559aba9a695aa63	2d7925b1bcf0c68d8dae61ad8a2cf029	-
Yunxia	a3034a660be658a5634af13a55931133	103e2b25cd468367356649253a04ec85	df9a9f8898b918bfe112ba4bc71ea7f6
Customer service male	9f8d93e987a4e342a187ae1e02fbfa4e	c20e1b59495d3186ef72226fb1e6701b	7c1c983df051f75f3a6bce42f434d34f
-	113821c9b505db223677edb864007a82	f3fd4fefc3b2e82ffd52f66bb802ddbc	-
-	c1960d7c97207d2cd9ccd703bcd34e9e	e4c864b2df9a629ec697c3ed31e43864	-
Male streamer	106a98b4609e55d631237cadd3381f3f	30de9859e7b7ca91c9b7ca572838b7a3	3fdb804af0120db1830c4ac81a698435
Female streamer	baf63f0c2739efacc4b37aee715a6cab	2536eb2c89bda92505b76d4d90d8637b	e01c105f9b05636b8542369dc907bd16

11.13 Querying Timbre IDs

You can query timbre IDs on the MetaStudio console or using the API:

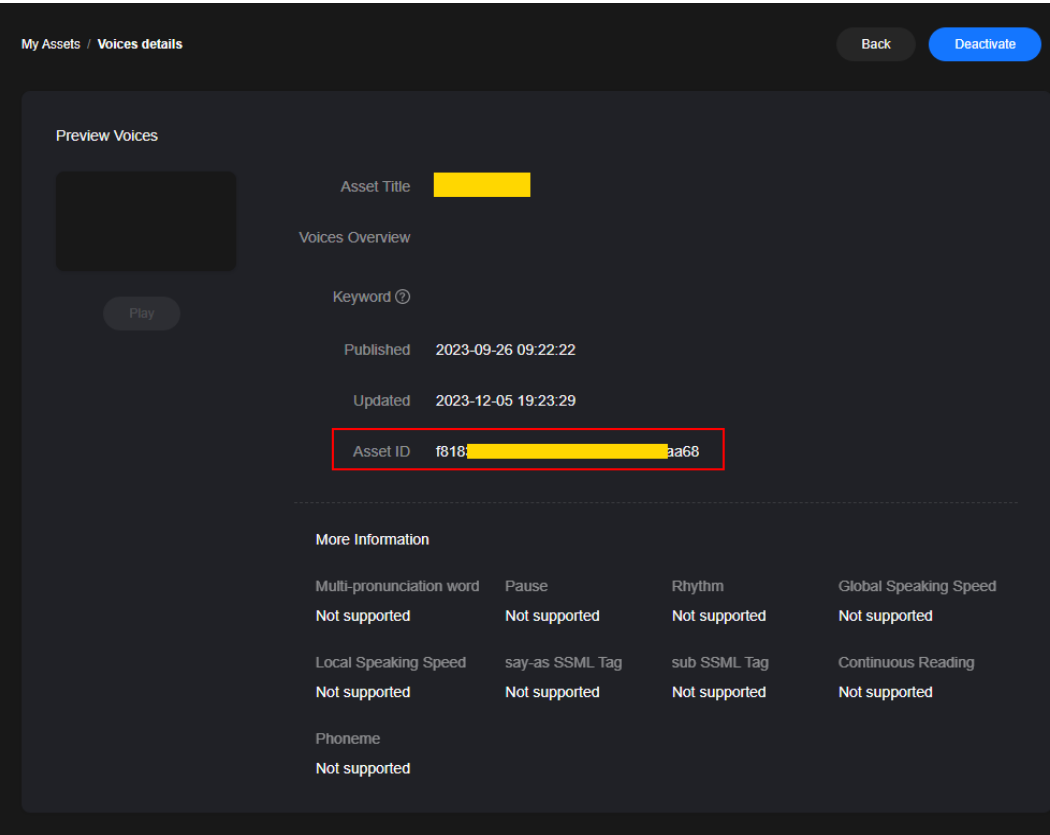
- [Method 1: Querying Timbre IDs on the Console](#): only for custom timbre IDs
- [Method 2: Querying Timbre IDs on the Console](#): all timbre IDs
- [Method 3: Querying Timbre IDs Using the API](#): all timbre IDs

Method 1: Querying Timbre IDs on the Console

This query method applies only to custom timbre IDs, not preset ones.

- Step 1** Log in to the MetaStudio console.
- Step 2** In the navigation pane, choose **My Creations**.
- Step 3** Select **Resources > Voices**.
- Step 4** Click the desired voice card to access the **Voice Details** page.
- The asset ID is the timbre ID required by the WebSocket API for speech synthesis.

Figure 11-5 Voice details



----End

Method 2: Querying Timbre IDs on the Console

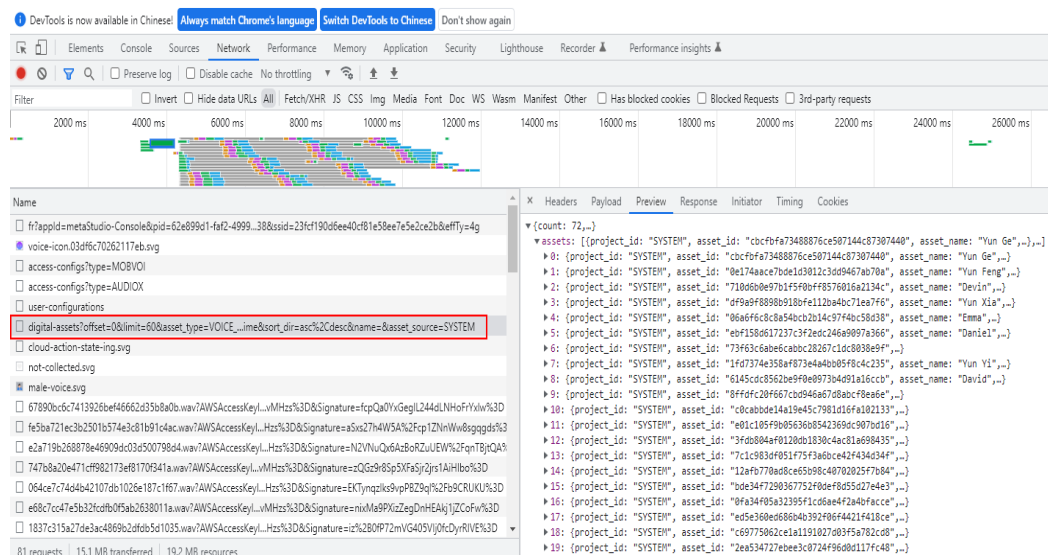
You can press **F12** on the MetaStudio console to query timbre IDs. Perform the following steps:

- Step 1** Log in to the MetaStudio console.
- Step 2** Click **Create** under **Video production**.
- Step 3** On the page displayed, press **F12** to open the code window and select the **Network** tab.
- Step 4** Return to the video production page and click **Education female** at the bottom of the page. The voice dialog box is displayed.
- Step 5** In the **Name** column of the code window, find and click the line starting with **digital-assets**, as shown in [Figure 11-6](#).

digital-assets is also a value in the URI of the API for **querying assets**.

Under the **Preview** tab on the right, you can see the **asset_ids** of all timbres, which are the desired timbre IDs.

Figure 11-6 Querying timbre IDs



----End

Method 3: Querying Timbre IDs Using the API

You can call the API for **querying assets** to query timbre IDs. Configure these parameters:

- **offset=0**: The query starts from the first timbre. You can customize the value.
- **limit=60**: Voice data records that can be queried each time. You can customize the value.
- **asset_type=VOICE_MODEL**: The asset type is timbre model.
- **asset_state=ACTIVED**: The asset has been activated.
- **asset_source=SYSTEM**: The asset is a preset one.
- **voice_provider=HUAWEI_METASTUDIO**: The timbre model MetaStudio-developed. You can change the value.

12 Change History

Table 12-1 Change history

Released On	Description
2025-03-26	This issue is the ninth official release. Changes: Added the subscription management API group.
2024-12-30	This issue is the eighth official release. Changes: Added the following APIs to the API group TTS Management: Configuring a Tenant-Level Custom Pronunciation for TTS, Obtaining a Tenant-Level Custom Pronunciation for TTS, Deleting a Tenant-Level Custom Pronunciation for TTS, and Modifying a Tenant-Level Custom Pronunciation for TTS.
2024-12-05	This issue is the seventh official release. Changes: - Added the API group Virtual Avatar Video Subtitle File Management. - Added the API group Third-Party Live Platform Management.
2024-11-30	This issue is the sixth official release. Changes: - Added the following APIs to the API group TTS Management: Creating an Asynchronous TTS Task and Obtaining an Asynchronous TTS Task. - Added the following APIs to the API group Voice Modeling Task Management: Querying Personalized Audio Duration and Setting the Task Batch.

Released On	Description
2024-11-15	This issue is the fifth official release. Changes: Added intelligent interaction APIs and the intelligent interaction client SDK.
2024-10-30	This issue is the fourth official release. Changes: Added the API group Tenant Management .
2024-08-20	This issue is the third official release. Changes: Added the API Querying Task Operation Logs .
2024-06-01	This issue is the second official release. Changes: - Added the API Batch Asset Operations. - Added the API group Live Product Management.
2024-03-30	This issue is the first official release.