MetaStudio

API Reference

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Huawei Cloud Computing Technologies Co., Ltd.

Contents

1 Before You Start

1.1 Overview

MetaStudio provides capabilities such as virtual human generation, visual control, speech control, and real-time rendering, and quickly provides virtual video services such as virtual video production and livestreaming for industries. It is applicable to scenarios such as online courses, live commerce, and social entertainment.

This document describes how to use APIs to perform operations on Huawei Cloud MetaStudio. For details about all supported operations, see **API Overview**.

Before calling APIs of Huawei Cloud MetaStudio, ensure that you are familiar with MetaStudio concepts.

1.2 API Calling

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

1.3 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 **regions and endpoints** of services.

Table 1-1 MetaStudio endpoints

Region Name	Region	Endpoint
CN East-Shanghai1	cn-east-3	metastudio.cn-east-3.myhuaweicloud.com
CN North-Beijing4	cn-north-4	metastudio.cn-north-4.myhuaweicloud.com

An endpoint is the **request address** for calling an API. Endpoints vary depending on services and regions. For the endpoints of all services, see regions and endpoints.

1.4 Configuring User Information

Before using MetaStudio, you need to configure user information. Contact Huawei Cloud technical engineers to configure an account whitelist for you. For details, **submit a service ticket** and attach account information (project ID).

1.5 Constraints

API request throttling is configured for Huawei Cloud MetaStudio to prevent service interruption caused by repeated API calls in a short period. **Table 1-2** describes the API request throttling.

Table 1-2 API request throttling

API Category	API Name	Single Tenant (CN North-Beijing4)	Single Tenant (CN East-Shanghai1)	Single Tenant (AP-Singapore)
Digital Asset Management	Creating an Asset	10 times/ second	5 times/ second	5 times/ second
	Querying the Asset List	20 times/ second	10 times/ second	10 times/ second
	Updating an Asset	10 times/ second	5 times/ second	5 times/ second
	Deleting an Asset	10 times/ second	5 times/ second	5 times/ second
	Querying Asset Details	20 times/ second	10 times/ second	10 times/ second
	Restoring a Deleted Asset	10 times/ second	5 times/ second	5 times/ second
	Querying Asset Summary	20 times/ second	10 times/ second	10 times/ second
File Management	Deleting a File	10 times/ second	5 times/ second	5 times/ second
	Creating a File and Obtaining the URL for File Upload	10 times/ second	5 times/ second	5 times/ second
	Confirming the Upload of a File	10 times/ second	5 times/ second	5 times/ second

API Category	API Name	Single Tenant (CN North-Beijing4)	Single Tenant (CN East-Shanghai1)	Single Tenant (AP-Singapore)
Video Script Management	Creating a Video Script	10 times/ second	5 times/ second	5 times/ second
	Querying Video Scripts	20 times/ second	10 times/ second	10 times/ second
	Querying Video Script Details	20 times/ second	10 times/ second	10 times/ second
	Updating a Video Script	10 times/ second	5 times/ second	5 times/ second
	Deleting a Video Script	10 times/ second	5 times/ second	5 times/ second
	Copying a Video Script	10 times/ second	5 times/ second	5 times/ second
Virtual Human Video Production Management	Querying Video Production Tasks	20 times/ second	10 times/ second	10 times/ second
Virtual Avatar Video Production Management	Creating a Virtual Avatar Video Production Task	5 times/ second	3 times/ second	3 times/ second
	Querying Virtual Avatar Video Production Task Details	20 times/ second	10 times/ second	10 times/ second
	Canceling a Virtual Avatar Video Production Task in the Waiting Status	5 times/ second	3 times/ second	3 times/ second
Intelligent Live Room Management	Creating an Intelligent Live Room	5 times/ second	3 times/ second	3 times/ second
	Querying Intelligent Live Rooms	20 times/ second	10 times/ second	10 times/ second
	Querying Intelligent Livestreaming Script Details	20 times/ second	10 times/ second	10 times/ second

API Category	API Name	Single Tenant (CN North-Beijing4)	Single Tenant (CN East-Shanghai1)	Single Tenant (AP-Singapore)
	Updating Intelligent Live Room Information	5 times/ second	3 times/ second	3 times/ second
	Deleting an Intelligent Live Room	4 times/ second	3 times/ second	3 times/ second
	Creating an Interaction Rule Library for Live Rooms	4 times/ second	3 times/ second	3 times/ second
	Querying Interaction Rule Libraries for Live Rooms	20 times/ second	10 times/ second	10 times/ second
	Updating an Interaction Rule Library for Live Rooms	4 times/ second	3 times/ second	3 times/ second
	Deleting an Interaction Rule Library for Live Rooms	4 times/ second	3 times/ second	3 times/ second
	Checking Language Consistency Between Timbre and Text	4 times/ second	3 times/ second	3 times/ second
Livestreaming Task Management	Starting a Virtual Human Intelligent Livestreaming Task	4 times/ second	3 times/ second	3 times/ second
	Querying Virtual Human Intelligent Livestreaming Tasks	20 times/ second	10 times/ second	10 times/ second
	Querying Virtual Human Intelligent Livestreaming Task Details	20 times/ second	10 times/ second	10 times/ second

API Category	API Name	Single Tenant (CN North-Beijing4)	Single Tenant (CN East-Shanghai1)	Single Tenant (AP-Singapore)
	Ending a Virtual Human Intelligent Livestreaming Task	4 times/ second	3 times/ second	3 times/ second
	Controlling Virtual Human Intelligent Livestreaming	4 times/ second	3 times/ second	3 times/ second
	Reporting Livestreaming Events	4 times/ second	3 times/ second	3 times/ second
Image Modeling Management	Creating a Virtual Avatar Model Training Task	10 times/ second	3 times/ second	3 times/ second
	Querying Virtual Avatar Model Training Tasks	20 times/ second	10 times/ second	10 times/ second
	Querying Virtual Avatar Model Training Task Details	20 times/ second	10 times/ second	10 times/ second
	Deleting a Virtual Avatar Model Training Task	10 times/ second	3 times/ second	3 times/ second
	Updating a Virtual Avatar Model Training Task	10 times/ second	3 times/ second	3 times/ second
	Executing a Virtual Avatar Model Training Task as a Tenant	10 times/ second	3 times/ second	3 times/ second
Voice Modeling Task Management	Creating a Voice Training Task (Basic Edition)	10 times/ second	3 times/ second	3 times/ second
	Creating a Voice Training Task (Advanced Edition)	10 times/ second	3 times/ second	3 times/ second
	Creating a Voice Training Task (Premium Edition)	10 times/ second	3 times/ second	3 times/ second

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

1.6 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
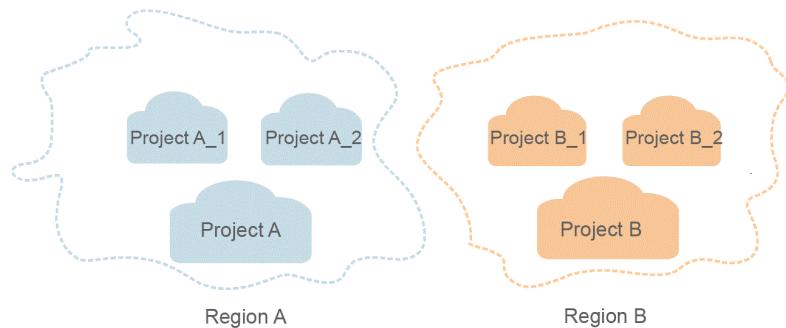
2 API Overview

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 the Asset List**
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/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**

Virtual Human Video Production Management

Table 2-4 Virtual human 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 Human 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 Human Intelligent Livestreaming Task Details**
POST /v1/{project_id}/smart-live-rooms/{room_id}/smart-live-jobs/{job_id}/stop	**Ending a Virtual Human Intelligent Livestreaming Task**
POST /v1/{project_id}/smart-live-rooms/{room_id}/smart-live-jobs/{job_id}/command	**Controlling Virtual Human Intelligent Livestreaming**
GET /v1/{project_id}/smart-live-jobs	**Querying All Virtual Human 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**

Image Modeling Management

Table 2-8 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 2-9 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}/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 2-10 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. The obtained token can then be used to authenticate the calling of other APIs.

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**.

Parameter	Description
query-string	Query parameter, which is optional. Ensure that a question mark (?) is included before each query parameter that is in the format of *Parameter name=Parameter value*. 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
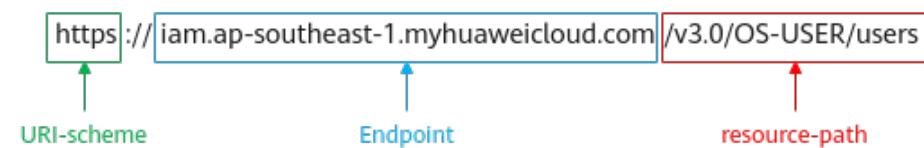
📖 **NOTE**

> 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.

Method	Description
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 *Hostname:Port number*. 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:44 3 |
| 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 |

Parameter	Description	Mandatory	Example Value
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
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: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

☐ **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. In the response to the API used to obtain a user token, **X-Subject-Token** is the desired user token. This token can then be used to authenticate the calling of other APIs.

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.

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 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 to which the IAM user belongs
                    }
                }
            }
        },
        "scope": {
            "project": {
                "name": "xxxxxxxx"    // 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 **ABCDEFJ....**, **X-Auth-Token: ABCDEFJ....** can be added to a request as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/projects
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```

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 is 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	Asset name.
asset_description	No	String	Asset description.

Parameter	Mandatory	Type	Description
asset_type	Yes	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_TEMPLET**: business card template 3D virtual human asset. Options: • **HUMAN_MODEL**: 3D virtual human model • **SCENE**: scene model • **ANIMATION**: animated actions • **MATERIAL**: stylized materials • **NORMAL_MODEL**: normal model
asset_owner	No	String	Project ID. **NOTE** • Only the administrator can configure this parameter.
review_config	No	**ReviewConfig** object	Configures content review.
tags	No	Array of strings	Tags.
asset_extra_meta	No	**AssetExtraMeta** object	Asset metadata. Sets this parameter based on the asset type.

Parameter	Mandatory	Type	Description
system_prope rties	No	Array of **SystemPrope rty** objects	Sets system attributes.
shared_config	No	**AssetSharedC onfig** object	Sharing configuration
is_need_gener ate_cover	No	Boolean	Indicates whether to generate a thumbnail image through the asset library. **NOTE** ● Available for asset type: **VIDEO**.
asset_order	No	Integer	Display sequence.

Table 4-4 ReviewConfig

Parameter	Mandatory	Type	Description
no_need_revie w	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	**HumanMode lAssetMeta** object	Virtual human model metadata.
voice_model_ meta	No	**VoiceModelA ssetMeta** object	Timbre model metadata.
ppt_meta	No	**PPTAssetMet a** object	PPT asset metadata information.
animation_me ta	No	**AnimationAs setMeta** object	Animated action asset metadata.
scene_meta	No	**SceneAssetM eta** object	Scenario metadata.

Parameter	Mandatory	Type	Description
material_meta	No	**MaterialAssetMeta** object	Material metadata.
human_model_2d_meta	No	**HumanModel2DAssetMeta** object	Virtual avatar model metadata
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	Virtual human model 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
modeling_type	No	String	Modeling type of the virtual human model. ● **UPLOADED**: model uploaded by a tenant ● **PICTURE_MODELING**: model generated by photo ● **CHARACTER_CUSTOMIZATION_MODELING**: model generated by creating a face avatar
modeling_job_id	No	String	Modeling task ID.
model_properties	No	**HumanModelMetaProperties** object	Records model configuration information.

Parameter	Mandatory	Type	Description
components	No	Array of **ComponentInfo** objects	Replaceable components.

Table 4-7 HumanModelMetaProperties

Parameter	Mandatory	Type	Description
whole_model_base_file_id	No	String	Indicates the **file_id** based on which the **WHOLE_MODEL** in the current model is generated. If the current ID is the same as the **file_id** of the **MAIN** file, the **WHOLE_MODEL** has been generated and does not need to be exported.
load_model_file_id	No	String	**file_id** used for loading. If the ID is null or no ID is matched, the **MAIN** file is used.

Table 4-8 ComponentInfo

Parameter	Mandatory	Type	Description
component_name	Yes	String	Component name.
component_type	Yes	String	Component type.
component_desc	No	String	Component description.

Table 4-9 VoiceModelAssetMeta

Parameter	Mandatory	Type	Description
order	No	Integer	Display order
model_type	No	String	Timbre asset type. ● **COMMON**: general emotion model ● **CLONE**: voice cloning model

Parameter	Mandatory	Type	Description
sex	No	String	Timbre gender. ● **UNKNOW**: neutral timbre ● **MALE**: male timbre ● **FEMALE**: female timbre The default value is **UNKNOW**.
language	No	String	Timbre languages: ● **UNKNOW**: unknown ● **CN**: Chinese ● **EN**: English ● **GER**: German ● **fr**: French ● **Kr**: Korean ● **por**: Portuguese ● **JPN**: Japanese ● **Ita**: Italian ● **ESP**: Spanish ● **DBH**: Northeast China dialect ● **GT**: Cantonese & 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 The default value is **UNKNOW**.
speed_ratio	No	Float	Speech speed zoom ratio

Parameter	Mandatory	Type	Description
volume_ratio	No	Float	Volume zoom ratio
is_realtime_voice	No	Boolean	Whether the timbre supports real-time compositing. The default value is **true**. **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.
voice_capability	No	**VoiceCapability** object	Capability set supported by the timbre asset. **NOTE** The timbre capability set can be queried but cannot be configured.
external_voice_meta	No	**ExternalVoiceAssetMeta** object	Third-party TTS timbre metadata.

Table 4-10 VoiceCapability

Parameter	Mandatory	Type	Description
is_support_phoneme_en	No	Boolean	English phonetic symbols are supported.
is_support_phoneme	No	Boolean	Whether multi-pronunciation words are supported.
is_support_break_time	No	Boolean	Whether pauses are supported.
is_support_break_strength	No	Boolean	Whether rhythm is supported.
is_support_speed	No	Boolean	Whether global speaking speed is supported.
is_support_prosody	No	Boolean	Whether local speaking speed is supported.
is_support_ssml_say_as	No	Boolean	Whether the say-as SSML tag is supported.
is_support_ssml_sub	No	Boolean	Whether the sub SSML tag is supported.

Parameter	Mandatory	Type	Description
is_support_word	No	Boolean	Whether continuous reading is supported.

Table 4-11 ExternalVoiceAssetMeta

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

Table 4-12 PPTAssetMeta

Parameter	Mandatory	Type	Description
auto_analysis	No	Boolean	Indicates whether the PPT needs to be automatically parsed.
ppt_analysis_status	No	String	PPT resolution status. • **INITIALIZE**: initial • **WAITING**: waiting • **CONVERTING**: being parsed • **FAILED**: failed • **SUCCEEDED**: successful • **CANCELED**: canceled
error_info	No	**ErrorResponse** object	Error information
page_count	No	Integer	Total number of PPT pages.
pages	No	Array of **PPTPageInfo** objects	PPT page image.

Table 4-13 PPTPageInfo

Parameter	Mandatory	Type	Description
page_no	No	Integer	Page number.
file_id	No	String	ID of the image file corresponding to the page.
page_content	No	String	Commentary (extracted from remarks).

Table 4-14 AnimationAssetMeta

Parameter	Mandatory	Type	Description
style_id	No	String	Virtual human model style ID.
duration	No	Float	Animation duration.
auto_analysis	No	Boolean	Indicates whether an action needs to be automatically parsed.
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.
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 4-15 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 4-16 SceneComponentInfo

Parameter	Mandatory	Type	Description
index	No	Integer	Component index.
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 4-17 MaterialAssetMeta

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

Table 4-18 MaterialComponentInfo

Parameter	Mandatory	Type	Description
component_name	Yes	String	Material component name.

Parameter	Mandatory	Type	Description
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 4-19 HumanModel2DAssetMeta

Parameter	Mandatory	Type	Description
is_action_editable	No	Boolean	Indicates whether the action of a virtual avatar can be edited (Uneditable by default).
is_real_background	No	Boolean	Indicates whether a virtual avatar is in a real scene. The real scene will not be replaced.
support_live	No	Boolean	Indicates whether livestream is supported.
model_version	No	String	Virtual avatar model version. By default, the V2 model is used. • **V2**: V2 model • **V3**: V3 model • **V3_2**: V3.2 model
model_resolution	No	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.
device_names	No	Array of strings	The compilation task has been executed.

Table 4-20 ImageAssetMeta

Parameter	Mandatory	Type	Description
codec	No	String	Image encoding format, which is automatically extracted.
width	No	Integer	Image width, which is automatically extracted.
height	No	Integer	Image height, which is automatically extracted.
size	No	Number	Size
mode	No	String	**Horizontal**; **Vertical**
error_info	No	**ErrorResponse** object	Error message

Table 4-21 VideoAssetMeta

Parameter	Mandatory	Type	Description
video_codec	No	String	Video encoding format
width	No	Integer	Video width
height	No	Integer	Video height
frame_rate	No	String	Frame rate
video_bit_rate	No	Integer	Average video bitrate, in kbit/s.
duration	No	Integer	Duration, in second.
audio_codec	No	String	Audio encoding format
audio_bit_rate	No	Integer	Average audio bitrate, in kbit/s.
audio_channels	No	Integer	Number of audio channels
sample	No	Integer	Sampling rate, in Hz.
mode	No	String	**Horizontal**; **Vertical**
video_transcoding_status	No	String	Video transcoding status. • WAITING • TRANSCODING • FAILED • SUCCEEDED

Parameter	Mandatory	Type	Description
error_info	No	**ErrorRespons e** object	Error message

Table 4-22 AudioAssetMeta

Parameter	Mandatory	Type	Description
duration	No	Integer	Duration, in second.
audio_codec	No	String	Audio encoding format
audio_bit_rate	No	Integer	Average audio bitrate, in kbit/s.
audio_channe ls	No	Integer	Number of audio channels
sample	No	Integer	Sampling rate, in Hz.
error_info	No	**ErrorRespons e** 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	Operations. • **ADD**: add • **DELETE**: delete

Parameter	Mandatory	Type	Description
key	No	String	System attribute. Public asset attribute. 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 attribute. Options: • **MATERIAL_IMG**: image used as the foreground. Set **value** to **Yes**. • **MATERIAL_VIDEO**: video used as the foreground. Set **value** to **Yes**. • **BUSINESS_CARD_VIDEO**: business card video • **TO_BE_TRANSLATED_VIDEO**: source video for translation. The value can be **Yes**. 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
value	No	String	Attribute value.

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.
offset	No	Integer	Offset where the query starts.
name	No	String	Fuzzy search by name.
tag	No	String	Fuzzy search by tag.
tag_combination_type	No	String	Tag query combination mode. INTERSECTION 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_TEMPLET**: business card template • **MUSIC**: music • **AUDIO**: audio
sort_key	No	String	Sorting field. Currently, only **create_time** is supported.
sort_dir	No	String	Sorting mode. • **asc**: ascending order • **desc**: descending order **asc** is used by default.
asset_source	No	String	Asset source. • **SYSTEM**: system asset • **CUSTOMIZATION**: tenant asset • **ALL**: all assets Tenant assets are queried by default.

Parameter	Mandatory	Type	Description
asset_state	No	String	Asset status. If there is more than one, separate them with commas (,). ● **CREATING**: The asset is being created. The main file has not been uploaded. ● **FAILED**: Main file upload fails. ● **UNACTIVED**: The main file is uploaded successfully. The asset is not activated, and it cannot be used for other services. (Users can update the status.) ● **ACTIVED**: The main file is uploaded successfully. The asset is activated, and it 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 is deleted. The asset is unavailable and cannot be restored. ● **BLOCK**: The asset is frozen. The asset is unavailable and cannot be viewed. By default, assets in all statuses are queried.
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

Parameter	Mandatory	Type	Description
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	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_prope rty	No	String	System attribute. *key* and *value* are separated with colons (:). Use commas (,) to separate them if there are more than one key. For example, **system_property=BACKGROU ND_IMG:Yes,RENDER_ENGIN E: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_VIDE O**: 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_editabl e	No	Boolean	Indicates whether an action is editable. This parameter is only available for virtual avatar model query.
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_vo ice	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_devic e_name	No	String	Name of a compilation task that has been executed under an asset
exclude_devic e_name	No	String	Name of a compilation task that has been executed under an asset

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.
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 ion	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_TEMPLET**: 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 fails. ● **UNACTIVED**: The main file is uploaded successfully. The asset is not activated, and it cannot be used for other services. (Users can update the status.) ● **ACTIVED**: The main file is uploaded successfully. The asset is activated, and it 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 is deleted. The asset is unavailable and cannot be restored. ● **BLOCK**: The asset is frozen. The asset is unavailable and cannot be viewed.
fail_type	String	Failure causes: ● **AUTOMATIC_REVIEW_REJECT**: Auto review failed. ● **MANUAL_REVIEW_REJECT**: Manual review failed.
reason	String	Freezing, unfreezing, and failure causes.
tags	Array of strings	Tags.
asset_extra_meta	**AssetExtraMeta** object	Asset metadata. Sets this parameter based on the asset type.
system_properties	Array of **SystemProperty** objects	Sets system attributes.
files	Array of **AssetFileInfo** objects	Files under an asset.
asset_order	Integer	Display sequence.

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	Virtual human model 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

Parameter	Type	Description
modeling_type	String	Modeling type of the virtual human model. • **UPLOADED**: model uploaded by a tenant • **PICTURE_MODELING**: model generated by photo • **CHARACTER_CUSTOMIZATION_MODELING**: model generated by creating a face avatar
modeling_job_id	String	Modeling task ID.
model_properties	**HumanModelMetaProperties** object	Records model configuration information.
components	Array of **ComponentInfo** objects	Replaceable components.

Table 4-37 HumanModelMetaProperties

Parameter	Type	Description
whole_model_base_file_id	String	Indicates the **file_id** based on which the **WHOLE_MODEL** in the current model is generated. If the current ID is the same as the **file_id** of the **MAIN** file, the **WHOLE_MODEL** has been generated and does not need to be exported.
load_model_file_id	String	**file_id** used for loading. If the ID is null or no ID is matched, the **MAIN** file is used.

Table 4-38 ComponentInfo

Parameter	Type	Description
component_name	String	Component name.
component_type	String	Component type.
component_desc	String	Component description.

Table 4-39 VoiceModelAssetMeta

Parameter	Type	Description
order	Integer	Display order
model_type	String	Timbre asset type. ● **COMMON**: general emotion model ● **CLONE**: voice cloning model
sex	String	Timbre gender. ● **UNKNOW**: neutral timbre ● **MALE**: male timbre ● **FEMALE**: female timbre The default value is **UNKNOW**.

Parameter	Type	Description
language	String	Timbre languages: ● **UNKNOW**: unknown ● **CN**: Chinese ● **EN**: English ● **GER**: German ● **fr**: French ● **Kr**: Korean ● **por**: Portuguese ● **JPN**: Japanese ● **Ita**: Italian ● **ESP**: Spanish ● **DBH**: Northeast China dialect ● **GT**: Cantonese & 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 The default value is **UNKNOW**.
speed_ratio	Float	Speech speed zoom ratio
volume_ratio	Float	Volume zoom ratio
is_realtime_voice	Boolean	Whether the timbre supports real-time compositing. The default value is **true**. **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.

Parameter	Type	Description
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.

Table 4-40 VoiceCapability

Parameter	Type	Description
is_support_phoneme_en	Boolean	English phonetic symbols are supported.
is_support_phoneme	Boolean	Whether multi-pronunciation words are supported.
is_support_break_time	Boolean	Whether pauses are supported.
is_support_break_strength	Boolean	Whether rhythm is supported.
is_support_speed	Boolean	Whether global speaking speed is supported.
is_support_prosody	Boolean	Whether local speaking speed is supported.
is_support_ssml_say_as	Boolean	Whether the say-as SSML tag is supported.
is_support_ssml_sub	Boolean	Whether the sub SSML tag is supported.
is_support_word	Boolean	Whether continuous reading is supported.

Table 4-41 ExternalVoiceAssetMeta

Parameter	Type	Description
provider	String	Third-party TTS vendor. Options: • **XIMALAYA**: Himalaya • **HUAWEI_EI**: Huawei Cloud EI • **MOBVOI**: Mobvoi • **AUDIOX**: AudioX • **SINOVOICE**: SinoVoice • **DATABACK**: DataBaker • **AISPEECH**: AISpeech

Table 4-42 PPTAssetMeta

Parameter	Type	Description
auto_analysis	Boolean	Indicates whether the PPT needs to be automatically parsed.
ppt_analysis_status	String	PPT resolution status. • **INITIALIZE**: initial • **WAITING**: waiting • **CONVERTING**: being parsed • **FAILED**: failed • **SUCCEEDED**: successful • **CANCELED**: canceled
error_info	**ErrorResponse** object	Error information
page_count	Integer	Total number of PPT pages.
pages	Array of **PPTPageInfo** objects	PPT page image.

Table 4-43 PPTPageInfo

Parameter	Type	Description
page_no	Integer	Page number.
file_id	String	ID of the image file corresponding to the page.
page_content	String	Commentary (extracted from remarks).

Table 4-44 AnimationAssetMeta

Parameter	Type	Description
style_id	String	Virtual human model style ID.
duration	Float	Animation duration.
auto_analysis	Boolean	Indicates whether an action needs to be automatically parsed.
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.
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,**SceneComponentInfo**>	Default scene settings (camera position and initial person position).

Table 4-46 SceneComponentInfo

Parameter	Type	Description
index	Integer	Component index.
component_name	String	Component name.

Parameter	Type	Description
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	Indicates whether the action of a virtual avatar can be edited (Uneditable by default).
is_real_background	Boolean	Indicates whether a virtual avatar is in a real scene. The real scene will not be replaced.

Parameter	Type	Description
support_live	Boolean	Indicates whether livestream is supported.
model_versio n	String	Virtual avatar model version. By default, the V2 model is used. ● **V2**: V2 model ● **V3**: V3 model ● **V3_2**: V3.2 model
model_resolut ion	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.
device_names	Array of strings	The compilation task has been executed.

Table 4-50 ImageAssetMeta

Parameter	Type	Description
codec	String	Image encoding format, which is automatically extracted.
width	Integer	Image width, which is automatically extracted.
height	Integer	Image height, which is automatically extracted.
size	Number	Size
mode	String	**Horizontal**; **Vertical**
error_info	**ErrorRespons e** object	Error message

Table 4-51 VideoAssetMeta

Parameter	Type	Description
video_codec	String	Video encoding format
width	Integer	Video width
height	Integer	Video height
frame_rate	String	Frame rate
video_bit_rate	Integer	Average video bitrate, in kbit/s.

Parameter	Type	Description
duration	Integer	Duration, in second.
audio_codec	String	Audio encoding format
audio_bit_rate	Integer	Average audio bitrate, in kbit/s.
audio_channels	Integer	Number of audio channels
sample	Integer	Sampling rate, in Hz.
mode	String	**Horizontal**; **Vertical**
video_transcoding_status	String	Video transcoding status. ● WAITING ● TRANSCODING ● FAILED ● SUCCEEDED
error_info	**ErrorResponse** object	Error message

Table 4-52 AudioAssetMeta

Parameter	Type	Description
duration	Integer	Duration, in second.
audio_codec	String	Audio encoding format
audio_bit_rate	Integer	Average audio bitrate, in kbit/s.
audio_channels	Integer	Number of audio channels
sample	Integer	Sampling rate, in Hz.
error_info	**ErrorResponse** object	Error message

Table 4-53 ErrorResponse

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

Table 4-54 SystemProperty

Parameter	Type	Description
action	String	Operations. • **ADD**: add • **DELETE**: delete
key	String	System attribute. Public asset attribute. 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 attribute. Options: • **MATERIAL_IMG**: image used as the foreground. Set **value** to **Yes**. • **MATERIAL_VIDEO**: video used as the foreground. Set **value** to **Yes**. • **BUSINESS_CARD_VIDEO**: business card video • **TO_BE_TRANSLATED_VIDEO**: source video for translation. The value can be **Yes**. 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
value	String	Attribute value.

Table 4-55 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.

Parameter	Type	Description
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.
file_type	String	File type (the file name extension is extracted by default).
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_TEMPLET**, categories are **MAIN** and **COVER** (business card demo).
download_url	String	File download URL, which is valid for 24 hours.

Parameter	Type	Description
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.

Status code: 400

Table 4-56 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 4-57 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**.
asset_id	Yes	String	Asset ID.

Request Parameters

Table 4-58 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 4-59 Request body parameters

Parameter	Mandatory	Type	Description
asset_name	No	String	Asset name.
asset_description	No	String	Asset description.

Parameter	Mandatory	Type	Description
asset_type	No	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_TEMPLET**: 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
asset_state	No	String	Asset status: • **UNACTIVED**: Cancel activation (Assets not activated are not available for other services). • **ACTIVED**: Activate assets (Activated assets are available for other services).
asset_owner	No	String	Project ID. **NOTE** • Only the administrator can configure this parameter.

Parameter	Mandatory	Type	Description
review_config	No	**ReviewConfig** object	Configures content review.
tags	No	Array of strings	Tags.
asset_extra_meta	No	**AssetExtraMeta** object	Asset metadata. Sets this parameter based on the asset type.
system_properties	No	Array of **SystemProperty** objects	Sets system attributes.
shared_config	No	**AssetSharedConfig** object	Sharing configuration
asset_order	No	Integer	Display sequence.

Table 4-60 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 4-61 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.

Parameter	Mandatory	Type	Description
material_meta	No	**MaterialAssetMeta** object	Material metadata.
human_model_2d_meta	No	**HumanModel2DAssetMeta** object	Virtual avatar model metadata
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 4-62 HumanModelAssetMeta

Parameter	Mandatory	Type	Description
style_id	No	String	Virtual human model 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
modeling_type	No	String	Modeling type of the virtual human model. ● **UPLOADED**: model uploaded by a tenant ● **PICTURE_MODELING**: model generated by photo ● **CHARACTER_CUSTOMIZATION_MODELING**: model generated by creating a face avatar
modeling_job_id	No	String	Modeling task ID.
model_properties	No	**HumanModelMetaProperties** object	Records model configuration information.

Parameter	Mandatory	Type	Description
components	No	Array of **ComponentInfo** objects	Replaceable components.

Table 4-63 HumanModelMetaProperties

Parameter	Mandatory	Type	Description
whole_model_base_file_id	No	String	Indicates the **file_id** based on which the **WHOLE_MODEL** in the current model is generated. If the current ID is the same as the **file_id** of the **MAIN** file, the **WHOLE_MODEL** has been generated and does not need to be exported.
load_model_file_id	No	String	**file_id** used for loading. If the ID is null or no ID is matched, the **MAIN** file is used.

Table 4-64 ComponentInfo

Parameter	Mandatory	Type	Description
component_name	Yes	String	Component name.
component_type	Yes	String	Component type.
component_desc	No	String	Component description.

Table 4-65 VoiceModelAssetMeta

Parameter	Mandatory	Type	Description
order	No	Integer	Display order
model_type	No	String	Timbre asset type. • **COMMON**: general emotion model • **CLONE**: voice cloning model

Parameter	Mandatory	Type	Description
sex	No	String	Timbre gender. • **UNKNOW**: neutral timbre • **MALE**: male timbre • **FEMALE**: female timbre The default value is **UNKNOW**.
language	No	String	Timbre languages: • **UNKNOW**: unknown • **CN**: Chinese • **EN**: English • **GER**: German • **fr**: French • **Kr**: Korean • **por**: Portuguese • **JPN**: Japanese • **Ita**: Italian • **ESP**: Spanish • **DBH**: Northeast China dialect • **GT**: Cantonese & 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 The default value is **UNKNOW**.
speed_ratio	No	Float	Speech speed zoom ratio

Parameter	Mandatory	Type	Description
volume_ratio	No	Float	Volume zoom ratio
is_realtime_voice	No	Boolean	Whether the timbre supports real-time compositing. The default value is **true**. **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.
voice_capability	No	**VoiceCapability** object	Capability set supported by the timbre asset. **NOTE** The timbre capability set can be queried but cannot be configured.
external_voice _meta	No	**ExternalVoice AssetMeta** object	Third-party TTS timbre metadata.

Table 4-66 VoiceCapability

Parameter	Mandatory	Type	Description
is_support_phoneme_en	No	Boolean	English phonetic symbols are supported.
is_support_phoneme	No	Boolean	Whether multi-pronunciation words are supported.
is_support_break_time	No	Boolean	Whether pauses are supported.
is_support_break_strength	No	Boolean	Whether rhythm is supported.
is_support_speed	No	Boolean	Whether global speaking speed is supported.
is_support_prosody	No	Boolean	Whether local speaking speed is supported.
is_support_ssml_say_as	No	Boolean	Whether the say-as SSML tag is supported.
is_support_ssml_sub	No	Boolean	Whether the sub SSML tag is supported.

Parameter	Mandatory	Type	Description
is_support_word	No	Boolean	Whether continuous reading is supported.

Table 4-67 ExternalVoiceAssetMeta

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

Table 4-68 PPTAssetMeta

Parameter	Mandatory	Type	Description
auto_analysis	No	Boolean	Indicates whether the PPT needs to be automatically parsed.
ppt_analysis_status	No	String	PPT resolution status. • **INITIALIZE**: initial • **WAITING**: waiting • **CONVERTING**: being parsed • **FAILED**: failed • **SUCCEEDED**: successful • **CANCELED**: canceled
error_info	No	**ErrorResponse** object	Error information
page_count	No	Integer	Total number of PPT pages.
pages	No	Array of **PPTPageInfo** objects	PPT page image.

Table 4-69 PPTPageInfo

Parameter	Mandatory	Type	Description
page_no	No	Integer	Page number.
file_id	No	String	ID of the image file corresponding to the page.
page_content	No	String	Commentary (extracted from remarks).

Table 4-70 AnimationAssetMeta

Parameter	Mandatory	Type	Description
style_id	No	String	Virtual human model style ID.
duration	No	Float	Animation duration.
auto_analysis	No	Boolean	Indicates whether an action needs to be automatically parsed.
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.
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 4-71 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 4-72 SceneComponentInfo

Parameter	Mandatory	Type	Description
index	No	Integer	Component index.
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 4-73 MaterialAssetMeta

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

Table 4-74 MaterialComponentInfo

Parameter	Mandatory	Type	Description
component_name	Yes	String	Material component name.

Parameter	Mandatory	Type	Description
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 4-75 HumanModel2DAssetMeta

Parameter	Mandatory	Type	Description
is_action_editable	No	Boolean	Indicates whether the action of a virtual avatar can be edited (Uneditable by default).
is_real_background	No	Boolean	Indicates whether a virtual avatar is in a real scene. The real scene will not be replaced.
support_live	No	Boolean	Indicates whether livestream is supported.
model_version	No	String	Virtual avatar model version. By default, the V2 model is used. ● **V2**: V2 model ● **V3**: V3 model ● **V3_2**: V3.2 model
model_resolution	No	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.
device_names	No	Array of strings	The compilation task has been executed.

Table 4-76 ImageAssetMeta

Parameter	Mandatory	Type	Description
codec	No	String	Image encoding format, which is automatically extracted.
width	No	Integer	Image width, which is automatically extracted.
height	No	Integer	Image height, which is automatically extracted.
size	No	Number	Size
mode	No	String	**Horizontal**; **Vertical**
error_info	No	**ErrorResponse** object	Error message

Table 4-77 VideoAssetMeta

Parameter	Mandatory	Type	Description
video_codec	No	String	Video encoding format
width	No	Integer	Video width
height	No	Integer	Video height
frame_rate	No	String	Frame rate
video_bit_rate	No	Integer	Average video bitrate, in kbit/s.
duration	No	Integer	Duration, in second.
audio_codec	No	String	Audio encoding format
audio_bit_rate	No	Integer	Average audio bitrate, in kbit/s.
audio_channels	No	Integer	Number of audio channels
sample	No	Integer	Sampling rate, in Hz.
mode	No	String	**Horizontal**; **Vertical**
video_transcoding_status	No	String	Video transcoding status. ● WAITING ● TRANSCODING ● FAILED ● SUCCEEDED

Parameter	Mandatory	Type	Description
error_info	No	**ErrorRespons e** object	Error message

Table 4-78 AudioAssetMeta

Parameter	Mandatory	Type	Description
duration	No	Integer	Duration, in second.
audio_codec	No	String	Audio encoding format
audio_bit_rate	No	Integer	Average audio bitrate, in kbit/s.
audio_channe ls	No	Integer	Number of audio channels
sample	No	Integer	Sampling rate, in Hz.
error_info	No	**ErrorRespons e** object	Error message

Table 4-79 ErrorResponse

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

Table 4-80 SystemProperty

Parameter	Mandatory	Type	Description
action	No	String	Operations. ● **ADD**: add ● **DELETE**: delete

Parameter	Mandatory	Type	Description
key	No	String	System attribute.
			Public asset attribute. 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 attribute. Options:
			• **MATERIAL_IMG**: image used as the foreground. Set **value** to **Yes**.
			• **MATERIAL_VIDEO**: video used as the foreground. Set **value** to **Yes**.
			• **BUSINESS_CARD_VIDEO**: business card video
			• **TO_BE_TRANSLATED_VIDEO**: source video for translation. The value can be **Yes**.
			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
value	No	String	Attribute value.

Table 4-81 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 4-82 Response header parameters

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

Table 4-83 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_TEMPLET**: 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 fails. ● **UNACTIVED**: The main file is uploaded successfully. The asset is not activated, and it cannot be used for other services. (Users can update the status.) ● **ACTIVED**: The main file is uploaded successfully. The asset is activated, and it 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 is deleted. The asset is unavailable and cannot be restored. ● **BLOCK**: The asset is frozen. The asset is unavailable and cannot be viewed.
fail_type	String	Failure causes: ● **AUTOMATIC_REVIEW_REJECT**: Auto review failed. ● **MANUAL_REVIEW_REJECT**: Manual review failed.
reason	String	Freezing, unfreezing, and failure causes.
tags	Array of strings	Tags.
asset_extra_meta	**AssetExtraMeta** object	Asset metadata. Sets this parameter based on the asset type.
system_properties	Array of **SystemProperty** objects	Sets system attributes.
files	Array of **AssetFileInfo** objects	Files under an asset.
asset_order	Integer	Display sequence.

Table 4-84 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 4-85 HumanModelAssetMeta

Parameter	Type	Description
style_id	String	Virtual human model 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

Parameter	Type	Description
modeling_type	String	Modeling type of the virtual human model. • **UPLOADED**: model uploaded by a tenant • **PICTURE_MODELING**: model generated by photo • **CHARACTER_CUSTOMIZATION_MODELING**: model generated by creating a face avatar
modeling_job_id	String	Modeling task ID.
model_properties	**HumanModelMetaProperties** object	Records model configuration information.
components	Array of **ComponentInfo** objects	Replaceable components.

Table 4-86 HumanModelMetaProperties

Parameter	Type	Description
whole_model_base_file_id	String	Indicates the **file_id** based on which the **WHOLE_MODEL** in the current model is generated. If the current ID is the same as the **file_id** of the **MAIN** file, the **WHOLE_MODEL** has been generated and does not need to be exported.
load_model_file_id	String	**file_id** used for loading. If the ID is null or no ID is matched, the **MAIN** file is used.

Table 4-87 ComponentInfo

Parameter	Type	Description
component_name	String	Component name.
component_type	String	Component type.
component_desc	String	Component description.

Table 4-88 VoiceModelAssetMeta

Parameter	Type	Description
order	Integer	Display order
model_type	String	Timbre asset type. ● **COMMON**: general emotion model ● **CLONE**: voice cloning model
sex	String	Timbre gender. ● **UNKNOW**: neutral timbre ● **MALE**: male timbre ● **FEMALE**: female timbre The default value is **UNKNOW**.

Parameter	Type	Description
language	String	Timbre languages: • **UNKNOW**: unknown • **CN**: Chinese • **EN**: English • **GER**: German • **fr**: French • **Kr**: Korean • **por**: Portuguese • **JPN**: Japanese • **Ita**: Italian • **ESP**: Spanish • **DBH**: Northeast China dialect • **GT**: Cantonese & 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 The default value is **UNKNOW**.
speed_ratio	Float	Speech speed zoom ratio
volume_ratio	Float	Volume zoom ratio
is_realtime_voice	Boolean	Whether the timbre supports real-time compositing. The default value is **true**. **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.

Parameter	Type	Description
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.

Table 4-89 VoiceCapability

Parameter	Type	Description
is_support_phoneme_en	Boolean	English phonetic symbols are supported.
is_support_phoneme	Boolean	Whether multi-pronunciation words are supported.
is_support_break_time	Boolean	Whether pauses are supported.
is_support_break_strength	Boolean	Whether rhythm is supported.
is_support_speed	Boolean	Whether global speaking speed is supported.
is_support_prosody	Boolean	Whether local speaking speed is supported.
is_support_ssml_say_as	Boolean	Whether the say-as SSML tag is supported.
is_support_ssml_sub	Boolean	Whether the sub SSML tag is supported.
is_support_word	Boolean	Whether continuous reading is supported.

Table 4-90 ExternalVoiceAssetMeta

Parameter	Type	Description
provider	String	Third-party TTS vendor. Options: • **XIMALAYA**: Himalaya • **HUAWEI_EI**: Huawei Cloud EI • **MOBVOI**: Mobvoi • **AUDIOX**: AudioX • **SINOVOICE**: SinoVoice • **DATABACK**: DataBaker • **AISPEECH**: AISpeech

Table 4-91 PPTAssetMeta

Parameter	Type	Description
auto_analysis	Boolean	Indicates whether the PPT needs to be automatically parsed.
ppt_analysis_status	String	PPT resolution status. • **INITIALIZE**: initial • **WAITING**: waiting • **CONVERTING**: being parsed • **FAILED**: failed • **SUCCEEDED**: successful • **CANCELED**: canceled
error_info	**ErrorResponse** object	Error information
page_count	Integer	Total number of PPT pages.
pages	Array of **PPTPageInfo** objects	PPT page image.

Table 4-92 PPTPageInfo

Parameter	Type	Description
page_no	Integer	Page number.
file_id	String	ID of the image file corresponding to the page.
page_content	String	Commentary (extracted from remarks).

Table 4-93 AnimationAssetMeta

Parameter	Type	Description
style_id	String	Virtual human model style ID.
duration	Float	Animation duration.
auto_analysis	Boolean	Indicates whether an action needs to be automatically parsed.
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.
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 4-94 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 4-95 SceneComponentInfo

Parameter	Type	Description
index	Integer	Component index.
component_name	String	Component name.

Parameter	Type	Description
component_type	String	Component type. ● **CAMERA**: camera ● **PANEL**: screen ● **LIGHT**: light
component_desc	String	Component description.

Table 4-96 MaterialAssetMeta

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

Table 4-97 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 4-98 HumanModel2DAssetMeta

Parameter	Type	Description
is_action_editable	Boolean	Indicates whether the action of a virtual avatar can be edited (Uneditable by default).
is_real_background	Boolean	Indicates whether a virtual avatar is in a real scene. The real scene will not be replaced.

Parameter	Type	Description
support_live	Boolean	Indicates whether livestream is supported.
model_versio n	String	Virtual avatar model version. By default, the V2 model is used. ● **V2**: V2 model ● **V3**: V3 model ● **V3_2**: V3.2 model
model_resolut ion	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.
device_names	Array of strings	The compilation task has been executed.

Table 4-99 ImageAssetMeta

Parameter	Type	Description
codec	String	Image encoding format, which is automatically extracted.
width	Integer	Image width, which is automatically extracted.
height	Integer	Image height, which is automatically extracted.
size	Number	Size
mode	String	**Horizontal**; **Vertical**
error_info	**ErrorRespons e** object	Error message

Table 4-100 VideoAssetMeta

Parameter	Type	Description
video_codec	String	Video encoding format
width	Integer	Video width
height	Integer	Video height
frame_rate	String	Frame rate
video_bit_rate	Integer	Average video bitrate, in kbit/s.

Parameter	Type	Description
duration	Integer	Duration, in second.
audio_codec	String	Audio encoding format
audio_bit_rate	Integer	Average audio bitrate, in kbit/s.
audio_channels	Integer	Number of audio channels
sample	Integer	Sampling rate, in Hz.
mode	String	**Horizontal**; **Vertical**
video_transcoding_status	String	Video transcoding status. ● WAITING ● TRANSCODING ● FAILED ● SUCCEEDED
error_info	**ErrorResponse object**	Error message

Table 4-101 AudioAssetMeta

Parameter	Type	Description
duration	Integer	Duration, in second.
audio_codec	String	Audio encoding format
audio_bit_rate	Integer	Average audio bitrate, in kbit/s.
audio_channels	Integer	Number of audio channels
sample	Integer	Sampling rate, in Hz.
error_info	**ErrorResponse object**	Error message

Table 4-102 ErrorResponse

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

Table 4-103 SystemProperty

Parameter	Type	Description
action	String	Operations. ● **ADD**: add ● **DELETE**: delete
key	String	System attribute. Public asset attribute. 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 attribute. Options: ● **MATERIAL_IMG**: image used as the foreground. Set **value** to **Yes**. ● **MATERIAL_VIDEO**: video used as the foreground. Set **value** to **Yes**. ● **BUSINESS_CARD_VIDEO**: business card video ● **TO_BE_TRANSLATED_VIDEO**: source video for translation. The value can be **Yes**. 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
value	String	Attribute value.

Table 4-104 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.

Parameter	Type	Description
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.
file_type	String	File type (the file name extension is extracted by default).
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_TEMPLET**, categories are **MAIN** and **COVER** (business card demo).
download_url	String	File download URL, which is valid for 24 hours.

Parameter	Type	Description
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.

Status code: 400

Table 4-105 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/
ca40212e1cdb64ab5f74446bcddb8eb9/model/image/24bad716-87b1-45e5-8912-6102f7693265.bin?
AccessKeyId=F8DE4LGO7EOYY0CM9ERJ&Expires=1657527524&Signature=BWgSQpc4lMFFrtj2ae67fw679%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=BWgSQpc4lMFFrtj2ae67fw679%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 4-106 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 4-107 Query Parameters

Parameter	Mandatory	Type	Description
mode	No	String	Deletion mode.

Request Parameters

Table 4-108 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 4-109 Response header parameters

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

Status code: 400

Table 4-110 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 4-111 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 4-112 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.

Table 4-114 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_TEMPLET**: 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 fails. • **UNACTIVED**: The main file is uploaded successfully. The asset is not activated, and it cannot be used for other services. (Users can update the status.) • **ACTIVED**: The main file is uploaded successfully. The asset is activated, and it 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 is deleted. The asset is unavailable and cannot be restored. • **BLOCK**: The asset is frozen. The asset is unavailable and cannot be viewed.
fail_type	String	Failure causes: • **AUTOMATIC_REVIEW_REJECT**: Auto review failed. • **MANUAL_REVIEW_REJECT**: Manual review failed.
reason	String	Freezing, unfreezing, and failure causes.
tags	Array of strings	Tags.
asset_extra_meta	**AssetExtraMeta** object	Asset metadata. Sets this parameter based on the asset type.
system_properties	Array of **SystemProperty** objects	Sets system attributes.
files	Array of **AssetFileInfo** objects	Files under an asset.
asset_order	Integer	Display sequence.

Table 4-115 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 4-116 HumanModelAssetMeta

Parameter	Type	Description
style_id	String	Virtual human model 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

Parameter	Type	Description
modeling_type	String	Modeling type of the virtual human model. • **UPLOADED**: model uploaded by a tenant • **PICTURE_MODELING**: model generated by photo • **CHARACTER_CUSTOMIZATION_MODELING**: model generated by creating a face avatar
modeling_job_id	String	Modeling task ID.
model_properties	**HumanModelMetaProperties** object	Records model configuration information.
components	Array of **ComponentInfo** objects	Replaceable components.

Table 4-117 HumanModelMetaProperties

Parameter	Type	Description
whole_model_base_file_id	String	Indicates the **file_id** based on which the **WHOLE_MODEL** in the current model is generated. If the current ID is the same as the **file_id** of the **MAIN** file, the **WHOLE_MODEL** has been generated and does not need to be exported.
load_model_file_id	String	**file_id** used for loading. If the ID is null or no ID is matched, the **MAIN** file is used.

Table 4-118 ComponentInfo

Parameter	Type	Description
component_name	String	Component name.
component_type	String	Component type.
component_desc	String	Component description.

Table 4-119 VoiceModelAssetMeta

Parameter	Type	Description
order	Integer	Display order
model_type	String	Timbre asset type. ● **COMMON**: general emotion model ● **CLONE**: voice cloning model
sex	String	Timbre gender. ● **UNKNOW**: neutral timbre ● **MALE**: male timbre ● **FEMALE**: female timbre The default value is **UNKNOW**.

Parameter	Type	Description
language	String	Timbre languages: ● **UNKNOW**: unknown ● **CN**: Chinese ● **EN**: English ● **GER**: German ● **fr**: French ● **Kr**: Korean ● **por**: Portuguese ● **JPN**: Japanese ● **Ita**: Italian ● **ESP**: Spanish ● **DBH**: Northeast China dialect ● **GT**: Cantonese & 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 The default value is **UNKNOW**.
speed_ratio	Float	Speech speed zoom ratio
volume_ratio	Float	Volume zoom ratio
is_realtime_voice	Boolean	Whether the timbre supports real-time compositing. The default value is **true**. **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.

Parameter	Type	Description
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.

Table 4-120 VoiceCapability

Parameter	Type	Description
is_support_phoneme_en	Boolean	English phonetic symbols are supported.
is_support_phoneme	Boolean	Whether multi-pronunciation words are supported.
is_support_break_time	Boolean	Whether pauses are supported.
is_support_break_strength	Boolean	Whether rhythm is supported.
is_support_speed	Boolean	Whether global speaking speed is supported.
is_support_prosody	Boolean	Whether local speaking speed is supported.
is_support_ssml_say_as	Boolean	Whether the say-as SSML tag is supported.
is_support_ssml_sub	Boolean	Whether the sub SSML tag is supported.
is_support_word	Boolean	Whether continuous reading is supported.

Table 4-121 ExternalVoiceAssetMeta

Parameter	Type	Description
provider	String	Third-party TTS vendor. Options: • **XIMALAYA**: Himalaya • **HUAWEI_EI**: Huawei Cloud EI • **MOBVOI**: Mobvoi • **AUDIOX**: AudioX • **SINOVOICE**: SinoVoice • **DATABACK**: DataBaker • **AISPEECH**: AISpeech

Table 4-122 PPTAssetMeta

Parameter	Type	Description
auto_analysis	Boolean	Indicates whether the PPT needs to be automatically parsed.
ppt_analysis_status	String	PPT resolution status. • **INITIALIZE**: initial • **WAITING**: waiting • **CONVERTING**: being parsed • **FAILED**: failed • **SUCCEEDED**: successful • **CANCELED**: canceled
error_info	**ErrorResponse** object	Error information
page_count	Integer	Total number of PPT pages.
pages	Array of **PPTPageInfo** objects	PPT page image.

Table 4-123 PPTPageInfo

Parameter	Type	Description
page_no	Integer	Page number.
file_id	String	ID of the image file corresponding to the page.
page_content	String	Commentary (extracted from remarks).

Table 4-124 AnimationAssetMeta

Parameter	Type	Description
style_id	String	Virtual human model style ID.
duration	Float	Animation duration.
auto_analysis	Boolean	Indicates whether an action needs to be automatically parsed.
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.
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 4-125 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 4-126 SceneComponentInfo

Parameter	Type	Description
index	Integer	Component index.
component_name	String	Component name.

Parameter	Type	Description
component_type	String	Component type. ● **CAMERA**: camera ● **PANEL**: screen ● **LIGHT**: light
component_desc	String	Component description.

Table 4-127 MaterialAssetMeta

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

Table 4-128 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 4-129 HumanModel2DAssetMeta

Parameter	Type	Description
is_action_editable	Boolean	Indicates whether the action of a virtual avatar can be edited (Uneditable by default).
is_real_background	Boolean	Indicates whether a virtual avatar is in a real scene. The real scene will not be replaced.

Parameter	Type	Description
support_live	Boolean	Indicates whether livestream is supported.
model_versio n	String	Virtual avatar model version. By default, the V2 model is used. ● **V2**: V2 model ● **V3**: V3 model ● **V3_2**: V3.2 model
model_resolut ion	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.
device_names	Array of strings	The compilation task has been executed.

Table 4-130 ImageAssetMeta

Parameter	Type	Description
codec	String	Image encoding format, which is automatically extracted.
width	Integer	Image width, which is automatically extracted.
height	Integer	Image height, which is automatically extracted.
size	Number	Size
mode	String	**Horizontal**; **Vertical**
error_info	**ErrorRespons e** object	Error message

Table 4-131 VideoAssetMeta

Parameter	Type	Description
video_codec	String	Video encoding format
width	Integer	Video width
height	Integer	Video height
frame_rate	String	Frame rate
video_bit_rate	Integer	Average video bitrate, in kbit/s.

Parameter	Type	Description
duration	Integer	Duration, in second.
audio_codec	String	Audio encoding format
audio_bit_rate	Integer	Average audio bitrate, in kbit/s.
audio_channels	Integer	Number of audio channels
sample	Integer	Sampling rate, in Hz.
mode	String	**Horizontal**; **Vertical**
video_transcoding_status	String	Video transcoding status. ● WAITING ● TRANSCODING ● FAILED ● SUCCEEDED
error_info	**ErrorResponse** object	Error message

Table 4-132 AudioAssetMeta

Parameter	Type	Description
duration	Integer	Duration, in second.
audio_codec	String	Audio encoding format
audio_bit_rate	Integer	Average audio bitrate, in kbit/s.
audio_channels	Integer	Number of audio channels
sample	Integer	Sampling rate, in Hz.
error_info	**ErrorResponse** object	Error message

Table 4-133 ErrorResponse

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

Table 4-134 SystemProperty

Parameter	Type	Description
action	String	Operations. ● **ADD**: add ● **DELETE**: delete
key	String	System attribute. Public asset attribute. 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 attribute. Options: ● **MATERIAL_IMG**: image used as the foreground. Set **value** to **Yes**. ● **MATERIAL_VIDEO**: video used as the foreground. Set **value** to **Yes**. ● **BUSINESS_CARD_VIDEO**: business card video ● **TO_BE_TRANSLATED_VIDEO**: source video for translation. The value can be **Yes**. 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
value	String	Attribute value.

Table 4-135 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.

Parameter	Type	Description
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.
file_type	String	File type (the file name extension is extracted by default).
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_TEMPLET**, categories are **MAIN** and **COVER** (business card demo).
download_url	String	File download URL, which is valid for 24 hours.

Parameter	Type	Description
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.

Status code: 400

Table 4-136 Response body parameters

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

Status code: 404

Table 4-137 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=BWgSQpc4lMFFrtj2ae67fw679%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=BWgSQpc4lMFFrtj2ae67fw679%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 4-138 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 4-139 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.

Response Parameters

Status code: 200

Table 4-140 Response header parameters

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

Status code: 400

Table 4-141 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 4-142 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 4-143 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 4-144 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 4-145 Response header parameters

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

Table 4-146 Response body parameters

Parameter	Type	Description
results	Array of **AssetActionResult** objects	Batch operation result

Table 4-147 AssetActionResult

Parameter	Type	Description
ret_status	String	Handling status. • **SUCCESS** • **FAILED**
asset_ids	Array of strings	Asset IDs
error_info	**ErrorRespons e** object	Error message

Table 4-148 ErrorResponse

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

Status code: 400

Table 4-149 Response body parameters

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

Status code: 500

Table 4-150 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" : "DETELTE",
```

```
"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/summarys

Table 4-151 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 4-152 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 4-153 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 4-154 Response header parameters

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

Table 4-155 Response body parameters

Parameter	Type	Description
asset_list	Array of **DigitalAssetSummary** objects	Assets.

Table 4-156 DigitalAssetSummary

Parameter	Type	Description
asset_id	String	Asset ID.
asset_name	String	Asset name.

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_TEMPLET**: 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 4-157 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=BWgSQpc4lMFFrtj2ae67fw679%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**.

4.1.9 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 4-158 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 4-159 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 4-160 Response header parameters

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

Table 4-161 Response body parameters

Parameter	Type	Description
asset_id	String	Asset ID.
asset_info	String	Encrypted asset information.
encryption_info	**ReplicationEncInfo** object	Encryption information.

Table 4-162 ReplicationEncInfo

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

Status code: 400

Table 4-163 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 4-164 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**.

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.

Table 4-166 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.

Table 4-167 ReplicationEncInfo

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

Response Parameters

Status code: 200

Table 4-168 Response header parameters

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

Status code: 400

Table 4-169 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 4-170 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.

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-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 4-172 Request body parameters

Parameter	Mandatory	Type	Description
file_name	Yes	String	File name, which is case-insensitive. The value can contain 1 to 256 characters.
file_md5	Yes	String	MD5 value of the file content. The MD5 value must be encoded using Base64. An encoded string is for 24 bytes.
file_size	Yes	Long	Total file size. The value ranges from 1 to 5368709120.
file_type	Yes	String	File type (the file name extension is extracted by default).
asset_id	Yes	String	Asset ID.

Parameter	Mandatory	Type	Description
asset_file_category	Yes	String	File category in an asset. Each type of asset has different file categories. • **MAIN**: main file • **COVER**: thumbnail file • **PAGE**: image file of the PPT content page • **SAMPLE**: sample audio or action file • **OTHER**: other files • **WHOLE_MODEL**: full model file (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_TEMPLET**, 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**.

Response Parameters

Status code: 200

Table 4-173 Response header parameters

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

Table 4-174 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 4-175 Response body parameters

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

Status code: 401

Table 4-176 Response body parameters

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

Status code: 500

Table 4-177 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" : "n58IG6hfM7vqI4K0vnWpog==",
  "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 4-178 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 4-179 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 4-180 Response header parameters

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

Status code: 401

Table 4-181 Response body parameters

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

Status code: 500

Table 4-182 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 4-183 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 4-184 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 4-185 Request body parameters

Parameter	Mandatory	Type	Description
state	Yes	String	File upload status. • **CREATED**: Upload complete. • **FAILED**: Upload failed. • **CANCELLED**: Upload canceled.
auto_meta_analysis	No	Boolean	Automatically parses metadata. Only main files of images, videos, and audios are supported.

Response Parameters

Status code: 200

Table 4-186 Response header parameters

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

Status code: 400

Table 4-187 Response body parameters

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

Status code: 401

Table 4-188 Response body parameters

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

Status code: 500

Table 4-189 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 Codes

See **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 4-190 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 4-191 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 4-192 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 5368709120.
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**.

Response Parameters

Status code: 200

Table 4-193 Response header parameters

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

Table 4-194 Response body parameters

Parameter	Type	Description
file_id	String	File ID.

Parameter	Type	Description
upload_urls	Array of strings	URL for uploading file parts.

Status code: 400

Table 4-195 Response body parameters

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

Status code: 401

Table 4-196 Response body parameters

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

Status code: 500

Table 4-197 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=BHFSP0ZDGFL6BLGHCNPK&Expires=1695532670&partNumber=1&uploadId=0000018AC154BC
218415213228194267&Signature=FrLhTRdhMjpAFVb%2Ff%2BcGJQgvjlw%3D", "https://
{endpoint}:443/0d697589d98091f12f92c0073501cd79/942e65a5fd219a2e01fb08d881cfadb9/ori4k.zip?
AccessKeyId=BHFSP0ZDGFL6BLGHCNPK&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	Script name.
script_description	No	String	Script description.
view_mode	No	String	Landscape or portrait mode. The default value is **LANDSCAPE**. ● **LANDSCAPE**: landscape ● **VERTICAL**: portrait
model_asset_id	No	String	Virtual human model asset ID

Parameter	Mandatory	Type	Description
model_asset_type	No	String	Virtual human model type. • **HUMAN_MODEL_2D**: virtual avatar • **HUMAN_MODEL_3D**: 3D virtual human
voice_config	No	**VoiceConfig** object	Voice configuration parameter.
video_config	No	**VideoConfig** object	Video output configuration.
scene_asset_id	No	String	Asset ID of a scene. **NOTE** • This parameter is not required for virtual avatar video production.
priv_data	No	String	Private data, which is entered by the user and then returned with the same content.
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	Timbre asset ID.

Parameter	Mandatory	Type	Description
speed	No	Integer	Speech speed. The value defaults to **100** and ranges from 50 to 200. **NOTE** ● The value **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.
pitch	No	Integer	Pitch. The value defaults to **100** and ranges from 50 to 200.
volume	No	Integer	Volume. The value defaults to **140** and ranges from 90 to 240.

Table 5-5 VideoConfig

Parameter	Mandatory	Type	Description
clip_mode	No	String	Clipping mode of the output video. Default value: **RESIZE**. ● **RESIZE**: video scaling ● **CROP**: video cropping
codec	Yes	String	Video encoding format and video file format. ● **H264**: H.264 encoding, MP4 file output ● **VP8**: VP8 encoding, WebM file output

Parameter	Mandatory	Type	Description
bitrate	Yes	Integer	Average output bitrate. Unit: kbit/s The value ranges from 40 to 30,000. **NOTE** • Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. • Bitrate range for virtual avatar video production: [1000, 8000].
width	Yes	Integer	Video width. Unit: pixel. **NOTE** • 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 videos can be used 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 is supported for virtual avatar livestreaming.
height	Yes	Integer	Video height. Unit: pixel. **NOTE** • 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 is supported for virtual avatar livestreaming.

Parameter	Mandatory	Type	Description
frame_rate	No	String	Frame rate. Unit: FPS **NOTE** ● The frame rate of virtual avatar videos is fixed at 25 FPS.
is_subtitle_en able	No	Boolean	Whether the output video is subtitled. The default value is **false**. ● **true**: Displays the subtitle. ● **false**: Hides the subtitle.
subtitle_confi g	No	**SubtitleConfi g** object	Subtitle configuration.
dx	No	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** ● The canvas 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.
dy	No	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** ● The canvas 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.
is_enable_sup er_resolution	No	Boolean	Whether super resolution is enabled for a video. **NOTE** **true**: enable **false**: do not enable

Table 5-6 SubtitleConfig

Parameter	Mandatory	Type	Description
dx	No	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** • The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	No	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** • The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
font_name	No	String	Font. The following fonts are supported: • **HarmonyOS_Sans_SC_Black**: HarmonyOS bold • **HarmonyOS_Sans_SC_Regular**: HarmonyOS normal • **HarmonyOS_Sans_SC_Thin**: HarmonyOS light
font_size	No	Integer	Font size. The value ranges from 4 to 120.
h	No	Integer	Subtitle box height **NOTE** • The parameter **h** is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box by the front end. This parameter is not used in the background.

Parameter	Mandatory	Type	Description
w	No	Integer	Subtitle box width **NOTE** ● 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 by the front end. This parameter is not used in the background.

Table 5-7 BackgroundMusicConfig

Parameter	Mandatory	Type	Description
music_asset_id	No	String	Music asset ID.
volume	No	Integer	Music volume. For example, **100** indicates that the volume is 100%, and **50** indicates that the volume is 50%. The value defaults to **100** and ranges from 0 to 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	Script No.
shoot_script	Yes	**ShootScript** object	Performance script.

Table 5-10 ShootScript

Parameter	Mandatory	Type	Description
script_type	No	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_config	No	**TextConfig** object	Commentary configuration.
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	Script. Two modes are supported: plain text mode and tag mode. **Plain text 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**.

Table 5-12 BackgroundConfigInfo

Parameter	Mandatory	Type	Description
background_type	Yes	String	Background type. • **IMAGE**: image, which is used as the image for 3D virtual human demonstration materials or virtual avatar background. • **IMAGE_2D**: image, which is used as the background image in the 2D scene for 3D virtual broadcasters. • **VIDEO**: video • **AUDIO**: audio **NOTE** • Only **IMAGE** is supported for virtual avatar video production.
background_config	No	String	Background file URL. **NOTE** • 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**.
background_color_config	No	String	RGB color value of a solid color background. **NOTE** • This parameter is mandatory when **background_type** is set to **COLOR**.
background_asset_id	No	String	Background asset ID. **NOTE** • If the background is a background image, set this parameter to the image asset ID.

Table 5-13 LayerConfig

Parameter	Mandatory	Type	Description
layer_type	Yes	String	Layer type. ● **HUMAN**: person layer ● **IMAGE**: image layer ● **VIDEO**: video layer ● TEXT: material 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.
group_id	No	String	Groups materials in multiple scenes. Materials with the same **group_id** share location information when they are applied globally.
position	No	**LayerPosition Config** object	Layer position configuration.
size	No	**LayerSizeConf ig** object	Layer size configuration.
image_config	No	**ImageLayerC onfig** object	Material image layer configuration.
video_config	No	**VideoLayerC onfig** object	Material video layer configuration.
text_config	No	**TextLayerConf ig** object	Material text layer configuration.

Table 5-14 LayerPositionConfig

Parameter	Mandatory	Type	Description
dx	Yes	Integer	X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** ● The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Parameter	Mandatory	Type	Description
dy	Yes	Integer	Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
layer_index	Yes	Integer	Layer sequence of an image, video, or person image. **NOTE** ● The layer sequence is an integer starting from 1. The sequence of the bottom layer is 1 and incremented by 1.

Table 5-15 LayerSizeConfig

Parameter	Mandatory	Type	Description
width	No	Integer	Width (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
height	No	Integer	Height (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Table 5-16 ImageLayerConfig

Parameter	Mandatory	Type	Description
image_url	No	String	Image file URL.

Table 5-17 VideoLayerConfig

Parameter	Mandatory	Type	Description
video_url	No	String	Video file URL.
video_cover_u rl	No	String	Video thumbnail file URL.
loop_count	No	Integer	Number of times that a video is played cyclically.

Table 5-18 TextLayerConfig

Parameter	Mandatory	Type	Description
text_context	No	String	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**.
font_name	No	String	Font. The following fonts are supported: ● **HarmonyOS_Sans_SC_Blac k**: HarmonyOS bold ● **HarmonyOS_Sans_SC_Reg ular**: HarmonyOS normal ● **HarmonyOS_Sans_SC_Thin** : HarmonyOS light ● **fzyouh**: Square & lean
font_size	No	Integer	Font size (pixel). The value ranges from 4 to 120.
font_color	No	String	Font color. RGB color value.

Response Parameters

Status code: 200

Table 5-19 Response header parameters

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

Table 5-20 Response body parameters

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

Table 5-21 ShootScriptAudioFiles

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

Table 5-22 ShootScriptAudioFileItem

Parameter	Type	Description
sequence_no	Integer	Script No.
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 5-23 Response body parameters

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

Status code: 401

Table 5-24 Response body parameters

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

Status code: 500

Table 5-25 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 5-26 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 5-27 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts.
limit	No	Integer	Number of items displayed on each page.
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_TEMPLET**: 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 5-28 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 5-29 Response header parameters

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

Table 5-30 Response body parameters

Parameter	Type	Description
count	Integer	Total number of scripts.

Parameter	Type	Description
video_scripts	Array of **VideoScriptBaseInfo** objects	Script list.

Table 5-31 VideoScriptBaseInfo

Parameter	Type	Description
script_id	String	Script ID.
script_name	String	Script name.
script_description	String	Script description.
model_asset_id	String	Asset ID of a virtual human model.
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 5-32 Response body parameters

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

Status code: 401

Table 5-33 Response body parameters

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

Status code: 500

Table 5-34 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.
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 5-35 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 5-36 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 5-37 Response header parameters

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

Table 5-38 Response body parameters

Parameter	Type	Description
script_name	String	Script name.

Parameter	Type	Description
script_description	String	Script description.
view_mode	String	Landscape or portrait mode. The default value is **LANDSCAPE**. ● **LANDSCAPE**: landscape ● **VERTICAL**: portrait
model_asset_id	String	Virtual human model asset ID
model_asset_type	String	Virtual human model type. ● **HUMAN_MODEL_2D**: virtual avatar ● **HUMAN_MODEL_3D**: 3D virtual human
voice_config	**VoiceConfig** object	Voice configuration parameter.
video_config	**VideoConfig** object	Video output configuration.
scene_asset_id	String	Asset ID of a scene. **NOTE** ● This parameter is not required for virtual avatar video production.
priv_data	String	Private data, which is entered by the user and then returned with the same content.
background_music_config	**BackgroundMusicConfig** object	Background music configuration.
review_config	**ReviewConfig** object	Content review configuration.
shoot_scripts	Array of **ShootScriptShowItem** 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

Parameter	Type	Description
script_cover_url	String	URL for downloading the script thumbnail.

Table 5-39 VoiceConfig

Parameter	Type	Description
voice_asset_id	String	Timbre asset ID.
speed	Integer	Speech speed. The value defaults to **100** and ranges from 50 to 200. **NOTE** ● The value **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.
pitch	Integer	Pitch. The value defaults to **100** and ranges from 50 to 200.
volume	Integer	Volume. The value defaults to **140** and ranges from 90 to 240.

Table 5-40 VideoConfig

Parameter	Type	Description
clip_mode	String	Clipping mode of the output video. Default value: **RESIZE**. ● **RESIZE**: video scaling ● **CROP**: video cropping
codec	String	Video encoding format and video file format. ● **H264**: H.264 encoding, MP4 file output ● **VP8**: VP8 encoding, WebM file output

Parameter	Type	Description
bitrate	Integer	Average output bitrate. Unit: kbit/s The value ranges from 40 to 30,000. **NOTE** ● Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. ● Bitrate range for virtual avatar video production: [1000, 8000].
width	Integer	Video width. Unit: pixel. **NOTE** ● 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 videos can be used 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 is supported for virtual avatar livestreaming.
height	Integer	Video height. Unit: pixel. **NOTE** ● 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 is supported for virtual avatar livestreaming.
frame_rate	String	Frame rate. Unit: FPS **NOTE** ● The frame rate of virtual avatar videos is fixed at 25 FPS.
is_subtitle_enable	Boolean	Whether the output video is subtitled. The default value is **false**. ● **true**: Displays the subtitle. ● **false**: Hides the subtitle.
subtitle_config	**SubtitleConfig** object	Subtitle configuration.

Parameter	Type	Description
dx	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** ● The canvas 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.
dy	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** ● The canvas 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.
is_enable_super_resolution	Boolean	Whether super resolution is enabled for a video. **NOTE** **true**: enable **false**: do not enable

Table 5-41 SubtitleConfig

Parameter	Type	Description
dx	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** ● The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** ● The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Parameter	Type	Description
font_name	String	Font. The following fonts are supported: • **HarmonyOS_Sans_SC_Black**: HarmonyOS bold • **HarmonyOS_Sans_SC_Regular**: HarmonyOS normal • **HarmonyOS_Sans_SC_Thin**: HarmonyOS light
font_size	Integer	Font size. The value ranges from 4 to 120.
h	Integer	Subtitle box height **NOTE** • The parameter **h** is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box by the front end. This parameter is not used in the background.
w	Integer	Subtitle box width **NOTE** • 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 by the front end. This parameter is not used in the background.

Table 5-42 BackgroundMusicConfig

Parameter	Type	Description
music_asset_id	String	Music asset ID.
volume	Integer	Music volume. For example, **100** indicates that the volume is 100%, and **50** indicates that the volume is 50%. The value defaults to **100** and ranges from 0 to 100.

Table 5-43 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 5-44 ShootScriptShowItem

Parameter	Type	Description
sequence_no	Integer	Script No.
shoot_script	**ShootScriptDetail** object	Script configuration

Table 5-45 ShootScriptDetail

Parameter	Type	Description
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_config	**TextConfig** object	Commentary configuration.
background_config	Array of **BackgroundConfigInfo** objects	Background configuration.
layer_config	Array of **LayerConfig** objects	Layer configuration.
thumbnail_url	String	Thumbnail URL of a script scene.

Table 5-46 TextConfig

Parameter	Type	Description
text	String	Script. Two modes are supported: plain text mode and tag mode. **Plain text 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**.

Table 5-47 BackgroundConfigInfo

Parameter	Type	Description
background_type	String	Background type. ● **IMAGE**: image, which is used as the image for 3D virtual human demonstration materials or virtual avatar background. ● **IMAGE_2D**: image, which is used as the background image in the 2D scene for 3D virtual broadcasters. ● **VIDEO**: video ● **AUDIO**: audio **NOTE** ● Only **IMAGE** is supported for virtual avatar video production.

background_config	String	Background file URL.
		NOTE
		  ● 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**.

background_color_config	String	RGB color value of a solid color background. **NOTE** ● This parameter is mandatory when **background_type** is set to **COLOR**.
background_asset_id	String	Background asset ID. **NOTE** ● If the background is a background image, set this parameter to the image asset ID.

Table 5-48 LayerConfig

Parameter	Type	Description
layer_type	String	Layer type. ● **HUMAN**: person layer ● **IMAGE**: image layer ● **VIDEO**: video layer ● TEXT: material text layer
asset_id	String	ID of the asset overlaid on a video. You do not need to set this parameter for external assets.

Parameter	Type	Description
group_id	String	Groups materials in multiple scenes. Materials with the same **group_id** share location information when they are applied globally.
position	**LayerPosition Config** object	Layer position configuration.
size	**LayerSizeConf ig** object	Layer size configuration.
image_config	**ImageLayerC onfig** object	Material image layer configuration.
video_config	**VideoLayerC onfig** object	Material video layer configuration.
text_config	**TextLayerConf ig** object	Material text layer configuration.

Table 5-49 LayerPositionConfig

Parameter	Type	Description
dx	Integer	X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** • The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	Integer	Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
layer_index	Integer	Layer sequence of an image, video, or person image. **NOTE** • The layer sequence is an integer starting from 1. The sequence of the bottom layer is 1 and incremented by 1.

Table 5-50 LayerSizeConfig

Parameter	Type	Description
width	Integer	Width (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
height	Integer	Height (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Table 5-51 ImageLayerConfig

Parameter	Type	Description
image_url	String	Image file URL.

Table 5-52 VideoLayerConfig

Parameter	Type	Description
video_url	String	Video file URL.
video_cover_url	String	Video thumbnail file URL.
loop_count	Integer	Number of times that a video is played cyclically.

Table 5-53 TextLayerConfig

Parameter	Type	Description
text_context	String	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**.

Parameter	Type	Description
font_name	String	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
font_size	Integer	Font size (pixel). The value ranges from 4 to 120.
font_color	String	Font color. RGB color value.

Table 5-54 ShootScriptAudioFiles

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

Table 5-55 ShootScriptAudioFileItem

Parameter	Type	Description
sequence_no	Integer	Script No.
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 5-56 Response body parameters

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

Status code: 401

Table 5-57 Response body parameters

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

Status code: 404

Table 5-58 Response body parameters

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

Status code: 500

Table 5-59 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 5-60 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 5-61 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 5-62 Request body parameters

Parameter	Mandatory	Type	Description
script_name	No	String	Script name.
script_description	No	String	Script description.
view_mode	No	String	Landscape or portrait mode. The default value is **LANDSCAPE**. • **LANDSCAPE**: landscape • **VERTICAL**: portrait
model_asset_id	No	String	Virtual human model asset ID

Parameter	Mandatory	Type	Description
model_asset_type	No	String	Virtual human model type. • **HUMAN_MODEL_2D**: virtual avatar • **HUMAN_MODEL_3D**: 3D virtual human
voice_config	No	**VoiceConfig** object	Voice configuration parameter.
video_config	No	**VideoConfig** object	Video output configuration.
scene_asset_id	No	String	Asset ID of a scene. **NOTE** • This parameter is not required for virtual avatar video production.
priv_data	No	String	Private data, which is entered by the user and then returned with the same content.
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 5-63 VoiceConfig

Parameter	Mandatory	Type	Description
voice_asset_id	Yes	String	Timbre asset ID.

Parameter	Mandatory	Type	Description
speed	No	Integer	Speech speed. The value defaults to **100** and ranges from 50 to 200. **NOTE** ● The value **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.
pitch	No	Integer	Pitch. The value defaults to **100** and ranges from 50 to 200.
volume	No	Integer	Volume. The value defaults to **140** and ranges from 90 to 240.

Table 5-64 VideoConfig

Parameter	Mandatory	Type	Description
clip_mode	No	String	Clipping mode of the output video. Default value: **RESIZE**. ● **RESIZE**: video scaling ● **CROP**: video cropping
codec	Yes	String	Video encoding format and video file format. ● **H264**: H.264 encoding, MP4 file output ● **VP8**: VP8 encoding, WebM file output

Parameter	Mandatory	Type	Description
bitrate	Yes	Integer	Average output bitrate. Unit: kbit/s The value ranges from 40 to 30,000. **NOTE** ● Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. ● Bitrate range for virtual avatar video production: [1000, 8000].
width	Yes	Integer	Video width. Unit: pixel. **NOTE** ● 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 videos can be used 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 is supported for virtual avatar livestreaming.
height	Yes	Integer	Video height. Unit: pixel. **NOTE** ● 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 is supported for virtual avatar livestreaming.

Parameter	Mandatory	Type	Description
frame_rate	No	String	Frame rate. Unit: FPS **NOTE** • The frame rate of virtual avatar videos is fixed at 25 FPS.
is_subtitle_enable	No	Boolean	Whether the output video is subtitled. The default value is **false**. • **true**: Displays the subtitle. • **false**: Hides the subtitle.
subtitle_config	No	**SubtitleConfig** object	Subtitle configuration.
dx	No	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** • The canvas 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.
dy	No	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** • The canvas 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.
is_enable_super_resolution	No	Boolean	Whether super resolution is enabled for a video. **NOTE** **true**: enable **false**: do not enable

Table 5-65 SubtitleConfig

Parameter	Mandatory	Type	Description
dx	No	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** • The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	No	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** • The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
font_name	No	String	Font. The following fonts are supported: • **HarmonyOS_Sans_SC_Black**: HarmonyOS bold • **HarmonyOS_Sans_SC_Regular**: HarmonyOS normal • **HarmonyOS_Sans_SC_Thin**: HarmonyOS light
font_size	No	Integer	Font size. The value ranges from 4 to 120.
h	No	Integer	Subtitle box height **NOTE** • The parameter **h** is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box by the front end. This parameter is not used in the background.

Parameter	Mandatory	Type	Description
w	No	Integer	Subtitle box width **NOTE** ● 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 by the front end. This parameter is not used in the background.

Table 5-66 BackgroundMusicConfig

Parameter	Mandatory	Type	Description
music_asset_id	No	String	Music asset ID.
volume	No	Integer	Music volume. For example, **100** indicates that the volume is 100%, and **50** indicates that the volume is 50%. The value defaults to **100** and ranges from 0 to 100.

Table 5-67 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 5-68 ShootScriptItem

Parameter	Mandatory	Type	Description
sequence_no	No	Integer	Script No.
shoot_script	Yes	**ShootScript** object	Performance script.

Table 5-69 ShootScript

Parameter	Mandatory	Type	Description
script_type	No	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_config	No	**TextConfig** object	Commentary configuration.
background_config	No	Array of **BackgroundConfigInfo** objects	Background configuration.
layer_config	No	Array of **LayerConfig** objects	Layer configuration.

Table 5-70 TextConfig

Parameter	Mandatory	Type	Description
text	Yes	String	Script. Two modes are supported: plain text mode and tag mode. **Plain text 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**.

Table 5-71 BackgroundConfigInfo

Parameter	Mandatory	Type	Description
background_type	Yes	String	Background type. • **IMAGE**: image, which is used as the image for 3D virtual human demonstration materials or virtual avatar background. • **IMAGE_2D**: image, which is used as the background image in the 2D scene for 3D virtual broadcasters. • **VIDEO**: video • **AUDIO**: audio NOTE • Only **IMAGE** is supported for virtual avatar video production.
background_config	No	String	Background file URL. NOTE • 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**.
background_color_config	No	String	RGB color value of a solid color background. NOTE • This parameter is mandatory when **background_type** is set to **COLOR**.
background_asset_id	No	String	Background asset ID. NOTE • If the background is a background image, set this parameter to the image asset ID.

Table 5-72 LayerConfig

Parameter	Mandatory	Type	Description
layer_type	Yes	String	Layer type. ● **HUMAN**: person layer ● **IMAGE**: image layer ● **VIDEO**: video layer ● TEXT: material 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.
group_id	No	String	Groups materials in multiple scenes. Materials with the same **group_id** share location information when they are applied globally.
position	No	**LayerPosition Config** object	Layer position configuration.
size	No	**LayerSizeConf ig** object	Layer size configuration.
image_config	No	**ImageLayerC onfig** object	Material image layer configuration.
video_config	No	**VideoLayerC onfig** object	Material video layer configuration.
text_config	No	**TextLayerConf ig** object	Material text layer configuration.

Table 5-73 LayerPositionConfig

Parameter	Mandatory	Type	Description
dx	Yes	Integer	X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** ● The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Parameter	Mandatory	Type	Description
dy	Yes	Integer	Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
layer_index	Yes	Integer	Layer sequence of an image, video, or person image. **NOTE** ● The layer sequence is an integer starting from 1. The sequence of the bottom layer is 1 and incremented by 1.

Table 5-74 LayerSizeConfig

Parameter	Mandatory	Type	Description
width	No	Integer	Width (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
height	No	Integer	Height (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Table 5-75 ImageLayerConfig

Parameter	Mandatory	Type	Description
image_url	No	String	Image file URL.

Table 5-76 VideoLayerConfig

Parameter	Mandatory	Type	Description
video_url	No	String	Video file URL.
video_cover_url	No	String	Video thumbnail file URL.
loop_count	No	Integer	Number of times that a video is played cyclically.

Table 5-77 TextLayerConfig

Parameter	Mandatory	Type	Description
text_context	No	String	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**.
font_name	No	String	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
font_size	No	Integer	Font size (pixel). The value ranges from 4 to 120.
font_color	No	String	Font color. RGB color value.

Response Parameters

Status code: 200

Table 5-78 Response header parameters

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

Table 5-79 Response body parameters

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

Table 5-80 ShootScriptAudioFiles

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

Table 5-81 ShootScriptAudioFileItem

Parameter	Type	Description
sequence_no	Integer	Script No.
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 5-82 Response body parameters

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

Status code: 401

Table 5-83 Response body parameters

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

Status code: 500

Table 5-84 Response body parameters

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

Example Requests

```
PUT https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/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 5-85 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 5-86 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 5-87 Response header parameters

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

Status code: 400

Table 5-88 Response body parameters

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

Status code: 401

Table 5-89 Response body parameters

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

Status code: 500

Table 5-90 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 5-91 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 5-92 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 5-93 Response header parameters

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

Table 5-94 Response body parameters

Parameter	Type	Description
script_id	String	New script ID

Status code: 400

Table 5-95 Response body parameters

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

Status code: 401

Table 5-96 Response body parameters

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

Status code: 500

Table 5-97 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 Virtual human 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 5-98 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**.

Table 5-99 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts.

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of items displayed on each page.
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. Currently, only **create_time** is supported.
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.
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 5-100 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 5-101 Response header parameters

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

Table 5-102 Response body parameters

Parameter	Type	Description
count	Integer	Total number of video production tasks.

Parameter	Type	Description
jobs	Array of **DigitalHumanVideo** objects	Video production task list.

Table 5-103 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	Virtual human video duration.
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.

Table 5-104 OutputAssetInfo

Parameter	Type	Description
asset_id	String	Output video asset ID.

Parameter	Type	Description
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 5-105 ErrorResponse

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

Status code: 400

Table 5-106 Response body parameters

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

Status code: 401

Table 5-107 Response body parameters

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

Status code: 404

Table 5-108 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error description.

Status code: 500

Table 5-109 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 5-110 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**.

Request Parameters

Table 5-111 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 5-112 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	Asset ID of a virtual avatar model.
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 5-113 VoiceConfig

Parameter	Mandatory	Type	Description
voice_asset_id	Yes	String	Timbre asset ID.

Parameter	Mandatory	Type	Description
speed	No	Integer	Speech speed. The value defaults to **100** and ranges from 50 to 200. **NOTE** ● The value **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.
pitch	No	Integer	Pitch. The value defaults to **100** and ranges from 50 to 200.
volume	No	Integer	Volume. The value defaults to **140** and ranges from 90 to 240.

Table 5-114 VideoConfig

Parameter	Mandatory	Type	Description
clip_mode	No	String	Clipping mode of the output video. Default value: **RESIZE**. ● **RESIZE**: video scaling ● **CROP**: video cropping
codec	Yes	String	Video encoding format and video file format. ● **H264**: H.264 encoding, MP4 file output ● **VP8**: VP8 encoding, WebM file output

Parameter	Mandatory	Type	Description
bitrate	Yes	Integer	Average output bitrate. Unit: kbit/s The value ranges from 40 to 30,000. **NOTE** ● Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. ● Bitrate range for virtual avatar video production: [1000, 8000].
width	Yes	Integer	Video width. Unit: pixel. **NOTE** ● 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 videos can be used 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 is supported for virtual avatar livestreaming.
height	Yes	Integer	Video height. Unit: pixel. **NOTE** ● 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 is supported for virtual avatar livestreaming.

Parameter	Mandatory	Type	Description
frame_rate	No	String	Frame rate. Unit: FPS **NOTE** ● The frame rate of virtual avatar videos is fixed at 25 FPS.
is_subtitle_enable	No	Boolean	Whether the output video is subtitled. The default value is **false**. ● **true**: Displays the subtitle. ● **false**: Hides the subtitle.
subtitle_config	No	**SubtitleConfig** object	Subtitle configuration.
dx	No	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** ● The canvas 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.
dy	No	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** ● The canvas 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.
is_enable_super_resolution	No	Boolean	Whether super resolution is enabled for a video. **NOTE** **true**: enable **false**: do not enable

Table 5-115 SubtitleConfig

Parameter	Mandatory	Type	Description
dx	No	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** ● The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	No	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** ● The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
font_name	No	String	Font. The following fonts are supported: ● **HarmonyOS_Sans_SC_Black**: HarmonyOS bold ● **HarmonyOS_Sans_SC_Regular**: HarmonyOS normal ● **HarmonyOS_Sans_SC_Thin**: HarmonyOS light
font_size	No	Integer	Font size. The value ranges from 4 to 120.
h	No	Integer	Subtitle box height **NOTE** ● The parameter **h** is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box by the front end. This parameter is not used in the background.

Parameter	Mandatory	Type	Description
w	No	Integer	Subtitle box width **NOTE** ● 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 by the front end. This parameter is not used in the background.

Table 5-116 ShootScriptItem

Parameter	Mandatory	Type	Description
sequence_no	No	Integer	Script No.
shoot_script	Yes	**ShootScript** object	Performance script.

Table 5-117 ShootScript

Parameter	Mandatory	Type	Description
script_type	No	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_config	No	**TextConfig** object	Commentary configuration.
background_config	No	Array of **BackgroundConfigInfo** objects	Background configuration.
layer_config	No	Array of **LayerConfig** objects	Layer configuration.

Table 5-118 TextConfig

Parameter	Mandatory	Type	Description
text	Yes	String	Script. Two modes are supported: plain text mode and tag mode. **Plain text 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**.

Table 5-119 BackgroundConfigInfo

Parameter	Mandatory	Type	Description
background_type	Yes	String	Background type. ● **IMAGE**: image, which is used as the image for 3D virtual human demonstration materials or virtual avatar background. ● **IMAGE_2D**: image, which is used as the background image in the 2D scene for 3D virtual broadcasters. ● **VIDEO**: video ● **AUDIO**: audio **NOTE** ● Only **IMAGE** is supported for virtual avatar video production.
background_config	No	String	Background file URL. **NOTE** ● 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**.

Parameter	Mandatory	Type	Description
background_color_config	No	String	RGB color value of a solid color background. **NOTE** ● This parameter is mandatory when **background_type** is set to **COLOR**.
background_asset_id	No	String	Background asset ID. **NOTE** ● If the background is a background image, set this parameter to the image asset ID.

Table 5-120 LayerConfig

Parameter	Mandatory	Type	Description
layer_type	Yes	String	Layer type. ● **HUMAN**: person layer ● **IMAGE**: image layer ● **VIDEO**: video layer ● TEXT: material 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.
group_id	No	String	Groups materials in multiple scenes. Materials with the same **group_id** share location information when they are applied globally.
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 5-121 LayerPositionConfig

Parameter	Mandatory	Type	Description
dx	Yes	Integer	X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** ● The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	Yes	Integer	Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
layer_index	Yes	Integer	Layer sequence of an image, video, or person image. **NOTE** ● The layer sequence is an integer starting from 1. The sequence of the bottom layer is 1 and incremented by 1.

Table 5-122 LayerSizeConfig

Parameter	Mandatory	Type	Description
width	No	Integer	Width (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Parameter	Mandatory	Type	Description
height	No	Integer	Height (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Table 5-123 ImageLayerConfig

Parameter	Mandatory	Type	Description
image_url	No	String	Image file URL.

Table 5-124 VideoLayerConfig

Parameter	Mandatory	Type	Description
video_url	No	String	Video file URL.
video_cover_url	No	String	Video thumbnail file URL.
loop_count	No	Integer	Number of times that a video is played cyclically.

Table 5-125 TextLayerConfig

Parameter	Mandatory	Type	Description
text_context	No	String	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**.

Parameter	Mandatory	Type	Description
font_name	No	String	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
font_size	No	Integer	Font size (pixel). The value ranges from 4 to 120.
font_color	No	String	Font color. RGB color value.

Table 5-126 OutputAssetConfig

Parameter	Mandatory	Type	Description
asset_name	Yes	String	Output video asset name.

Table 5-127 BackgroundMusicConfig

Parameter	Mandatory	Type	Description
music_asset_id	No	String	Music asset ID.
volume	No	Integer	Music volume. For example, **100** indicates that the volume is 100%, and **50** indicates that the volume is 50%. The value defaults to **100** and ranges from 0 to 100.

Table 5-128 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 5-129 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)
key	No	String	Key

Response Parameters

Status code: 200

Table 5-130 Response header parameters

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

Table 5-131 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.

Status code: 400

Table 5-132 Response body parameters

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

Status code: 401

Table 5-133 Response body parameters

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

Status code: 500

Table 5-134 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=zXGOEQlrgZ4yAUziwlGcdbXLPIM
%3D",
      "human_position_2d" : {
        "position" : "MIDDLE"
      }
    } ]
  }
 } ],
 "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 5-135 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 5-136 Query Parameters

Parameter	Mandatory	Type	Description
show_script	No	Boolean	Whether to return the script parameter configuration.

Request Parameters

Table 5-137 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 5-138 Response header parameters

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

Table 5-139 Response body parameters

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.

Parameter	Type	Description
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	Virtual human video duration.
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.
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	Asset ID of a virtual avatar model.
voice_config	**VoiceConfig** object	Voice configuration parameter.
video_config	**VideoConfig** object	Video output configuration.

Parameter	Type	Description
shoot_scripts	Array of **ShootScriptItem** objects	Shooting script list.
background_music_config	**BackgroundMusicConfig** object	Background music configuration.

Table 5-140 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 5-141 ErrorResponse

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

Table 5-142 VoiceConfig

Parameter	Type	Description
voice_asset_id	String	Timbre asset ID.
speed	Integer	Speech speed. The value defaults to **100** and ranges from 50 to 200. **NOTE** ● The value **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.

Parameter	Type	Description
pitch	Integer	Pitch. The value defaults to **100** and ranges from 50 to 200.
volume	Integer	Volume. The value defaults to **140** and ranges from 90 to 240.

Table 5-143 VideoConfig

Parameter	Type	Description
clip_mode	String	Clipping mode of the output video. Default value: **RESIZE**. ● **RESIZE**: video scaling ● **CROP**: video cropping
codec	String	Video encoding format and video file format. ● **H264**: H.264 encoding, MP4 file output ● **VP8**: VP8 encoding, WebM file output
bitrate	Integer	Average output bitrate. Unit: kbit/s The value ranges from 40 to 30,000. **NOTE** ● Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. ● Bitrate range for virtual avatar video production: [1000, 8000].
width	Integer	Video width. Unit: pixel. **NOTE** ● 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 videos can be used 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 is supported for virtual avatar livestreaming.

Parameter	Type	Description
height	Integer	Video height. Unit: pixel. **NOTE** ● 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 is supported for virtual avatar livestreaming.
frame_rate	String	Frame rate. Unit: FPS **NOTE** ● The frame rate of virtual avatar videos is fixed at 25 FPS.
is_subtitle_enable	Boolean	Whether the output video is subtitled. The default value is **false**. ● **true**: Displays the subtitle. ● **false**: Hides the subtitle.
subtitle_config	**SubtitleConfig** object	Subtitle configuration.
dx	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** ● The canvas 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.
dy	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** ● The canvas 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.

Parameter	Type	Description
is_enable_super_resolution	Boolean	Whether super resolution is enabled for a video. **NOTE** **true**: enable **false**: do not enable

Table 5-144 SubtitleConfig

Parameter	Type	Description
dx	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** ● The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** ● The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
font_name	String	Font. The following fonts are supported: ● **HarmonyOS_Sans_SC_Black**: HarmonyOS bold ● **HarmonyOS_Sans_SC_Regular**: HarmonyOS normal ● **HarmonyOS_Sans_SC_Thin**: HarmonyOS light
font_size	Integer	Font size. The value ranges from 4 to 120.
h	Integer	Subtitle box height **NOTE** ● The parameter **h** is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box by the front end. This parameter is not used in the background.

Parameter	Type	Description
w	Integer	Subtitle box width **NOTE** ● 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 by the front end. This parameter is not used in the background.

Table 5-145 ShootScriptItem

Parameter	Type	Description
sequence_no	Integer	Script No.
shoot_script	**ShootScript** object	Performance script.

Table 5-146 ShootScript

Parameter	Type	Description
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_config	**TextConfig** object	Commentary configuration.
background_config	Array of **BackgroundConfigInfo** objects	Background configuration.
layer_config	Array of **LayerConfig** objects	Layer configuration.

Table 5-147 TextConfig

Parameter	Type	Description
text	String	Script. Two modes are supported: plain text mode and tag mode. **Plain text 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**.

Table 5-148 BackgroundConfigInfo

Parameter	Type	Description
background_type	String	Background type. • **IMAGE**: image, which is used as the image for 3D virtual human demonstration materials or virtual avatar background. • **IMAGE_2D**: image, which is used as the background image in the 2D scene for 3D virtual broadcasters. • **VIDEO**: video • **AUDIO**: audio **NOTE** • Only **IMAGE** is supported for virtual avatar video production.
background_config	String	Background file URL. **NOTE** • 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**.
background_color_config	String	RGB color value of a solid color background. **NOTE** • This parameter is mandatory when **background_type** is set to **COLOR**.
background_asset_id	String	Background asset ID. **NOTE** • If the background is a background image, set this parameter to the image asset ID.

Table 5-149 LayerConfig

Parameter	Type	Description
layer_type	String	Layer type. ● **HUMAN**: person layer ● **IMAGE**: image layer ● **VIDEO**: video layer ● TEXT: material text layer
asset_id	String	ID of the asset overlaid on a video. You do not need to set this parameter for external assets.
group_id	String	Groups materials in multiple scenes. Materials with the same **group_id** share location information when they are applied globally.
position	**LayerPosition Config** 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 5-150 LayerPositionConfig

Parameter	Type	Description
dx	Integer	X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** ● The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	Integer	Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Parameter	Type	Description
layer_index	Integer	Layer sequence of an image, video, or person image. **NOTE** • The layer sequence is an integer starting from 1. The sequence of the bottom layer is 1 and incremented by 1.

Table 5-151 LayerSizeConfig

Parameter	Type	Description
width	Integer	Width (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
height	Integer	Height (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Table 5-152 ImageLayerConfig

Parameter	Type	Description
image_url	String	Image file URL.

Table 5-153 VideoLayerConfig

Parameter	Type	Description
video_url	String	Video file URL.
video_cover_url	String	Video thumbnail file URL.
loop_count	Integer	Number of times that a video is played cyclically.

Table 5-154 TextLayerConfig

Parameter	Type	Description
text_context	String	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**.
font_name	String	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
font_size	Integer	Font size (pixel). The value ranges from 4 to 120.
font_color	String	Font color. RGB color value.

Table 5-155 BackgroundMusicConfig

Parameter	Type	Description
music_asset_i d	String	Music asset ID.
volume	Integer	Music volume. For example, **100** indicates that the volume is 100%, and **50** indicates that the volume is 50%. The value defaults to **100** and ranges from 0 to 100.

Status code: 400

Table 5-156 Response body parameters

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

Status code: 401

Table 5-157 Response body parameters

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

Status code: 404

Table 5-158 Response body parameters

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

Status code: 500

Table 5-159 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=zVGMVbI5ji9rr8epD1Cir5OGIRk
%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" : [ {
        "human_position_2d" : {
          "position" : "MIDDLE"
        },
        "background_type" : "IMAGE",
        "background_config" : "https://{endpoint}/0d697589d98091f12f92c0073501cd79/
c7885ffdfb347337a890208ca7fd07e3/34534f0262813a6838bdcfb8bc949af6.jpg?
AccessKeyId=WTEZCVDFUF3XHXCTPIJ8&Expires=1686901332&Signature=2E7Y7joo2NopBsU8u3iDnf2P9p8%
3D"
      } ]
    }
  } ]
}
```

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 5-160 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 5-161 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 5-162 Response header parameters

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

Status code: 400

Table 5-163 Response body parameters

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

Status code: 401

Table 5-164 Response body parameters

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

Status code: 500

Table 5-165 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	Livestreaming room name.
room_description	No	String	Livestreaming room description.

Parameter	Mandatory	Type	Description
room_type	No	String	Live room type. • **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
scene_scripts	No	Array of **LiveVideoScriptInfo** objects	Default livestreaming script list.
interaction_rules	No	Array of **LiveRoomInteractionRuleInfo** objects	Interaction rule list.
play_policy	No	**PlayPolicy** object	Script playback policy.
video_config	No	**VideoConfig** object	Video output configuration.
output_urls	No	Array of strings	Address of the third-party livestreaming platform for RTMP video stream push.
stream_keys	No	Array of strings	Stream key of the third-party livestreaming platform for RTMP video stream push, which corresponds to the ingest URL.
backup_model_asset_ids	No	Array of strings	Asset ID of the alternative virtual streamer (only image assets, excluding timbre).
live_event_callback_config	No	**LiveEventCallBackConfig** object	Live event callback notification configuration.

Parameter	Mandatory	Type	Description
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 review configuration.
shared_config	No	**SharedConfig** object	Sharing configuration.
view_mode	No	String	Landscape or portrait mode. Default value: **VERTICAL** • **LANDSCAPE**: landscape • **VERTICAL**: portrait
co_streamer_config	No	**CoStreamerConfig** object	Co-streamer configuration
priv_data	No	String	Private data, which is filled in by the user and carried back as it is.

Table 6-4 LiveVideoScriptInfo

Parameter	Mandatory	Type	Description
script_id	No	String	Script ID.
script_name	Yes	String	Script name.
script_description	No	String	Script description.
dh_id	No	String	Virtual human ID, which corresponds to the combination of image and timbre.
model_asset_id	No	String	Asset ID of a virtual human model.
voice_config	No	**VoiceConfig** object	Voice configuration parameter.
background_config	No	Array of **BackgroundConfigInfo** objects	Background configuration.

Parameter	Mandatory	Type	Description
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	Background type. ● **IMAGE**: image, which is used as the image for 3D virtual human demonstration materials or virtual avatar background. ● **IMAGE_2D**: image, which is used as the background image in the 2D scene for 3D virtual broadcasters. ● **VIDEO**: video ● **AUDIO**: audio **NOTE** ● Only **IMAGE** is supported for virtual avatar video production.
background_config	No	String	Background file URL. **NOTE** ● 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**.
background_color_config	No	String	RGB color value of a solid color background. **NOTE** ● This parameter is mandatory when **background_type** is set to **COLOR**.

Parameter	Mandatory	Type	Description
background_asset_id	No	String	Background asset ID. **NOTE** • If the background is a background image, set this parameter to the image asset ID.

Table 6-6 LayerConfig

Parameter	Mandatory	Type	Description
layer_type	Yes	String	Layer type. • **HUMAN**: person layer • **IMAGE**: image layer • **VIDEO**: video layer • TEXT: material 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.
group_id	No	String	Groups materials in multiple scenes. Materials with the same **group_id** share location information when they are applied globally.
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 6-7 LayerPositionConfig

Parameter	Mandatory	Type	Description
dx	Yes	Integer	X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** ● The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	Yes	Integer	Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
layer_index	Yes	Integer	Layer sequence of an image, video, or person image. **NOTE** ● The layer sequence is an integer starting from 1. The sequence of the bottom layer is 1 and incremented by 1.

Table 6-8 LayerSizeConfig

Parameter	Mandatory	Type	Description
width	No	Integer	Width (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Parameter	Mandatory	Type	Description
height	No	Integer	Height (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Table 6-9 ImageLayerConfig

Parameter	Mandatory	Type	Description
image_url	No	String	Image file URL.

Table 6-10 VideoLayerConfig

Parameter	Mandatory	Type	Description
video_url	No	String	Video file URL.
video_cover_url	No	String	Video thumbnail file URL.
loop_count	No	Integer	Number of times that a video is played cyclically.

Table 6-11 TextLayerConfig

Parameter	Mandatory	Type	Description
text_context	No	String	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**.

Parameter	Mandatory	Type	Description
font_name	No	String	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
font_size	No	Integer	Font size (pixel). The value ranges from 4 to 120.
font_color	No	String	Font color. RGB color value.

Table 6-12 LiveShootScriptItem

Parameter	Mandatory	Type	Description
sequence_no	No	Integer	Script No.
title	No	String	Paragraph title.
text_config	No	**TextConfig** object	Script configuration.
audio_config	No	**LiveAudioConfig** object	Live audio configuration.

Table 6-13 TextConfig

Parameter	Mandatory	Type	Description
text	Yes	String	Script. Two modes are supported: plain text mode and tag mode. **Plain text 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**.

Table 6-14 LiveAudioConfig

Parameter	Mandatory	Type	Description
asset_id	No	String	ID of the inserted audio asset. You do not need to set this parameter for external assets.
audio_url	No	String	Audio URL. Only the MP3 format is supported. The size is less than 100 MB. The output is automatically converted to mono 16 kHz for sampling.
subtitle_url	No	String	URL of the subtitle file of the audio. Only the SRT format is supported. The size is less than 1 MB.

Table 6-15 LiveRoomInteractionRuleInfo

Parameter	Mandatory	Type	Description
rule_index	No	String	Rule index.
rule_name	No	String	Rule name.
enabled	No	Boolean	Whether to enable.

Parameter	Mandatory	Type	Description
event_type	No	Integer	Event type. - **1**: on-screen comment - **2**: users joining a live room - **3**: giving likes - **4**: sending gifts - **10**: preset wording
hit_condition	No	**HitCondition** object	Hit condition.
trigger	No	**TriggerProcess** object	Trigger
review_config	No	**ReviewConfig** object	Content review configuration.
group_id	No	String	Interaction rule library ID, which is carried when a rule is imported from the interaction rule library.
group_name	No	String	Interaction rule library name, which is carried when a rule is imported from the interaction rule library.
enabled_scenes	No	Array of strings	Scenario where a rule is enabled. Set this parameter when it is enabled in some scenarios. If this parameter is not specified, the rule is enabled in all scenarios.

Table 6-16 HitCondition

Parameter	Mandatory	Type	Description
relation	No	String	Condition relationship. The value **And** or **Or RESERVED** indicates that the general reply does not check other matching conditions.
priority	No	Integer	Priority. A smaller value indicates a higher priority. The value ranges from 0 to 999. The default value is **500**. This parameter is optional.
tags	No	Array of **HitCondition Tag** objects	Matching relationship configuration

Table 6-17 HitConditionTag

Parameter	Mandatory	Type	Description
tag	No	String	Key fields in the event content.
operation	No	String	Field processing. ● **SUM**: accumulation ● **AVG**: average ● **COUNT**: count ● **NONE**: no processing
match	No	String	Match type. ● **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
value	No	String	Match value

Table 6-18 TriggerProcess

Parameter	Mandatory	Type	Description
time_window	No	Integer	Processing suppression duration, in second. **–1** indicates the entire livestreaming. **0** indicates no suppression. It is triggered each time.

Parameter	Mandatory	Type	Description
reply_mode	No	String	Reply type. • **SYSTEM_REPLY**: automatic reply based on the preset script • **CALLBACK**: callback to other services, with the preset script • **SHOW_LAYER**: overlaid layer display, which does not affect the script • **INTELLIGENT_REPLY**: script of an intelligent reply
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.
reply_texts	No	Array of strings	Reply scripts.
reply_audios	No	Array of **ReplyAudioInfo** objects	Reply audio set. Set **audio_url**.
reply_order	No	String	Reply sequence. • **RANDOM**: random • **ORDER**: sequential loop
reply_role	No	String	Reply role. The default value is **STREAMER**. • **STREAMER**: streamer • **CO_STREAMER**: co-streamer
robot_id	No	String	Bot ID.

Table 6-19 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 6-20 SmartImageLayerConfig

Parameter	Mandatory	Type	Description
image_url	Yes	String	Image file URL.
display_duration	No	Integer	Image display duration, in second. ● 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-21 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	Video display duration, in second. ● 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-22 SmartTextLayerConfig

Parameter	Mandatory	Type	Description
text_type	No	String	Text type. ● **DYNAMIC**: dynamic text, which requires keyword replacement ● **STATIC**: static text
text_context	No	String	Text.
font_name	No	String	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
font_size	No	Integer	Font size (pixel). The value ranges from 4 to 120.
font_color	No	String	Font color. RGB color value.

Parameter	Mandatory	Type	Description
display_durati on	No	Integer	Text display duration, in second. ● 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-23 ReplyAudioInfo

Parameter	Mandatory	Type	Description
audio_url	No	String	Audio URL.
audio_name	No	String	Audio name.

Table 6-24 PlayPolicy

Parameter	Mandatory	Type	Description
repeat_count	No	Integer	Number of times that a script is played repeatedly. The value **–1** indicates that the playback is repeated until it is stopped manually. The value **0** indicates that it is played only once. If the value is n, the actual number of running times is $n + 1$.
auto_play_scri pt	No	Boolean	Indicates whether to automatically play a script. **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.

Parameter	Mandatory	Type	Description
play_mode	No	String	Control mode. The default value is **TEXT**. **TEXT**: text control, that is, TTS is used **AUDIO**: speech control **NO_PRESET**: no preset script, that is, manual control is used
random_play_mode	No	String	Random broadcast mode. ● **NONE**: Random broadcast is disabled. ● **SCENE**: Random broadcast by scene is enabled. Paragraphs in a scene are broadcast in sequence. ● **SCRIPT_ITEM**: Random broadcast by paragraph is enabled. Scenes are broadcast in sequence. ● **SCENE_AND_SCRIPT_ITEM**: Scenes and paragraphs are broadcast randomly.
need_independent_capture_client	No	Boolean	Whether an independent data collection device is required

Table 6-25 VideoConfig

Parameter	Mandatory	Type	Description
clip_mode	No	String	Clipping mode of the output video. Default value: **RESIZE**. ● **RESIZE**: video scaling ● **CROP**: video cropping
codec	Yes	String	Video encoding format and video file format. ● **H264**: H.264 encoding, MP4 file output ● **VP8**: VP8 encoding, WebM file output

Parameter	Mandatory	Type	Description
bitrate	Yes	Integer	Average output bitrate. Unit: kbit/s The value ranges from 40 to 30,000. **NOTE** ● Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. ● Bitrate range for virtual avatar video production: [1000, 8000].
width	Yes	Integer	Video width. Unit: pixel. **NOTE** ● 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 videos can be used 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 is supported for virtual avatar livestreaming.
height	Yes	Integer	Video height. Unit: pixel. **NOTE** ● 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 is supported for virtual avatar livestreaming.

Parameter	Mandatory	Type	Description
frame_rate	No	String	Frame rate. Unit: FPS **NOTE** ● The frame rate of virtual avatar videos is fixed at 25 FPS.
is_subtitle_enable	No	Boolean	Whether the output video is subtitled. The default value is **false**. ● **true**: Displays the subtitle. ● **false**: Hides the subtitle.
subtitle_config	No	**SubtitleConfig** object	Subtitle configuration.
dx	No	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** ● The canvas 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.
dy	No	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** ● The canvas 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.
is_enable_super_resolution	No	Boolean	Whether super resolution is enabled for a video. **NOTE** **true**: enable **false**: do not enable

Table 6-26 SubtitleConfig

Parameter	Mandatory	Type	Description
dx	No	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** ● The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	No	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** ● The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
font_name	No	String	Font. The following fonts are supported: ● **HarmonyOS_Sans_SC_Black**: HarmonyOS bold ● **HarmonyOS_Sans_SC_Regular**: HarmonyOS normal ● **HarmonyOS_Sans_SC_Thin**: HarmonyOS light
font_size	No	Integer	Font size. The value ranges from 4 to 120.
h	No	Integer	Subtitle box height **NOTE** ● The parameter **h** is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box by the front end. This parameter is not used in the background.

Parameter	Mandatory	Type	Description
w	No	Integer	Subtitle box width **NOTE** • 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 by the front end. This parameter is not used in the background.

Table 6-27 LiveEventCallBackConfig

Parameter	Mandatory	Type	Description
live_event_type_callback_url	No	String	Live event callback URL. HTTPS URL, which must contain an authentication string.

Parameter	Mandatory	Type	Description
auth_type	No	String	Authentication type. • **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.
key	No	String	Key

Parameter	Mandatory	Type	Description

callback_event_type	No	Array of strings	Live event types in callbacks. 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:
			
			`{`
			`  "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\"}"`
			`}`
			
			The **RTMP_STREAM_STATE_CHANGE** callback is defined as follows:
			
			`{`
			`  "event_type": "RTMP_STREAM_STATE_CHANGE",`
			`  "message":"{\"room_id\":\"26f065244f754b3aa853b649a21aaf66\",\"job_id\":\"e87104f76d7546ce8a46ac6b04c49c3c\",\"output_url\":\"rtmp://xxx/xx/xx\",\"stream_key\":\"xxxxx\",\"state\":\"CONNECTED\"}"`
			`}`
			
			The value of **state** can be **CONNECTING**, **CONNECTED**, **DISCONNECTED**, **RECONNECTING**, or **END**.

Parameter	Mandatory	Type	Description

			The **REPLY_COMMAND_FINISH** callback is defined as follows:
			`{`
			`  "event_type":`
			`"REPLY_COMMAND_FINISH",`
			`  "message":"{\"room_id`
			`\":\"26f065244f754b3aa853b649a21aaf`
			`66\",\"job_id`
			`\":\"e87104f76d7546ce8a46ac6b04c49c`
			`3c\",\"reply_id`
			`\":\"e87104f76d7546ce8a46ac6b04c49c`
			`3c"}"`
			`}`

Table 6-28 RTCLiveEventCallBackConfig

Parameter	Mandatory	Type	Description

rtc_callback_e vent_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:
			
			`{`
			`  "message_type":`
			`"live_progress_notify",`
			`  "data": {`
			`    "script_name": "Scene 1",`
			`    "shoot_script_sequence_no": 2,`
			`    "shoot_script_title": "Greeting",`
			`    "offset": "247",`
			`    "reply_id":`
			`"e87104f76d7546ce8a46ac6b04c49c3c"`
			`  }`
			`}`
			
			The **REPLY_COMMAND_FINISH** callback is defined as follows:
			
			`{`
			`  "message_type":`
			`"reply_command_finish_notify",`
			`  "data":"{`
			`"reply_id":"e87104f76d7546ce8a46ac6b04c49c3c"`
			`  }"`
			`}`

Table 6-29 ReviewConfig

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

Table 6-30 SharedConfig

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. The tenants are specified by the owner.
shared_state	No	String	Sharing status. • **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.
expire_time	No	String	Time when the sharing expires. If this parameter is left blank, the sharing never expires.
allowed_project_ids	No	Array of strings	Tenants allowed to access the asset.

Table 6-31 CoStreamerConfig

Parameter	Mandatory	Type	Description
voice_config	No	**VoiceConfig** object	Voice configuration parameter.
streamer_action	No	String	Behavior of the streamer when the co-streamer speaks. • **SILENCE**: silent • **VOLUME_DOWN**: decreased volume

Table 6-32 VoiceConfig

Parameter	Mandatory	Type	Description
voice_asset_id	Yes	String	Timbre asset ID.
speed	No	Integer	Speech speed. The value defaults to **100** and ranges from 50 to 200. **NOTE** ● The value **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.
pitch	No	Integer	Pitch. The value defaults to **100** and ranges from 50 to 200.
volume	No	Integer	Volume. The value defaults to **140** and ranges from 90 to 240.

Response Parameters

Status code: 200

Table 6-33 Response header parameters

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

Table 6-34 Response body parameters

Parameter	Type	Description
room_id	String	Livestreaming room ID.

Status code: 400

Table 6-35 Response body parameters

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

Status code: 401

Table 6-36 Response body parameters

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

Status code: 500

Table 6-37 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 6-38 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**.

Table 6-39 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts.
limit	No	Integer	Number of items displayed on each page.
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.
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.

Parameter	Mandatory	Type	Description
end_time	No	String	End time of the latest livestreaming task. 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_OHTERS**: templates shared with others • **SHARED_FROM_OHTERS**: templates shared by others • **Public**: public templates

Request Parameters

Table 6-40 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 6-41 Response header parameters

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

Table 6-42 Response body parameters

Parameter	Type	Description
count	Integer	Total number of livestreaming rooms.

Parameter	Type	Description
smart_live_rooms	Array of **SmartLiveRoomBaseInfo** objects	Livestreaming room list.

Table 6-43 SmartLiveRoomBaseInfo

Parameter	Type	Description
room_id	String	Livestreaming room ID.
project_id	String	Tenant ID
room_name	String	Livestreaming room name.
room_type	String	Live room type. ● **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
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
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

Parameter	Type	Description
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_status	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 filled in by the user and carried back as it is.

Table 6-44 ErrorResponse

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

Table 6-45 SharedConfig

Parameter	Type	Description
shared_type	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. The tenants are specified by the owner.
shared_state	String	Sharing status. ● **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.
expire_time	String	Time when the sharing expires. If this parameter is left blank, the sharing never expires.
allowed_project_ids	Array of strings	Tenants allowed to access the asset.

Table 6-46 ModelInfo

Parameter	Type	Description
model_asset_id	String	Model asset ID.
asset_name	String	Asset name.
backup_model_asset_ids	Array of strings	Asset ID of the alternative virtual streamer (only image assets, excluding timbre).

Status code: 400

Table 6-47 Response body parameters

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

Status code: 401

Table 6-48 Response body parameters

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

Status code: 500

Table 6-49 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 6-50 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 6-51 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 6-52 Response header parameters

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

Table 6-53 Response body parameters

Parameter	Type	Description
room_name	String	Livestreaming room name.

Parameter	Type	Description
room_description	String	Livestreaming room description.
room_type	String	Live room type. • **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
scene_scripts	Array of **LiveVideoScriptInfo** objects	Default livestreaming script list.
interaction_rules	Array of **LiveRoomInteractionRuleInfo** objects	Interaction rule list.
play_policy	**PlayPolicy** object	Script playback policy.
video_config	**VideoConfig** object	Video output configuration.
output_urls	Array of strings	Address of the third-party livestreaming platform for RTMP video stream push.
stream_keys	Array of strings	Stream key of the third-party livestreaming platform for RTMP video stream push, which corresponds to the ingest URL.
backup_model_asset_ids	Array of strings	Asset ID of the alternative virtual streamer (only image assets, excluding timbre).
live_event_callback_config	**LiveEventCallBackConfig** object	Live event 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.
review_config	**ReviewConfig** object	Content review configuration.
shared_config	**SharedConfig** object	Sharing configuration.

Parameter	Type	Description
view_mode	String	Landscape or portrait mode. Default value: **VERTICAL** • **LANDSCAPE**: landscape • **VERTICAL**: portrait
co_streamer_config	**CoStreamerConfig** object	Co-streamer configuration
priv_data	String	Private data, which is filled in by the user and carried back as it is.
room_id	String	Livestreaming room ID.
create_time	String	Time when a livestreaming room is created. The format complies with RFC 3339, 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 6-54 LiveVideoScriptInfo

Parameter	Type	Description
script_id	String	Script ID.
script_name	String	Script name.
script_description	String	Script description.
dh_id	String	Virtual human ID, which corresponds to the combination of image and timbre.
model_asset_id	String	Asset ID of a virtual human model.

Parameter	Type	Description
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 6-55 BackgroundConfigInfo

Parameter	Type	Description
background_type	String	Background type. • **IMAGE**: image, which is used as the image for 3D virtual human demonstration materials or virtual avatar background. • **IMAGE_2D**: image, which is used as the background image in the 2D scene for 3D virtual broadcasters. • **VIDEO**: video • **AUDIO**: audio **NOTE** • Only **IMAGE** is supported for virtual avatar video production.
background_config	String	Background file URL. **NOTE** • 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**.
background_color_config	String	RGB color value of a solid color background. **NOTE** • This parameter is mandatory when **background_type** is set to **COLOR**.

Parameter	Type	Description
background_asset_id	String	Background asset ID. **NOTE** ● If the background is a background image, set this parameter to the image asset ID.

Table 6-56 LayerConfig

Parameter	Type	Description
layer_type	String	Layer type. ● **HUMAN**: person layer ● **IMAGE**: image layer ● **VIDEO**: video layer ● TEXT: material text layer
asset_id	String	ID of the asset overlaid on a video. You do not need to set this parameter for external assets.
group_id	String	Groups materials in multiple scenes. Materials with the same **group_id** share location information when they are applied globally.
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 6-57 LayerPositionConfig

Parameter	Type	Description
dx	Integer	X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** ● The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Parameter	Type	Description
dy	Integer	Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
layer_index	Integer	Layer sequence of an image, video, or person image. **NOTE** ● The layer sequence is an integer starting from 1. The sequence of the bottom layer is 1 and incremented by 1.

Table 6-58 LayerSizeConfig

Parameter	Type	Description
width	Integer	Width (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
height	Integer	Height (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Table 6-59 ImageLayerConfig

Parameter	Type	Description
image_url	String	Image file URL.

Table 6-60 VideoLayerConfig

Parameter	Type	Description
video_url	String	Video file URL.
video_cover_url	String	Video thumbnail file URL.

Parameter	Type	Description
loop_count	Integer	Number of times that a video is played cyclically.

Table 6-61 TextLayerConfig

Parameter	Type	Description
text_context	String	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**.
font_name	String	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
font_size	Integer	Font size (pixel). The value ranges from 4 to 120.
font_color	String	Font color. RGB color value.

Table 6-62 LiveShootScriptItem

Parameter	Type	Description
sequence_no	Integer	Script No.
title	String	Paragraph title.
text_config	**TextConfig** object	Script configuration.
audio_config	**LiveAudioConfig** object	Live audio configuration.

Table 6-63 TextConfig

Parameter	Type	Description
text	String	Script. Two modes are supported: plain text mode and tag mode. **Plain text 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**.

Table 6-64 LiveAudioConfig

Parameter	Type	Description
asset_id	String	ID of the inserted audio asset. You do not need to set this parameter for external assets.
audio_url	String	Audio URL. Only the MP3 format is supported. The size is less than 100 MB. The output is automatically converted to mono 16 kHz for sampling.
subtitle_url	String	URL of the subtitle file of the audio. Only the SRT format is supported. The size is less than 1 MB.

Table 6-65 LiveRoomInteractionRuleInfo

Parameter	Type	Description
rule_index	String	Rule index.
rule_name	String	Rule name.
enabled	Boolean	Whether to enable.
event_type	Integer	Event type. - **1**: on-screen comment - **2**: users joining a live room - **3**: giving likes - **4**: sending gifts - **10**: preset wording
hit_condition	**HitCondition** object	Hit condition.
trigger	**TriggerProcess** object	Trigger

Parameter	Type	Description
review_config	**ReviewConfig** object	Content review configuration.
group_id	String	Interaction rule library ID, which is carried when a rule is imported from the interaction rule library.
group_name	String	Interaction rule library name, which is carried when a rule is imported from the interaction rule library.
enabled_scenes	Array of strings	Scenario where a rule is enabled. Set this parameter when it is enabled in some scenarios. If this parameter is not specified, the rule is enabled in all scenarios.

Table 6-66 HitCondition

Parameter	Type	Description
relation	String	Condition relationship. The value **And** or **Or** **RESERVED** indicates that the general reply does not check other matching conditions.
priority	Integer	Priority. A smaller value indicates a higher priority. The value ranges from 0 to 999. The default value is **500**. This parameter is optional.
tags	Array of **HitCondition Tag** objects	Matching relationship configuration

Table 6-67 HitConditionTag

Parameter	Type	Description
tag	String	Key fields in the event content.
operation	String	Field processing. ● **SUM**: accumulation ● **AVG**: average ● **COUNT**: count ● **NONE**: no processing

Parameter	Type	Description
match	String	Match type. • **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
value	String	Match value

Table 6-68 TriggerProcess

Parameter	Type	Description
time_window	Integer	Processing suppression duration, in second. **–1** indicates the entire livestreaming. **0** indicates no suppression. It is triggered each time.
reply_mode	String	Reply type. • **SYSTEM_REPLY**: automatic reply based on the preset script • **CALLBACK**: callback to other services, with the preset script • **SHOW_LAYER**: overlaid layer display, which does not affect the script • **INTELLIGENT_REPLY**: script of an intelligent reply
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.
reply_texts	Array of strings	Reply scripts.
reply_audios	Array of **ReplyAudioInfo** objects	Reply audio set. Set **audio_url**.

Parameter	Type	Description
reply_order	String	Reply sequence. • **RANDOM**: random • **ORDER**: sequential loop
reply_role	String	Reply role. The default value is **STREAMER**. • **STREAMER**: streamer • **CO_STREAMER**: co-streamer
robot_id	String	Bot ID.

Table 6-69 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.
image_config	**SmartImageLayerConfig** object	Image layer configuration.
video_config	**SmartVideoLayerConfig** object	Video layer configuration.
text_config	**SmartTextLayerConfig** object	Video layer configuration.

Table 6-70 SmartImageLayerConfig

Parameter	Type	Description
image_url	String	Image file URL.

Parameter	Type	Description
display_durati on	Integer	Image display duration, in second. ● 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-71 SmartVideoLayerConfig

Parameter	Type	Description
video_url	String	Video file URL.
video_cover_u rl	String	Video thumbnail file URL.
display_durati on	Integer	Video display duration, in second. ● 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-72 SmartTextLayerConfig

Parameter	Type	Description
text_type	String	Text type. ● **DYNAMIC**: dynamic text, which requires keyword replacement ● **STATIC**: static text
text_context	String	Text.
font_name	String	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

Parameter	Type	Description
font_size	Integer	Font size (pixel). The value ranges from 4 to 120.
font_color	String	Font color. RGB color value.
display_durati on	Integer	Text display duration, in second. • 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-73 ReplyAudioInfo

Parameter	Type	Description
audio_url	String	Audio URL.
audio_name	String	Audio name.

Table 6-74 PlayPolicy

Parameter	Type	Description
repeat_count	Integer	Number of times that a script is played repeatedly. The value **–1** indicates that the playback is repeated until it is stopped manually. The value **0** indicates that it is played only once. If the value is n, the actual number of running times is $n + 1$.
auto_play_scri pt	Boolean	Indicates whether to automatically play a script. **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.

Parameter	Type	Description
play_mode	String	Control mode. The default value is **TEXT**. **TEXT**: text control, that is, TTS is used **AUDIO**: speech control **NO_PRESET**: no preset script, that is, manual control is used
random_play_mode	String	Random broadcast mode. ● **NONE**: Random broadcast is disabled. ● **SCENE**: Random broadcast by scene is enabled. Paragraphs in a scene are broadcast in sequence. ● **SCRIPT_ITEM**: Random broadcast by paragraph is enabled. Scenes are broadcast in sequence. ● **SCENE_AND_SCRIPT_ITEM**: Scenes and paragraphs are broadcast randomly.
need_independent_capture_client	Boolean	Whether an independent data collection device is required

Table 6-75 VideoConfig

Parameter	Type	Description
clip_mode	String	Clipping mode of the output video. Default value: **RESIZE**. ● **RESIZE**: video scaling ● **CROP**: video cropping
codec	String	Video encoding format and video file format. ● **H264**: H.264 encoding, MP4 file output ● **VP8**: VP8 encoding, WebM file output
bitrate	Integer	Average output bitrate. Unit: kbit/s The value ranges from 40 to 30,000. **NOTE** ● Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. ● Bitrate range for virtual avatar video production: [1000, 8000].

Parameter	Type	Description
width	Integer	Video width. Unit: pixel. **NOTE** ● 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 videos can be used 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 is supported for virtual avatar livestreaming.
height	Integer	Video height. Unit: pixel. **NOTE** ● 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 is supported for virtual avatar livestreaming.
frame_rate	String	Frame rate. Unit: FPS **NOTE** ● The frame rate of virtual avatar videos is fixed at 25 FPS.
is_subtitle_enable	Boolean	Whether the output video is subtitled. The default value is **false**. ● **true**: Displays the subtitle. ● **false**: Hides the subtitle.
subtitle_config	**SubtitleConfig** object	Subtitle configuration.
dx	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** ● The canvas 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.

Parameter	Type	Description
dy	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** ● The canvas 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.
is_enable_super_resolution	Boolean	Whether super resolution is enabled for a video. **NOTE** **true**: enable **false**: do not enable

Table 6-76 SubtitleConfig

Parameter	Type	Description
dx	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** ● The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** ● The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
font_name	String	Font. The following fonts are supported: ● **HarmonyOS_Sans_SC_Black**: HarmonyOS bold ● **HarmonyOS_Sans_SC_Regular**: HarmonyOS normal ● **HarmonyOS_Sans_SC_Thin**: HarmonyOS light
font_size	Integer	Font size. The value ranges from 4 to 120.

Parameter	Type	Description
h	Integer	Subtitle box height **NOTE** • The parameter **h** is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box by the front end. This parameter is not used in the background.
w	Integer	Subtitle box width **NOTE** • 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 by the front end. This parameter is not used in the background.

Table 6-77 LiveEventCallBackConfig

Parameter	Type	Description
live_event_type_callback_url	String	Live event callback URL. HTTPS URL, which must contain an authentication string.
auth_type	String	Authentication type. • **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.
key	String	Key

Parameter	Type	Description

callback_event_type	Array of strings	Live event types in callbacks.
		
		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:
		
		``
		{
		  "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\"}"
		}
		``
		
		The **RTMP_STREAM_STATE_CHANGE** callback is defined as follows:
		
		``
		{
		  "event_type": "RTMP_STREAM_STATE_CHANGE",
		  "message":"{\"room_id
		\":\"26f065244f754b3aa853b649a21aaf66\",\"job_id
		\":\"e87104f76d7546ce8a46ac6b04c49c3c\",\"output_url
		\":\"rtmp://xxx/xx/xx\",\"stream_key\":\"xxxxx\",\"state
		\":\"CONNECTED\"}"
		}
		``
		
		The value of **state** can be **CONNECTING**, **CONNECTED**, **DISCONNECTED**, **RECONNECTING**, or **END**.
		
		The **REPLY_COMMAND_FINISH** callback is defined as follows:
		
		``
		{
		  "event_type": "REPLY_COMMAND_FINISH",
		  "message":"{\"room_id
		\":\"26f065244f754b3aa853b649a21aaf66\",\"job_id
		\":\"e87104f76d7546ce8a46ac6b04c49c3c\",\"reply_id
		\":\"e87104f76d7546ce8a46ac6b04c49c3c"}"
		}
		``

Table 6-78 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 6-79 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 6-80 SharedConfig

Parameter	Type	Description
shared_type	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. The tenants are specified by the owner.
shared_state	String	Sharing status. ● **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.
expire_time	String	Time when the sharing expires. If this parameter is left blank, the sharing never expires.
allowed_project_ids	Array of strings	Tenants allowed to access the asset.

Table 6-81 CoStreamerConfig

Parameter	Type	Description
voice_config	**VoiceConfig** object	Voice configuration parameter.
streamer_action	String	Behavior of the streamer when the co-streamer speaks. ● **SILENCE**: silent ● **VOLUME_DOWN**: decreased volume

Table 6-82 VoiceConfig

Parameter	Type	Description
voice_asset_id	String	Timbre asset ID.

Parameter	Type	Description
speed	Integer	Speech speed. The value defaults to **100** and ranges from 50 to 200. **NOTE** ● The value **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.
pitch	Integer	Pitch. The value defaults to **100** and ranges from 50 to 200.
volume	Integer	Volume. The value defaults to **140** and ranges from 90 to 240.

Table 6-83 ErrorResponse

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

Status code: 400

Table 6-84 Response body parameters

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

Status code: 401

Table 6-85 Response body parameters

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

Status code: 404

Table 6-86 Response body parameters

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

Status code: 500

Table 6-87 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.
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 6-88 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 6-89 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 6-90 Request body parameters

Parameter	Mandatory	Type	Description
room_name	Yes	String	Livestreaming room name.

Parameter	Mandatory	Type	Description
room_description	No	String	Livestreaming room description.
room_type	No	String	Live room type. • **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
scene_scripts	No	Array of **LiveVideoScriptInfo** objects	Default livestreaming script list.
interaction_rules	No	Array of **LiveRoomInteractionRuleInfo** objects	Interaction rule list.
play_policy	No	**PlayPolicy** object	Script playback policy.
video_config	No	**VideoConfig** object	Video output configuration.
output_urls	No	Array of strings	Address of the third-party livestreaming platform for RTMP video stream push.
stream_keys	No	Array of strings	Stream key of the third-party livestreaming platform for RTMP video stream push, which corresponds to the ingest URL.
backup_model_asset_ids	No	Array of strings	Asset ID of the alternative virtual streamer (only image assets, excluding timbre).
live_event_callback_config	No	**LiveEventCallBackConfig** object	Live event callback notification configuration.

Parameter	Mandatory	Type	Description
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 review configuration.
shared_config	No	**SharedConfig** object	Sharing configuration.
view_mode	No	String	Landscape or portrait mode. Default value: **VERTICAL** • **LANDSCAPE**: landscape • **VERTICAL**: portrait
co_streamer_config	No	**CoStreamerConfig** object	Co-streamer configuration
priv_data	No	String	Private data, which is filled in by the user and carried back as it is.

Table 6-91 LiveVideoScriptInfo

Parameter	Mandatory	Type	Description
script_id	No	String	Script ID.
script_name	Yes	String	Script name.
script_description	No	String	Script description.
dh_id	No	String	Virtual human ID, which corresponds to the combination of image and timbre.
model_asset_id	No	String	Asset ID of a virtual human model.
voice_config	No	**VoiceConfig** object	Voice configuration parameter.
background_config	No	Array of **BackgroundConfigInfo** objects	Background configuration.

Parameter	Mandatory	Type	Description
layer_config	No	Array of **LayerConfig** objects	Layer configuration.
shoot_scripts	Yes	Array of **LiveShootScriptItem** objects	Shooting script list.

Table 6-92 BackgroundConfigInfo

Parameter	Mandatory	Type	Description
background_type	Yes	String	Background type. ● **IMAGE**: image, which is used as the image for 3D virtual human demonstration materials or virtual avatar background. ● **IMAGE_2D**: image, which is used as the background image in the 2D scene for 3D virtual broadcasters. ● **VIDEO**: video ● **AUDIO**: audio **NOTE** ● Only **IMAGE** is supported for virtual avatar video production.
background_config	No	String	Background file URL. **NOTE** ● 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**.
background_color_config	No	String	RGB color value of a solid color background. **NOTE** ● This parameter is mandatory when **background_type** is set to **COLOR**.

Parameter	Mandatory	Type	Description
background_asset_id	No	String	Background asset ID. **NOTE** • If the background is a background image, set this parameter to the image asset ID.

Table 6-93 LayerConfig

Parameter	Mandatory	Type	Description
layer_type	Yes	String	Layer type. • **HUMAN**: person layer • **IMAGE**: image layer • **VIDEO**: video layer • TEXT: material 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.
group_id	No	String	Groups materials in multiple scenes. Materials with the same **group_id** share location information when they are applied globally.
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 6-94 LayerPositionConfig

Parameter	Mandatory	Type	Description
dx	Yes	Integer	X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** ● The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	Yes	Integer	Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
layer_index	Yes	Integer	Layer sequence of an image, video, or person image. **NOTE** ● The layer sequence is an integer starting from 1. The sequence of the bottom layer is 1 and incremented by 1.

Table 6-95 LayerSizeConfig

Parameter	Mandatory	Type	Description
width	No	Integer	Width (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Parameter	Mandatory	Type	Description
height	No	Integer	Height (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Table 6-96 ImageLayerConfig

Parameter	Mandatory	Type	Description
image_url	No	String	Image file URL.

Table 6-97 VideoLayerConfig

Parameter	Mandatory	Type	Description
video_url	No	String	Video file URL.
video_cover_url	No	String	Video thumbnail file URL.
loop_count	No	Integer	Number of times that a video is played cyclically.

Table 6-98 TextLayerConfig

Parameter	Mandatory	Type	Description
text_context	No	String	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**.

Parameter	Mandatory	Type	Description
font_name	No	String	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
font_size	No	Integer	Font size (pixel). The value ranges from 4 to 120.
font_color	No	String	Font color. RGB color value.

Table 6-99 LiveShootScriptItem

Parameter	Mandatory	Type	Description
sequence_no	No	Integer	Script No.
title	No	String	Paragraph title.
text_config	No	**TextConfig** object	Script configuration.
audio_config	No	**LiveAudioConfig** object	Live audio configuration.

Table 6-100 TextConfig

Parameter	Mandatory	Type	Description
text	Yes	String	Script. Two modes are supported: plain text mode and tag mode. **Plain text 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**.

Table 6-101 LiveAudioConfig

Parameter	Mandatory	Type	Description
asset_id	No	String	ID of the inserted audio asset. You do not need to set this parameter for external assets.
audio_url	No	String	Audio URL. Only the MP3 format is supported. The size is less than 100 MB. The output is automatically converted to mono 16 kHz for sampling.
subtitle_url	No	String	URL of the subtitle file of the audio. Only the SRT format is supported. The size is less than 1 MB.

Table 6-102 LiveRoomInteractionRuleInfo

Parameter	Mandatory	Type	Description
rule_index	No	String	Rule index.
rule_name	No	String	Rule name.
enabled	No	Boolean	Whether to enable.

Parameter	Mandatory	Type	Description
event_type	No	Integer	Event type. - **1**: on-screen comment - **2**: users joining a live room - **3**: giving likes - **4**: sending gifts - **10**: preset wording
hit_condition	No	**HitCondition** object	Hit condition.
trigger	No	**TriggerProcess** object	Trigger
review_config	No	**ReviewConfig** object	Content review configuration.
group_id	No	String	Interaction rule library ID, which is carried when a rule is imported from the interaction rule library.
group_name	No	String	Interaction rule library name, which is carried when a rule is imported from the interaction rule library.
enabled_scenes	No	Array of strings	Scenario where a rule is enabled. Set this parameter when it is enabled in some scenarios. If this parameter is not specified, the rule is enabled in all scenarios.

Table 6-103 HitCondition

Parameter	Mandatory	Type	Description
relation	No	String	Condition relationship. The value **And** or **Or RESERVED** indicates that the general reply does not check other matching conditions.
priority	No	Integer	Priority. A smaller value indicates a higher priority. The value ranges from 0 to 999. The default value is **500**. This parameter is optional.
tags	No	Array of **HitConditionTag** objects	Matching relationship configuration

Table 6-104 HitConditionTag

Parameter	Mandatory	Type	Description
tag	No	String	Key fields in the event content.
operation	No	String	Field processing. ● **SUM**: accumulation ● **AVG**: average ● **COUNT**: count ● **NONE**: no processing
match	No	String	Match type. ● **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
value	No	String	Match value

Table 6-105 TriggerProcess

Parameter	Mandatory	Type	Description
time_window	No	Integer	Processing suppression duration, in second. **–1** indicates the entire livestreaming. **0** indicates no suppression. It is triggered each time.

Parameter	Mandatory	Type	Description
reply_mode	No	String	Reply type. • **SYSTEM_REPLY**: automatic reply based on the preset script • **CALLBACK**: callback to other services, with the preset script • **SHOW_LAYER**: overlaid layer display, which does not affect the script • **INTELLIGENT_REPLY**: script of an intelligent reply
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.
reply_texts	No	Array of strings	Reply scripts.
reply_audios	No	Array of **ReplyAudioInfo** objects	Reply audio set. Set **audio_url**.
reply_order	No	String	Reply sequence. • **RANDOM**: random • **ORDER**: sequential loop
reply_role	No	String	Reply role. The default value is **STREAMER**. • **STREAMER**: streamer • **CO_STREAMER**: co-streamer
robot_id	No	String	Bot ID.

Table 6-106 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 6-107 SmartImageLayerConfig

Parameter	Mandatory	Type	Description
image_url	Yes	String	Image file URL.
display_duration	No	Integer	Image display duration, in second. • 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-108 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	Video display duration, in second. ● 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-109 SmartTextLayerConfig

Parameter	Mandatory	Type	Description
text_type	No	String	Text type. ● **DYNAMIC**: dynamic text, which requires keyword replacement ● **STATIC**: static text
text_context	No	String	Text.
font_name	No	String	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
font_size	No	Integer	Font size (pixel). The value ranges from 4 to 120.
font_color	No	String	Font color. RGB color value.

Parameter	Mandatory	Type	Description
display_durati on	No	Integer	Text display duration, in second. • 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-110 ReplyAudioInfo

Parameter	Mandatory	Type	Description
audio_url	No	String	Audio URL.
audio_name	No	String	Audio name.

Table 6-111 PlayPolicy

Parameter	Mandatory	Type	Description
repeat_count	No	Integer	Number of times that a script is played repeatedly. The value **–1** indicates that the playback is repeated until it is stopped manually. The value **0** indicates that it is played only once. If the value is *n*, the actual number of running times is *n* + 1.
auto_play_scri pt	No	Boolean	Indicates whether to automatically play a script. **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.

Parameter	Mandatory	Type	Description
play_mode	No	String	Control mode. The default value is **TEXT**. **TEXT**: text control, that is, TTS is used **AUDIO**: speech control **NO_PRESET**: no preset script, that is, manual control is used
random_play_mode	No	String	Random broadcast mode. • **NONE**: Random broadcast is disabled. • **SCENE**: Random broadcast by scene is enabled. Paragraphs in a scene are broadcast in sequence. • **SCRIPT_ITEM**: Random broadcast by paragraph is enabled. Scenes are broadcast in sequence. • **SCENE_AND_SCRIPT_ITEM**: Scenes and paragraphs are broadcast randomly.
need_independent_capture_client	No	Boolean	Whether an independent data collection device is required

Table 6-112 VideoConfig

Parameter	Mandatory	Type	Description
clip_mode	No	String	Clipping mode of the output video. Default value: **RESIZE**. • **RESIZE**: video scaling • **CROP**: video cropping
codec	Yes	String	Video encoding format and video file format. • **H264**: H.264 encoding, MP4 file output • **VP8**: VP8 encoding, WebM file output

Parameter	Mandatory	Type	Description
bitrate	Yes	Integer	Average output bitrate. Unit: kbit/s The value ranges from 40 to 30,000. **NOTE** - Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. - Bitrate range for virtual avatar video production: [1000, 8000].
width	Yes	Integer	Video width. Unit: pixel. **NOTE** - 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 videos can be used 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 is supported for virtual avatar livestreaming.
height	Yes	Integer	Video height. Unit: pixel. **NOTE** - 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 is supported for virtual avatar livestreaming.

Parameter	Mandatory	Type	Description
frame_rate	No	String	Frame rate. Unit: FPS **NOTE** ● The frame rate of virtual avatar videos is fixed at 25 FPS.
is_subtitle_en able	No	Boolean	Whether the output video is subtitled. The default value is **false**. ● **true**: Displays the subtitle. ● **false**: Hides the subtitle.
subtitle_confi g	No	**SubtitleConfi g** object	Subtitle configuration.
dx	No	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** ● The canvas 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.
dy	No	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** ● The canvas 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.
is_enable_sup er_resolution	No	Boolean	Whether super resolution is enabled for a video. **NOTE** **true**: enable **false**: do not enable

Table 6-113 SubtitleConfig

Parameter	Mandatory	Type	Description
dx	No	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** • The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	No	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** • The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
font_name	No	String	Font. The following fonts are supported: • **HarmonyOS_Sans_SC_Black**: HarmonyOS bold • **HarmonyOS_Sans_SC_Regular**: HarmonyOS normal • **HarmonyOS_Sans_SC_Thin**: HarmonyOS light
font_size	No	Integer	Font size. The value ranges from 4 to 120.
h	No	Integer	Subtitle box height **NOTE** • The parameter **h** is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box by the front end. This parameter is not used in the background.

Parameter	Mandatory	Type	Description
w	No	Integer	Subtitle box width **NOTE** ● 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 by the front end. This parameter is not used in the background.

Table 6-114 LiveEventCallBackConfig

Parameter	Mandatory	Type	Description
live_event_type_callback_url	No	String	Live event callback URL. HTTPS URL, which must contain an authentication string.

Parameter	Mandatory	Type	Description
auth_type	No	String	Authentication type. • **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.
key	No	String	Key

Parameter	Mandatory	Type	Description

callback_event_type	No	Array of strings	Live event types in callbacks. 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:
			
			`{`
			`  "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\"}"`
			`}`
			
			The **RTMP_STREAM_STATE_CHANGE** callback is defined as follows:
			
			`{`
			`  "event_type": "RTMP_STREAM_STATE_CHANGE",`
			`  "message":"{\"room_id\":\"26f065244f754b3aa853b649a21aaf66\",\"job_id\":\"e87104f76d7546ce8a46ac6b04c49c3c\",\"output_url\":\"rtmp://xxx/xx/xx\",\"stream_key\":\"xxxxx\",\"state\":\"CONNECTED\"}"`
			`}`
			
			The value of **state** can be **CONNECTING**, **CONNECTED**, **DISCONNECTED**, **RECONNECTING**, or **END**.

Parameter	Mandatory	Type	Description

			The **REPLY_COMMAND_FINISH** callback is defined as follows:
			
			{
			  "event_type": "REPLY_COMMAND_FINISH",
			  "message":"{\"room_id\":\"26f065244f754b3aa853b649a21aaf66\",\"job_id\":\"e87104f76d7546ce8a46ac6b04c49c3c\",\"reply_id\":\"e87104f76d7546ce8a46ac6b04c49c3c"}"
			}

Table 6-115 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:
			
			`{`
			`  "message_type": "live_progress_notify",`
			`  "data": {`
			`    "script_name": "Scene 1",`
			`    "shoot_script_sequence_no": 2,`
			`    "shoot_script_title": "Greeting",`
			`    "offset": "247",`
			`    "reply_id": "e87104f76d7546ce8a46ac6b04c49c3c"`
			`  }`
			`}`
			
			The **REPLY_COMMAND_FINISH** callback is defined as follows:
			
			`{`
			`  "message_type": "reply_command_finish_notify",`
			`  "data":"{`
			`"reply_id":"e87104f76d7546ce8a46ac6b04c49c3c"`
			`  }"`
			`}`

Table 6-116 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 6-117 SharedConfig

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. The tenants are specified by the owner.
shared_state	No	String	Sharing status. • **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.
expire_time	No	String	Time when the sharing expires. If this parameter is left blank, the sharing never expires.
allowed_proje ct_ids	No	Array of strings	Tenants allowed to access the asset.

Table 6-118 CoStreamerConfig

Parameter	Mandatory	Type	Description
voice_config	No	**VoiceConfig** object	Voice configuration parameter.
streamer_acti on	No	String	Behavior of the streamer when the co-streamer speaks. • **SILENCE**: silent • **VOLUME_DOWN**: decreased volume

Table 6-119 VoiceConfig

Parameter	Mandatory	Type	Description
voice_asset_id	Yes	String	Timbre asset ID.
speed	No	Integer	Speech speed. The value defaults to **100** and ranges from 50 to 200. **NOTE** ● The value **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.
pitch	No	Integer	Pitch. The value defaults to **100** and ranges from 50 to 200.
volume	No	Integer	Volume. The value defaults to **140** and ranges from 90 to 240.

Response Parameters

Status code: 200

Table 6-120 Response header parameters

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

Table 6-121 Response body parameters

Parameter	Type	Description
room_name	String	Livestreaming room name.
room_description	String	Livestreaming room description.

Parameter	Type	Description
room_type	String	Live room type. • **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
scene_scripts	Array of **LiveVideoScriptInfo** objects	Default livestreaming script list.
interaction_rules	Array of **LiveRoomInteractionRuleInfo** objects	Interaction rule list.
play_policy	**PlayPolicy** object	Script playback policy.
video_config	**VideoConfig** object	Video output configuration.
output_urls	Array of strings	Address of the third-party livestreaming platform for RTMP video stream push.
stream_keys	Array of strings	Stream key of the third-party livestreaming platform for RTMP video stream push, which corresponds to the ingest URL.
backup_model_asset_ids	Array of strings	Asset ID of the alternative virtual streamer (only image assets, excluding timbre).
live_event_callback_config	**LiveEventCallBackConfig** object	Live event 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.
review_config	**ReviewConfig** object	Content review configuration.
shared_config	**SharedConfig** object	Sharing configuration.
view_mode	String	Landscape or portrait mode. Default value: **VERTICAL** • **LANDSCAPE**: landscape • **VERTICAL**: portrait

Parameter	Type	Description
co_streamer_config	**CoStreamerConfig** object	Co-streamer configuration
priv_data	String	Private data, which is filled in by the user and carried back as it is.
room_id	String	Livestreaming room ID.
create_time	String	Time when a livestreaming room is created. The format complies with RFC 3339, 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 6-122 LiveVideoScriptInfo

Parameter	Type	Description
script_id	String	Script ID.
script_name	String	Script name.
script_description	String	Script description.
dh_id	String	Virtual human ID, which corresponds to the combination of image and timbre.
model_asset_id	String	Asset ID of a virtual human model.
voice_config	**VoiceConfig** object	Voice configuration parameter.

Parameter	Type	Description
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 6-123 BackgroundConfigInfo

Parameter	Type	Description
background_type	String	Background type. ● **IMAGE**: image, which is used as the image for 3D virtual human demonstration materials or virtual avatar background. ● **IMAGE_2D**: image, which is used as the background image in the 2D scene for 3D virtual broadcasters. ● **VIDEO**: video ● **AUDIO**: audio **NOTE** ● Only **IMAGE** is supported for virtual avatar video production.
background_config	String	Background file URL. **NOTE** ● 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**.
background_color_config	String	RGB color value of a solid color background. **NOTE** ● This parameter is mandatory when **background_type** is set to **COLOR**.
background_asset_id	String	Background asset ID. **NOTE** ● If the background is a background image, set this parameter to the image asset ID.

Table 6-124 LayerConfig

Parameter	Type	Description
layer_type	String	Layer type. ● **HUMAN**: person layer ● **IMAGE**: image layer ● **VIDEO**: video layer ● TEXT: material text layer
asset_id	String	ID of the asset overlaid on a video. You do not need to set this parameter for external assets.
group_id	String	Groups materials in multiple scenes. Materials with the same **group_id** share location information when they are applied globally.
position	**LayerPosition Config** object	Layer position configuration.
size	**LayerSizeConf ig** object	Layer size configuration.
image_config	**ImageLayerC onfig** object	Material image layer configuration.
video_config	**VideoLayerC onfig** object	Material video layer configuration.
text_config	**TextLayerConf ig** object	Material text layer configuration.

Table 6-125 LayerPositionConfig

Parameter	Type	Description
dx	Integer	X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** ● The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	Integer	Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Parameter	Type	Description
layer_index	Integer	Layer sequence of an image, video, or person image. **NOTE** ● The layer sequence is an integer starting from 1. The sequence of the bottom layer is 1 and incremented by 1.

Table 6-126 LayerSizeConfig

Parameter	Type	Description
width	Integer	Width (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
height	Integer	Height (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Table 6-127 ImageLayerConfig

Parameter	Type	Description
image_url	String	Image file URL.

Table 6-128 VideoLayerConfig

Parameter	Type	Description
video_url	String	Video file URL.
video_cover_url	String	Video thumbnail file URL.
loop_count	Integer	Number of times that a video is played cyclically.

Table 6-129 TextLayerConfig

Parameter	Type	Description
text_context	String	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**.
font_name	String	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
font_size	Integer	Font size (pixel). The value ranges from 4 to 120.
font_color	String	Font color. RGB color value.

Table 6-130 LiveShootScriptItem

Parameter	Type	Description
sequence_no	Integer	Script No.
title	String	Paragraph title.
text_config	**TextConfig** object	Script configuration.
audio_config	**LiveAudioCo nfig** object	Live audio configuration.

Table 6-131 TextConfig

Parameter	Type	Description
text	String	Script.
		Two modes are supported: plain text mode and tag mode.
		Plain text 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**.

Table 6-132 LiveAudioConfig

Parameter	Type	Description
asset_id	String	ID of the inserted audio asset. You do not need to set this parameter for external assets.
audio_url	String	Audio URL. Only the MP3 format is supported. The size is less than 100 MB. The output is automatically converted to mono 16 kHz for sampling.
subtitle_url	String	URL of the subtitle file of the audio. Only the SRT format is supported. The size is less than 1 MB.

Table 6-133 LiveRoomInteractionRuleInfo

Parameter	Type	Description
rule_index	String	Rule index.
rule_name	String	Rule name.
enabled	Boolean	Whether to enable.
event_type	Integer	Event type. - **1**: on-screen comment - **2**: users joining a live room - **3**: giving likes - **4**: sending gifts - **10**: preset wording
hit_condition	**HitCondition** object	Hit condition.
trigger	**TriggerProcess** object	Trigger

Parameter	Type	Description
review_config	**ReviewConfig** object	Content review configuration.
group_id	String	Interaction rule library ID, which is carried when a rule is imported from the interaction rule library.
group_name	String	Interaction rule library name, which is carried when a rule is imported from the interaction rule library.
enabled_scenes	Array of strings	Scenario where a rule is enabled. Set this parameter when it is enabled in some scenarios. If this parameter is not specified, the rule is enabled in all scenarios.

Table 6-134 HitCondition

Parameter	Type	Description
relation	String	Condition relationship. The value **And** or **Or RESERVED** indicates that the general reply does not check other matching conditions.
priority	Integer	Priority. A smaller value indicates a higher priority. The value ranges from 0 to 999. The default value is **500**. This parameter is optional.
tags	Array of **HitCondition Tag** objects	Matching relationship configuration

Table 6-135 HitConditionTag

Parameter	Type	Description
tag	String	Key fields in the event content.
operation	String	Field processing. ● **SUM**: accumulation ● **AVG**: average ● **COUNT**: count ● **NONE**: no processing

Parameter	Type	Description
match	String	Match type. • **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
value	String	Match value

Table 6-136 TriggerProcess

Parameter	Type	Description
time_window	Integer	Processing suppression duration, in second. **–1** indicates the entire livestreaming. **0** indicates no suppression. It is triggered each time.
reply_mode	String	Reply type. • **SYSTEM_REPLY**: automatic reply based on the preset script • **CALLBACK**: callback to other services, with the preset script • **SHOW_LAYER**: overlaid layer display, which does not affect the script • **INTELLIGENT_REPLY**: script of an intelligent reply
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.
reply_texts	Array of strings	Reply scripts.
reply_audios	Array of **ReplyAudioInfo** objects	Reply audio set. Set **audio_url**.

Parameter	Type	Description
reply_order	String	Reply sequence. • **RANDOM**: random • **ORDER**: sequential loop
reply_role	String	Reply role. The default value is **STREAMER**. • **STREAMER**: streamer • **CO_STREAMER**: co-streamer
robot_id	String	Bot ID.

Table 6-137 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.
image_config	**SmartImageLayerConfig** object	Image layer configuration.
video_config	**SmartVideoLayerConfig** object	Video layer configuration.
text_config	**SmartTextLayerConfig** object	Video layer configuration.

Table 6-138 SmartImageLayerConfig

Parameter	Type	Description
image_url	String	Image file URL.

Parameter	Type	Description
display_durati on	Integer	Image display duration, in second. ● 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-139 SmartVideoLayerConfig

Parameter	Type	Description
video_url	String	Video file URL.
video_cover_u rl	String	Video thumbnail file URL.
display_durati on	Integer	Video display duration, in second. ● 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-140 SmartTextLayerConfig

Parameter	Type	Description
text_type	String	Text type. ● **DYNAMIC**: dynamic text, which requires keyword replacement ● **STATIC**: static text
text_context	String	Text.
font_name	String	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

Parameter	Type	Description
font_size	Integer	Font size (pixel). The value ranges from 4 to 120.
font_color	String	Font color. RGB color value.
display_duration	Integer	Text display duration, in second. ● 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-141 ReplyAudioInfo

Parameter	Type	Description
audio_url	String	Audio URL.
audio_name	String	Audio name.

Table 6-142 PlayPolicy

Parameter	Type	Description
repeat_count	Integer	Number of times that a script is played repeatedly. The value **–1** indicates that the playback is repeated until it is stopped manually. The value **0** indicates that it is played only once. If the value is n, the actual number of running times is $n + 1$.
auto_play_script	Boolean	Indicates whether to automatically play a script. **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.

Parameter	Type	Description
play_mode	String	Control mode. The default value is **TEXT**. **TEXT**: text control, that is, TTS is used **AUDIO**: speech control **NO_PRESET**: no preset script, that is, manual control is used
random_play_mode	String	Random broadcast mode. • **NONE**: Random broadcast is disabled. • **SCENE**: Random broadcast by scene is enabled. Paragraphs in a scene are broadcast in sequence. • **SCRIPT_ITEM**: Random broadcast by paragraph is enabled. Scenes are broadcast in sequence. • **SCENE_AND_SCRIPT_ITEM**: Scenes and paragraphs are broadcast randomly.
need_independent_capture_client	Boolean	Whether an independent data collection device is required

Table 6-143 VideoConfig

Parameter	Type	Description
clip_mode	String	Clipping mode of the output video. Default value: **RESIZE**. • **RESIZE**: video scaling • **CROP**: video cropping
codec	String	Video encoding format and video file format. • **H264**: H.264 encoding, MP4 file output • **VP8**: VP8 encoding, WebM file output
bitrate	Integer	Average output bitrate. Unit: kbit/s The value ranges from 40 to 30,000. **NOTE** • Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. • Bitrate range for virtual avatar video production: [1000, 8000].

Parameter	Type	Description
width	Integer	Video width. Unit: pixel. **NOTE** ● 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 videos can be used 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 is supported for virtual avatar livestreaming.
height	Integer	Video height. Unit: pixel. **NOTE** ● 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 is supported for virtual avatar livestreaming.
frame_rate	String	Frame rate. Unit: FPS **NOTE** ● The frame rate of virtual avatar videos is fixed at 25 FPS.
is_subtitle_enable	Boolean	Whether the output video is subtitled. The default value is **false**. ● **true**: Displays the subtitle. ● **false**: Hides the subtitle.
subtitle_config	**SubtitleConfig** object	Subtitle configuration.
dx	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** ● The canvas 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.

Parameter	Type	Description
dy	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** ● The canvas 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.
is_enable_super_resolution	Boolean	Whether super resolution is enabled for a video. **NOTE** **true**: enable **false**: do not enable

Table 6-144 SubtitleConfig

Parameter	Type	Description
dx	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** ● The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** ● The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
font_name	String	Font. The following fonts are supported: ● **HarmonyOS_Sans_SC_Black**: HarmonyOS bold ● **HarmonyOS_Sans_SC_Regular**: HarmonyOS normal ● **HarmonyOS_Sans_SC_Thin**: HarmonyOS light
font_size	Integer	Font size. The value ranges from 4 to 120.

Parameter	Type	Description
h	Integer	Subtitle box height **NOTE** • The parameter **h** is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box by the front end. This parameter is not used in the background.
w	Integer	Subtitle box width **NOTE** • 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 by the front end. This parameter is not used in the background.

Table 6-145 LiveEventCallBackConfig

Parameter	Type	Description
live_event_type_callback_url	String	Live event callback URL. HTTPS URL, which must contain an authentication string.
auth_type	String	Authentication type. • **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.
key	String	Key

Parameter	Type	Description

callback_even t_type	Array of strings	Live event types in callbacks.
		
		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:
		
		`{`
		`  "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\"}"`
		`}`
		
		The **RTMP_STREAM_STATE_CHANGE** callback is defined as follows:
		
		`{`
		`  "event_type":  "RTMP_STREAM_STATE_CHANGE",`
		`  "message":"{\"room_id`
		`\":\"26f065244f754b3aa853b649a21aaf66\",\"job_id`
		`\":\"e87104f76d7546ce8a46ac6b04c49c3c\",\"output_url`
		`\":\"rtmp://xxx/xx/xx\",\"stream_key\":\"xxxxx\",\"state`
		`\":\"CONNECTED\"}"`
		`}`
		
		The value of **state** can be **CONNECTING**, **CONNECTED**, **DISCONNECTED**, **RECONNECTING**, or **END**.
		
		The **REPLY_COMMAND_FINISH** callback is defined as follows:
		
		`{`
		`  "event_type":  "REPLY_COMMAND_FINISH",`
		`  "message":"{\"room_id`
		`\":\"26f065244f754b3aa853b649a21aaf66\",\"job_id`
		`\":\"e87104f76d7546ce8a46ac6b04c49c3c\",\"reply_id`
		`\":\"e87104f76d7546ce8a46ac6b04c49c3c"}"`
		`}`

Table 6-146 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 6-147 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 6-148 SharedConfig

Parameter	Type	Description
shared_type	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. The tenants are specified by the owner.
shared_state	String	Sharing status. • **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.
expire_time	String	Time when the sharing expires. If this parameter is left blank, the sharing never expires.
allowed_project_ids	Array of strings	Tenants allowed to access the asset.

Table 6-149 CoStreamerConfig

Parameter	Type	Description
voice_config	**VoiceConfig** object	Voice configuration parameter.
streamer_action	String	Behavior of the streamer when the co-streamer speaks. • **SILENCE**: silent • **VOLUME_DOWN**: decreased volume

Table 6-150 VoiceConfig

Parameter	Type	Description
voice_asset_id	String	Timbre asset ID.

Parameter	Type	Description
speed	Integer	Speech speed. The value defaults to **100** and ranges from 50 to 200. **NOTE** - The value **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.
pitch	Integer	Pitch. The value defaults to **100** and ranges from 50 to 200.
volume	Integer	Volume. The value defaults to **140** and ranges from 90 to 240.

Table 6-151 ErrorResponse

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

Status code: 400

Table 6-152 Response body parameters

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

Status code: 401

Table 6-153 Response body parameters

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

Status code: 500

Table 6-154 Response body parameters

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

Example Requests

```
PUT https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/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 6-155 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 6-156 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 6-157 Response header parameters

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

Status code: 400

Table 6-158 Response body parameters

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

Status code: 401

Table 6-159 Response body parameters

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

Status code: 500

Table 6-160 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-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 6-161 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 6-162 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 6-163 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 6-164 InteractionRuleInfo

Parameter	Mandatory	Type	Description
rule_index	No	String	Rule index.

Parameter	Mandatory	Type	Description
rule_name	No	String	Rule name.
enabled	No	Boolean	Whether to enable.
event_type	No	Integer	Event type. - **1**: on-screen comment - **2**: users joining a live room - **3**: giving likes - **4**: sending gifts - **10**: preset wording
hit_condition	No	**HitCondition** object	Hit condition.
trigger	No	**TriggerProcess** object	Trigger
review_config	No	**ReviewConfig** object	Content review configuration.

Table 6-165 HitCondition

Parameter	Mandatory	Type	Description
relation	No	String	Condition relationship. The value **And** or **Or RESERVED** indicates that the general reply does not check other matching conditions.
priority	No	Integer	Priority. A smaller value indicates a higher priority. The value ranges from 0 to 999. The default value is **500**. This parameter is optional.
tags	No	Array of **HitConditionTag** objects	Matching relationship configuration

Table 6-166 HitConditionTag

Parameter	Mandatory	Type	Description
tag	No	String	Key fields in the event content.

Parameter	Mandatory	Type	Description
operation	No	String	Field processing. • **SUM**: accumulation • **AVG**: average • **COUNT**: count • **NONE**: no processing
match	No	String	Match type. • **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
value	No	String	Match value

Table 6-167 TriggerProcess

Parameter	Mandatory	Type	Description
time_window	No	Integer	Processing suppression duration, in second. **–1** indicates the entire livestreaming. **0** indicates no suppression. It is triggered each time.
reply_mode	No	String	Reply type. • **SYSTEM_REPLY**: automatic reply based on the preset script • **CALLBACK**: callback to other services, with the preset script • **SHOW_LAYER**: overlaid layer display, which does not affect the script • **INTELLIGENT_REPLY**: script of an intelligent reply

Parameter	Mandatory	Type	Description
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.
reply_texts	No	Array of strings	Reply scripts.
reply_audios	No	Array of **ReplyAudioInfo** objects	Reply audio set. Set **audio_url**.
reply_order	No	String	Reply sequence. • **RANDOM**: random • **ORDER**: sequential loop
reply_role	No	String	Reply role. The default value is **STREAMER**. • **STREAMER**: streamer • **CO_STREAMER**: co-streamer
robot_id	No	String	Bot ID.

Table 6-168 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.

Parameter	Mandatory	Type	Description
video_config	No	**SmartVideoLayerConfig** object	Video layer configuration.
text_config	No	**SmartTextLayerConfig** object	Video layer configuration.

Table 6-169 LayerPositionConfig

Parameter	Mandatory	Type	Description
dx	Yes	Integer	X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** ● The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	Yes	Integer	Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
layer_index	Yes	Integer	Layer sequence of an image, video, or person image. **NOTE** ● The layer sequence is an integer starting from 1. The sequence of the bottom layer is 1 and incremented by 1.

Table 6-170 LayerSizeConfig

Parameter	Mandatory	Type	Description
width	No	Integer	Width (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
height	No	Integer	Height (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Table 6-171 SmartImageLayerConfig

Parameter	Mandatory	Type	Description
image_url	Yes	String	Image file URL.
display_durati on	No	Integer	Image display duration, in second. • 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-172 SmartVideoLayerConfig

Parameter	Mandatory	Type	Description
video_url	Yes	String	Video file URL.
video_cover_u rl	No	String	Video thumbnail file URL.

Parameter	Mandatory	Type	Description
display_durati on	No	Integer	Video display duration, in second. • 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-173 SmartTextLayerConfig

Parameter	Mandatory	Type	Description
text_type	No	String	Text type. • **DYNAMIC**: dynamic text, which requires keyword replacement • **STATIC**: static text
text_context	No	String	Text.
font_name	No	String	Font. The following fonts are supported: • **HarmonyOS_Sans_SC_Blac k**: HarmonyOS bold • **HarmonyOS_Sans_SC_Reg ular**: HarmonyOS normal • **HarmonyOS_Sans_SC_Thin** : HarmonyOS light • **fzyouh**: Square & lean
font_size	No	Integer	Font size (pixel). The value ranges from 4 to 120.
font_color	No	String	Font color. RGB color value.

Parameter	Mandatory	Type	Description
display_durati on	No	Integer	Text display duration, in second. • 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-174 ReplyAudioInfo

Parameter	Mandatory	Type	Description
audio_url	No	String	Audio URL.
audio_name	No	String	Audio name.

Table 6-175 ReviewConfig

Parameter	Mandatory	Type	Description
no_need_revie w	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 6-176 Response header parameters

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

Table 6-177 Response body parameters

Parameter	Type	Description
group_id	String	Interaction rule library 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

```
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 6-181 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**.

Table 6-182 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts.
limit	No	Integer	Number of items displayed on each page.
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 6-183 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 6-184 Response header parameters

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

Table 6-185 Response body parameters

Parameter	Type	Description
count	Integer	Number of interaction rules.
interaction_rule_groups	Array of **InteractionRuleGroupDetail** objects	Interaction rule libraries.

Table 6-186 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.

Parameter	Type	Description
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 6-187 InteractionRuleDetailInfo

Parameter	Type	Description
rule_index	String	Rule index.
rule_name	String	Rule name.
enabled	Boolean	Whether to enable.
event_type	Integer	Event type. - **1**: on-screen comment - **2**: users joining a live room - **3**: giving likes - **4**: sending gifts - **10**: preset wording
hit_condition	**HitCondition** object	Hit condition.
trigger	**TriggerProcess** object	Trigger
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 6-188 HitCondition

Parameter	Type	Description
relation	String	Condition relationship. The value **And** or **Or** **RESERVED** indicates that the general reply does not check other matching conditions.
priority	Integer	Priority. A smaller value indicates a higher priority. The value ranges from 0 to 999. The default value is **500**. This parameter is optional.

Parameter	Type	Description
tags	Array of **HitCondition Tag** objects	Matching relationship configuration

Table 6-189 HitConditionTag

Parameter	Type	Description
tag	String	Key fields in the event content.
operation	String	Field processing. ● **SUM**: accumulation ● **AVG**: average ● **COUNT**: count ● **NONE**: no processing
match	String	Match type. ● **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
value	String	Match value

Table 6-190 TriggerProcess

Parameter	Type	Description
time_window	Integer	Processing suppression duration, in second. **–1** indicates the entire livestreaming. **0** indicates no suppression. It is triggered each time.

Parameter	Type	Description
reply_mode	String	Reply type. • **SYSTEM_REPLY**: automatic reply based on the preset script • **CALLBACK**: callback to other services, with the preset script • **SHOW_LAYER**: overlaid layer display, which does not affect the script • **INTELLIGENT_REPLY**: script of an intelligent reply
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.
reply_texts	Array of strings	Reply scripts.
reply_audios	Array of **ReplyAudioInfo** objects	Reply audio set. Set **audio_url**.
reply_order	String	Reply sequence. • **RANDOM**: random • **ORDER**: sequential loop
reply_role	String	Reply role. The default value is **STREAMER**. • **STREAMER**: streamer • **CO_STREAMER**: co-streamer
robot_id	String	Bot ID.

Table 6-191 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.

Parameter	Type	Description
size	**LayerSizeConfig** object	Layer size configuration.
image_config	**SmartImageLayerConfig** object	Image layer configuration.
video_config	**SmartVideoLayerConfig** object	Video layer configuration.
text_config	**SmartTextLayerConfig** object	Video layer configuration.

Table 6-192 LayerPositionConfig

Parameter	Type	Description
dx	Integer	X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** ● The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	Integer	Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
layer_index	Integer	Layer sequence of an image, video, or person image. **NOTE** ● The layer sequence is an integer starting from 1. The sequence of the bottom layer is 1 and incremented by 1.

Table 6-193 LayerSizeConfig

Parameter	Type	Description
width	Integer	Width (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
height	Integer	Height (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Table 6-194 SmartImageLayerConfig

Parameter	Type	Description
image_url	String	Image file URL.
display_durati on	Integer	Image display duration, in second. ● 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-195 SmartVideoLayerConfig

Parameter	Type	Description
video_url	String	Video file URL.
video_cover_u rl	String	Video thumbnail file URL.
display_durati on	Integer	Video display duration, in second. ● 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-196 SmartTextLayerConfig

Parameter	Type	Description
text_type	String	Text type. ● **DYNAMIC**: dynamic text, which requires keyword replacement ● **STATIC**: static text
text_context	String	Text.
font_name	String	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
font_size	Integer	Font size (pixel). The value ranges from 4 to 120.
font_color	String	Font color. RGB color value.
display_duration	Integer	Text display duration, in second. ● 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. 　If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-197 ReplyAudioInfo

Parameter	Type	Description
audio_url	String	Audio URL.
audio_name	String	Audio name.

Table 6-198 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 6-199 Response body parameters

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

Status code: 401

Table 6-200 Response body parameters

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

Status code: 500

Table 6-201 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 6-202 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
group_id	Yes	String	Interaction policy library ID.

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

Table 6-204 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 6-205 InteractionRuleInfo

Parameter	Mandatory	Type	Description
rule_index	No	String	Rule index.
rule_name	No	String	Rule name.
enabled	No	Boolean	Whether to enable.
event_type	No	Integer	Event type. - **1**: on-screen comment - **2**: users joining a live room - **3**: giving likes - **4**: sending gifts - **10**: preset wording
hit_condition	No	**HitCondition** object	Hit condition.
trigger	No	**TriggerProcess** object	Trigger
review_config	No	**ReviewConfig** object	Content review configuration.

Table 6-206 HitCondition

Parameter	Mandatory	Type	Description
relation	No	String	Condition relationship. The value **And** or **Or RESERVED** indicates that the general reply does not check other matching conditions.
priority	No	Integer	Priority. A smaller value indicates a higher priority. The value ranges from 0 to 999. The default value is **500**. This parameter is optional.
tags	No	Array of **HitConditionTag** objects	Matching relationship configuration

Table 6-207 HitConditionTag

Parameter	Mandatory	Type	Description
tag	No	String	Key fields in the event content.

Parameter	Mandatory	Type	Description
operation	No	String	Field processing. • **SUM**: accumulation • **AVG**: average • **COUNT**: count • **NONE**: no processing
match	No	String	Match type. • **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
value	No	String	Match value

Table 6-208 TriggerProcess

Parameter	Mandatory	Type	Description
time_window	No	Integer	Processing suppression duration, in second. **–1** indicates the entire livestreaming. **0** indicates no suppression. It is triggered each time.
reply_mode	No	String	Reply type. • **SYSTEM_REPLY**: automatic reply based on the preset script • **CALLBACK**: callback to other services, with the preset script • **SHOW_LAYER**: overlaid layer display, which does not affect the script • **INTELLIGENT_REPLY**: script of an intelligent reply

Parameter	Mandatory	Type	Description
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.
reply_texts	No	Array of strings	Reply scripts.
reply_audios	No	Array of **ReplyAudioInfo** objects	Reply audio set. Set **audio_url**.
reply_order	No	String	Reply sequence. • **RANDOM**: random • **ORDER**: sequential loop
reply_role	No	String	Reply role. The default value is **STREAMER**. • **STREAMER**: streamer • **CO_STREAMER**: co-streamer
robot_id	No	String	Bot ID.

Table 6-209 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.

Parameter	Mandatory	Type	Description
video_config	No	**SmartVideoLayerConfig** object	Video layer configuration.
text_config	No	**SmartTextLayerConfig** object	Video layer configuration.

Table 6-210 LayerPositionConfig

Parameter	Mandatory	Type	Description
dx	Yes	Integer	X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** ● The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	Yes	Integer	Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
layer_index	Yes	Integer	Layer sequence of an image, video, or person image. **NOTE** ● The layer sequence is an integer starting from 1. The sequence of the bottom layer is 1 and incremented by 1.

Table 6-211 LayerSizeConfig

Parameter	Mandatory	Type	Description
width	No	Integer	Width (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
height	No	Integer	Height (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Table 6-212 SmartImageLayerConfig

Parameter	Mandatory	Type	Description
image_url	Yes	String	Image file URL.
display_duration	No	Integer	Image display duration, in second. ● 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-213 SmartVideoLayerConfig

Parameter	Mandatory	Type	Description
video_url	Yes	String	Video file URL.
video_cover_url	No	String	Video thumbnail file URL.

Parameter	Mandatory	Type	Description
display_durati on	No	Integer	Video display duration, in second. • 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-214 SmartTextLayerConfig

Parameter	Mandatory	Type	Description
text_type	No	String	Text type. • **DYNAMIC**: dynamic text, which requires keyword replacement • **STATIC**: static text
text_context	No	String	Text.
font_name	No	String	Font. The following fonts are supported: • **HarmonyOS_Sans_SC_Blac k**: HarmonyOS bold • **HarmonyOS_Sans_SC_Reg ular**: HarmonyOS normal • **HarmonyOS_Sans_SC_Thin**: HarmonyOS light • **fzyouh**: Square & lean
font_size	No	Integer	Font size (pixel). The value ranges from 4 to 120.
font_color	No	String	Font color. RGB color value.

Parameter	Mandatory	Type	Description
display_durati on	No	Integer	Text display duration, in second. • 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-215 ReplyAudioInfo

Parameter	Mandatory	Type	Description
audio_url	No	String	Audio URL.
audio_name	No	String	Audio name.

Table 6-216 ReviewConfig

Parameter	Mandatory	Type	Description
no_need_revie w	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 6-217 Response header parameters

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

Table 6-218 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 6-219 InteractionRuleDetailInfo

Parameter	Type	Description
rule_index	String	Rule index.
rule_name	String	Rule name.
enabled	Boolean	Whether to enable.
event_type	Integer	Event type. - **1**: on-screen comment - **2**: users joining a live room - **3**: giving likes - **4**: sending gifts - **10**: preset wording
hit_condition	**HitCondition** object	Hit condition.
trigger	**TriggerProcess** object	Trigger
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 6-220 HitCondition

Parameter	Type	Description
relation	String	Condition relationship. The value **And** or **Or** **RESERVED** indicates that the general reply does not check other matching conditions.
priority	Integer	Priority. A smaller value indicates a higher priority. The value ranges from 0 to 999. The default value is **500**. This parameter is optional.
tags	Array of **HitCondition Tag** objects	Matching relationship configuration

Table 6-221 HitConditionTag

Parameter	Type	Description
tag	String	Key fields in the event content.
operation	String	Field processing. ● **SUM**: accumulation ● **AVG**: average ● **COUNT**: count ● **NONE**: no processing
match	String	Match type. ● **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
value	String	Match value

Table 6-222 TriggerProcess

Parameter	Type	Description
time_window	Integer	Processing suppression duration, in second. **–1** indicates the entire livestreaming. **0** indicates no suppression. It is triggered each time.
reply_mode	String	Reply type. • **SYSTEM_REPLY**: automatic reply based on the preset script • **CALLBACK**: callback to other services, with the preset script • **SHOW_LAYER**: overlaid layer display, which does not affect the script • **INTELLIGENT_REPLY**: script of an intelligent reply
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.
reply_texts	Array of strings	Reply scripts.
reply_audios	Array of **ReplyAudioInfo** objects	Reply audio set. Set **audio_url**.
reply_order	String	Reply sequence. • **RANDOM**: random • **ORDER**: sequential loop
reply_role	String	Reply role. The default value is **STREAMER**. • **STREAMER**: streamer • **CO_STREAMER**: co-streamer
robot_id	String	Bot ID.

Table 6-223 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.
image_config	**SmartImageLayerConfig** object	Image layer configuration.
video_config	**SmartVideoLayerConfig** object	Video layer configuration.
text_config	**SmartTextLayerConfig** object	Video layer configuration.

Table 6-224 LayerPositionConfig

Parameter	Type	Description
dx	Integer	X axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** ● The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	Integer	Y axis position of the pixel in the upper left corner of the image. The coordinate of the upper left corner of the canvas is 0x0. **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Parameter	Type	Description
layer_index	Integer	Layer sequence of an image, video, or person image. **NOTE** ● The layer sequence is an integer starting from 1. The sequence of the bottom layer is 1 and incremented by 1.

Table 6-225 LayerSizeConfig

Parameter	Type	Description
width	Integer	Width (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
height	Integer	Height (in pixel) of the layer image (relative to the canvas size). **NOTE** The canvas resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Table 6-226 SmartImageLayerConfig

Parameter	Type	Description
image_url	String	Image file URL.
display_durati on	Integer	Image display duration, in second. ● 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-227 SmartVideoLayerConfig

Parameter	Type	Description
video_url	String	Video file URL.

Parameter	Type	Description
video_cover_u rl	String	Video thumbnail file URL.
display_durati on	Integer	Video display duration, in second. • 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-228 SmartTextLayerConfig

Parameter	Type	Description
text_type	String	Text type. • **DYNAMIC**: dynamic text, which requires keyword replacement • **STATIC**: static text
text_context	String	Text.
font_name	String	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
font_size	Integer	Font size (pixel). The value ranges from 4 to 120.
font_color	String	Font color. RGB color value.
display_durati on	Integer	Text display duration, in second. • 0 Display duration rule: If **reply_texts** and **reply_audios** are carried, the duration is the same as the voice playback duration. If **reply_texts** and **reply_audios** are not carried, the duration is the same as the voice playback duration of the matched keyword.

Table 6-229 ReplyAudioInfo

Parameter	Type	Description
audio_url	String	Audio URL.
audio_name	String	Audio name.

Table 6-230 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 6-231 Response body parameters

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

Status code: 401

Table 6-232 Response body parameters

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

Status code: 500

Table 6-233 Response body parameters

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

Example Requests

```
PUT https://{endpoint}/v1/70b76xxxxxx34253880af501cdxxxxxx/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 6-234 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 6-235 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 6-236 Response header parameters

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

Status code: 400

Table 6-237 Response body parameters

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

Status code: 401

Table 6-238 Response body parameters

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

Status code: 500

Table 6-239 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 6-240 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 6-241 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.

Table 6-242 Request body parameters

Parameter	Mandatory	Type	Description
video_config	No	**VideoConfig** object	Video output configuration.
play_policy	No	**PlayPolicy** object	Script playback policy.
output_urls	No	Array of strings	Address of the third-party livestreaming platform for RTMP video stream push.
stream_keys	No	Array of strings	Stream key of the third-party livestreaming platform for RTMP video stream push, which corresponds to the ingest URL.
interaction_callback_url	No	String	Interactive callback URL, including authentication information.
live_event_callback_config	No	**LiveEventCallBackConfig** object	Live event 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	Landscape or portrait mode. Default value: **VERTICAL** • **LANDSCAPE**: landscape • **VERTICAL**: portrait
co_streamer_config	No	**CoStreamerConfig** object	Co-streamer configuration

Table 6-243 VideoConfig

Parameter	Mandatory	Type	Description
clip_mode	No	String	Clipping mode of the output video. Default value: **RESIZE**. ● **RESIZE**: video scaling ● **CROP**: video cropping
codec	Yes	String	Video encoding format and video file format. ● **H264**: H.264 encoding, MP4 file output ● **VP8**: VP8 encoding, WebM file output
bitrate	Yes	Integer	Average output bitrate. Unit: kbit/s The value ranges from 40 to 30,000. **NOTE** ● Quality is prioritized for virtual avatar video production, which may exceed the preset bitrate. ● Bitrate range for virtual avatar video production: [1000, 8000].
width	Yes	Integer	Video width. Unit: pixel. **NOTE** ● 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 videos can be used 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 is supported for virtual avatar livestreaming.

Parameter	Mandatory	Type	Description
height	Yes	Integer	Video height. Unit: pixel. **NOTE** ● 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 is supported for virtual avatar livestreaming.
frame_rate	No	String	Frame rate. Unit: FPS **NOTE** ● The frame rate of virtual avatar videos is fixed at 25 FPS.
is_subtitle_enable	No	Boolean	Whether the output video is subtitled. The default value is **false**. ● **true**: Displays the subtitle. ● **false**: Hides the subtitle.
subtitle_config	No	**SubtitleConfig** object	Subtitle configuration.
dx	No	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** ● The canvas 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.

Parameter	Mandatory	Type	Description
dy	No	Integer	Coordinates of the pixel in the upper left corner of the cropped video. This parameter takes effect when **clip_mode** is set to **crop**. **NOTE** ● The canvas 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.
is_enable_super_resolution	No	Boolean	Whether super resolution is enabled for a video. **NOTE** **true**: enable **false**: do not enable

Table 6-244 SubtitleConfig

Parameter	Mandatory	Type	Description
dx	No	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** ● The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).
dy	No	Integer	Coordinates of the pixel in the lower left corner of the subtitle. **NOTE** ● The video resolution is 1920 x 1080 in landscape mode (16:9) and 1080 x 1920 in portrait mode (9:16).

Parameter	Mandatory	Type	Description
font_name	No	String	Font. The following fonts are supported: ● **HarmonyOS_Sans_SC_Black**: HarmonyOS bold ● **HarmonyOS_Sans_SC_Regular**: HarmonyOS normal ● **HarmonyOS_Sans_SC_Thin**: HarmonyOS light
font_size	No	Integer	Font size. The value ranges from 4 to 120.
h	No	Integer	Subtitle box height **NOTE** ● The parameter **h** is used to facilitate the calculation of the coordinates in the upper left corner of the subtitle box by the front end. This parameter is not used in the background.
w	No	Integer	Subtitle box width **NOTE** ● 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 by the front end. This parameter is not used in the background.

Table 6-245 PlayPolicy

Parameter	Mandatory	Type	Description
repeat_count	No	Integer	Number of times that a script is played repeatedly. The value **–1** indicates that the playback is repeated until it is stopped manually. The value **0** indicates that it is played only once. If the value is n, the actual number of running times is n + 1.
auto_play_script	No	Boolean	Indicates whether to automatically play a script. **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.
play_mode	No	String	Control mode. The default value is **TEXT**. **TEXT**: text control, that is, TTS is used **AUDIO**: speech control **NO_PRESET**: no preset script, that is, manual control is used
random_play_mode	No	String	Random broadcast mode. ● **NONE**: Random broadcast is disabled. ● **SCENE**: Random broadcast by scene is enabled. Paragraphs in a scene are broadcast in sequence. ● **SCRIPT_ITEM**: Random broadcast by paragraph is enabled. Scenes are broadcast in sequence. ● **SCENE_AND_SCRIPT_ITEM**: Scenes and paragraphs are broadcast randomly.
need_independent_capture_client	No	Boolean	Whether an independent data collection device is required

Table 6-246 LiveEventCallBackConfig

Parameter	Mandatory	Type	Description
live_event_typ e_callback_url	No	String	Live event callback URL. HTTPS URL, which must contain an authentication string.
auth_type	No	String	Authentication type. • **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(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.
key	No	String	Key

Parameter	Mandatory	Type	Description

callback_even t_type	No	Array of strings	Live event types in callbacks. Currently, only the following options are supported:
			
			• **SHOOT_SCRIPT_SWITCH**: script paragraph switching event
			
			• **RTMP_STREAM_STATE_CH ANGE**: 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:
			
			`{`
			`  "event_type": "SHOOT_SCRIPT_SWITCH",`
			`  "message":"{\"room_id \":\"26f065244f754b3aa853b649a21aaf 66\",\"job_id \":\"e87104f76d7546ce8a46ac6b04c49c 3c\",\"scene_script_name\":\"Product 1\",\"shoot_script_sequence_no \":\"2\",\"shoot_script_title \":\"Paragraph 2\"}"`
			`}`
			
			The **RTMP_STREAM_STATE_CHAN GE** callback is defined as follows:
			
			`{`
			`  "event_type": "RTMP_STREAM_STATE_CHANGE",`
			`  "message":"{\"room_id \":\"26f065244f754b3aa853b649a21aaf 66\",\"job_id \":\"e87104f76d7546ce8a46ac6b04c49c 3c\",\"output_url\":\"rtmp://xxx/xx/xx \",\"stream_key\":\"xxxxx\",\"state \":\"CONNECTED\"}"`
			`}`
			
			The value of **state** can be **CONNECTING**, **CONNECTED**, **DISCONNECTED**, **RECONNECTING**, or **END**.

Parameter	Mandatory	Type	Description

			The **REPLY_COMMAND_FINISH** callback is defined as follows:
			{
			  "event_type": "REPLY_COMMAND_FINISH",
			  "message":"{\"room_id\":\"26f065244f754b3aa853b649a21aaf66\",\"job_id\":\"e87104f76d7546ce8a46ac6b04c49c3c\",\"reply_id\":\"e87104f76d7546ce8a46ac6b04c49c3c"}"
			}

Table 6-247 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 6-248 CoStreamerConfig

Parameter	Mandatory	Type	Description
voice_config	No	**VoiceConfig** object	Voice configuration parameter.

Parameter	Mandatory	Type	Description
streamer_acti on	No	String	Behavior of the streamer when the co-streamer speaks. • **SILENCE**: silent • **VOLUME_DOWN**: decreased volume

Table 6-249 VoiceConfig

Parameter	Mandatory	Type	Description
voice_asset_id	Yes	String	Timbre asset ID.
speed	No	Integer	Speech speed. The value defaults to **100** and ranges from 50 to 200. **NOTE** • The value **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.
pitch	No	Integer	Pitch. The value defaults to **100** and ranges from 50 to 200.
volume	No	Integer	Volume. The value defaults to **140** and ranges from 90 to 240.

Response Parameters

Status code: 202

Table 6-250 Response header parameters

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

Table 6-251 Response body parameters

Parameter	Type	Description
job_id	String	Livestreaming task ID.
rtc_room_info	**RTCRoomInfo List** 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	**LiveEventCall BackConfig** object	Live event callback notification configuration.
live_warning_info	Array of **LiveWarningI tem** objects	List of livestreaming risk alarms.

Table 6-252 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 6-253 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.

Table 6-254 LiveEventCallBackConfig

Parameter	Type	Description
live_event_type_callback_url	String	Live event callback URL. HTTPS URL, which must contain an authentication string.

Parameter	Type	Description
auth_type	String	Authentication type. ● **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.
key	String	Key

Parameter	Type	Description

callback_event_type	Array of strings	Live event types in callbacks.
		
		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:
		
		``
		{
		  "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\"}"
		}
		``
		
		The **RTMP_STREAM_STATE_CHANGE** callback is defined as follows:
		
		``
		{
		  "event_type": "RTMP_STREAM_STATE_CHANGE",
		  "message":"{\"room_id
		\":\"26f065244f754b3aa853b649a21aaf66\",\"job_id
		\":\"e87104f76d7546ce8a46ac6b04c49c3c\",\"output_url
		\":\"rtmp://xxx/xx/xx\",\"stream_key\":\"xxxxx\",\"state
		\":\"CONNECTED\"}"
		}
		``
		
		The value of **state** can be **CONNECTING**, **CONNECTED**, **DISCONNECTED**, **RECONNECTING**, or **END**.
		
		The **REPLY_COMMAND_FINISH** callback is defined as follows:
		
		``
		{
		  "event_type": "REPLY_COMMAND_FINISH",
		  "message":"{\"room_id
		\":\"26f065244f754b3aa853b649a21aaf66\",\"job_id
		\":\"e87104f76d7546ce8a46ac6b04c49c3c\",\"reply_id
		\":\"e87104f76d7546ce8a46ac6b04c49c3c"}"
		}
		``

Table 6-255 LiveWarningItem

Parameter	Type	Description
warning_type	String	Alarm type. • **TOO_LESSS_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 6-256 Response body parameters

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

Status code: 401

Table 6-257 Response body parameters

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

Status code: 500

Table 6-258 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 6-259 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 6-260 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts.
limit	No	Integer	Number of items displayed on each page.
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. Currently, only **create_time** is supported.
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.

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.

Response Parameters

Status code: 200

Table 6-262 Response header parameters

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

Table 6-263 Response body parameters

Parameter	Type	Description
count	Integer	Total number of virtual human livestreaming tasks.
smart_live_jobs	Array of **SmartLiveJob** objects	Virtual human livestreaming task list.

Table 6-264 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	Virtual human livestreaming duration, in seconds.
start_time	String	Start time of a virtual human livestreaming task. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
end_time	String	End time of a virtual human 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 human livestreaming task is created. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.

Parameter	Type	Description
lastupdate_time	String	Last update time of a virtual human 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 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	Virtual human livestream push duration, in seconds.
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

Table 6-265 ErrorResponse

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

Table 6-266 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 6-267 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.

Table 6-268 LiveEventCallBackConfig

Parameter	Type	Description
live_event_type_callback_url	String	Live event callback URL. HTTPS URL, which must contain an authentication string.

Parameter	Type	Description
auth_type	String	Authentication type. • **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.
key	String	Key

Parameter	Type	Description

callback_event_type	Array of strings	Live event types in callbacks.
		
		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:
		
		`{`
		`  "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\"}"`
		`}`
		
		The **RTMP_STREAM_STATE_CHANGE** callback is defined as follows:
		
		`{`
		`  "event_type":  "RTMP_STREAM_STATE_CHANGE",`
		`  "message":"{\"room_id`
		`\":\"26f065244f754b3aa853b649a21aaf66\",\"job_id`
		`\":\"e87104f76d7546ce8a46ac6b04c49c3c\",\"output_url`
		`\":\"rtmp://xxx/xx/xx\",\"stream_key\":\"xxxxx\",\"state`
		`\":\"CONNECTED\"}"`
		`}`
		
		The value of **state** can be **CONNECTING**, **CONNECTED**, **DISCONNECTED**, **RECONNECTING**, or **END**.
		
		The **REPLY_COMMAND_FINISH** callback is defined as follows:
		
		`{`
		`  "event_type":  "REPLY_COMMAND_FINISH",`
		`  "message":"{\"room_id`
		`\":\"26f065244f754b3aa853b649a21aaf66\",\"job_id`
		`\":\"e87104f76d7546ce8a46ac6b04c49c3c\",\"reply_id`
		`\":\"e87104f76d7546ce8a46ac6b04c49c3c"}"`
		`}`

Table 6-269 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:
		
		`{`
		`  "message_type": "live_progress_notify",`
		`  "data": {`
		`    "script_name": "Scene 1",`
		`    "shoot_script_sequence_no": 2,`
		`    "shoot_script_title": "Greeting",`
		`    "offset": "247",`
		`    "reply_id": "e87104f76d7546ce8a46ac6b04c49c3c"`
		`  }`
		`}`
		
		The **REPLY_COMMAND_FINISH** callback is defined as follows:
		
		`{`
		`  "message_type": "reply_command_finish_notify",`
		`  "data":"{`
		`    "reply_id":"e87104f76d7546ce8a46ac6b04c49c3c"`
		`  }"`
		`}`

Table 6-270 CoStreamerConfig

Parameter	Type	Description
voice_config	**VoiceConfig** object	Voice configuration parameter.
streamer_action	String	Behavior of the streamer when the co-streamer speaks. ● **SILENCE**: silent ● **VOLUME_DOWN**: decreased volume

Table 6-271 VoiceConfig

Parameter	Type	Description
voice_asset_id	String	Timbre asset ID.
speed	Integer	Speech speed. The value defaults to **100** and ranges from 50 to 200. **NOTE** ● The value **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.
pitch	Integer	Pitch. The value defaults to **100** and ranges from 50 to 200.
volume	Integer	Volume. The value defaults to **140** and ranges from 90 to 240.

Table 6-272 LiveJobLog

Parameter	Type	Description
interaction_records_url	String	Live interaction record file address

Status code: 400

Table 6-273 Response body parameters

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

Status code: 401

Table 6-274 Response body parameters

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

Status code: 500

Table 6-275 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 6-276 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 6-277 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 6-278 Response header parameters

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

Table 6-279 Response body parameters

Parameter	Type	Description
job_id	String	Virtual human livestreaming task ID.
room_id	String	Live room ID.

Parameter	Type	Description
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	Virtual human livestreaming duration, in seconds.
start_time	String	Start time of a virtual human livestreaming task. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
end_time	String	End time of a virtual human livestreaming task. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
error_info	**ErrorRespons e** object	Virtual human livestreaming task error information.
create_time	String	Time when a virtual human livestreaming task is created. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
lastupdate_ti me	String	Last update time of a virtual human livestreaming task. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
rtc_room_info	**RTCRoomInfo List** object	RTC room information.
live_event_rep ort_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_call back_config	**LiveEventCall BackConfig** object	Live event 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.
stream_durati on	Float	Virtual human livestream push duration, in seconds.
block_reason	String	Information about live room blocking.
cover_url	String	Live room thumbnail URL

Parameter	Type	Description
co_streamer_config	**CoStreamerConfig** object	Co-streamer configuration
live_job_log	**LiveJobLog** object	Livestreaming task records

Table 6-280 ErrorResponse

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

Table 6-281 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 6-282 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.

Table 6-283 LiveEventCallBackConfig

Parameter	Type	Description
live_event_type_callback_url	String	Live event callback URL. HTTPS URL, which must contain an authentication string.

Parameter	Type	Description
auth_type	String	Authentication type. • **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.
key	String	Key

Parameter	Type	Description

callback_event_type	Array of strings	Live event types in callbacks.
		
		 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:
		
		 ``
		{
		  "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\"}"
		}
		``
		
		 The **RTMP_STREAM_STATE_CHANGE** callback is defined as follows:
		
		 ``
		{
		  "event_type": "RTMP_STREAM_STATE_CHANGE",
		  "message":"{\"room_id
		\":\"26f065244f754b3aa853b649a21aaf66\",\"job_id
		\":\"e87104f76d7546ce8a46ac6b04c49c3c\",\"output_url
		\":\"rtmp://xxx/xx/xx\",\"stream_key\":\"xxxxx\",\"state
		\":\"CONNECTED\"}"
		}
		``
		
		 The value of **state** can be **CONNECTING**, **CONNECTED**, **DISCONNECTED**, **RECONNECTING**, or **END**.
		
		 The **REPLY_COMMAND_FINISH** callback is defined as follows:
		
		 ``
		{
		  "event_type": "REPLY_COMMAND_FINISH",
		  "message":"{\"room_id
		\":\"26f065244f754b3aa853b649a21aaf66\",\"job_id
		\":\"e87104f76d7546ce8a46ac6b04c49c3c\",\"reply_id
		\":\"e87104f76d7546ce8a46ac6b04c49c3c"}"
		}
		``

Table 6-284 RTCLiveEventCallBackConfig

Parameter	Type	Description

rtc_callback_e vent_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 6-285 CoStreamerConfig

Parameter	Type	Description
voice_config	**VoiceConfig** object	Voice configuration parameter.
streamer_acti on	String	Behavior of the streamer when the co-streamer speaks. ● **SILENCE**: silent ● **VOLUME_DOWN**: decreased volume

Table 6-286 VoiceConfig

Parameter	Type	Description
voice_asset_id	String	Timbre asset ID.
speed	Integer	Speech speed. The value defaults to **100** and ranges from 50 to 200. **NOTE** ● The value **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.
pitch	Integer	Pitch. The value defaults to **100** and ranges from 50 to 200.
volume	Integer	Volume. The value defaults to **140** and ranges from 90 to 240.

Table 6-287 LiveJobLog

Parameter	Type	Description
interaction_records_url	String	Live interaction record file address

Status code: 400

Table 6-288 Response body parameters

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

Status code: 401

Table 6-289 Response body parameters

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

Status code: 500

Table 6-290 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 6-291 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 6-292 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 6-293 Response header parameters

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

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

```
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 6-297 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.

Table 6-299 Request body parameters

Parameter	Mandatory	Type	Description
command	Yes	String	Command name. • **INSERT_PLAY_SCRIPT**: inserts a performance script. It is used for interactive reply. The virtual human and background remain unchanged. Definition of the params structure: PlayTextInfo. • **REWRITE_PLAY_SCRIPT**: dynamically edits a script that has not been played. Definition of the params structure: scene_scripts. • **INSERT_PLAY_AUDIO**: inserts an audio for control. It is used to directly control a virtual human. The virtual human and background remain unchanged. Definition of the params structure: PlayAudioInfo. • **REWRITE_INTERACTION_RULES**: dynamically modifies an interaction rule. Definition of the params structure: interaction_rules. • **GET_CURRENT_PLAYING_SCRIPTS**: queries the script list of the current round. The response is in the LivePlayingScriptList structure. • **SHOW_LAYER**: displays materials for live broadcast. Definition of the params structure: LiveGuideRuleInfo. • **REFRESH_OUTPUT_URL**: updates the RTMP stream push information of the current task. Definition of the params structure: RefreshOutputUrlConfig. • **GET_LIVE_JOB_CONFIG_INFO**: obtains room

Parameter	Mandatory	Type	Description
			information in a task. Definition of the params structure: SmartLiveRoomInfo.
params	No	Object	Command parameter.
review_config	No	**ReviewConfig** object	Content review configuration.

Table 6-300 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 6-301 Response header parameters

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

Table 6-302 Response body parameters

Parameter	Type	Description
command_id	String	Control command ID

Parameter	Type	Description
command	String	Command name. • **INSERT_PLAY_SCRIPT**: inserts a performance script. It is used for interactive reply. The virtual human and background remain unchanged. Definition of the params structure: ShootScript. • **REWRITE_PLAY_SCRIPT**: dynamically edits a script that has not been played. Definition of the params structure: scene_scripts. • **INSERT_PLAY_AUDIO**: inserts an audio for control. It is used to directly control a virtual human. The virtual human and background remain unchanged. Definition of the params structure: 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. Definition of the params structure: RefreshOutputUrlConfig. • **REWRITE_INTERACTION_RULES**: dynamically modifies an interaction rule. Definition of the params structure: interaction_rules. • **GET_LIVE_JOB_CONFIG_INFO**: obtains room information in a task. Definition of the params structure: SmartLiveRoomInfo.
result	String	Command execution result.

Status code: 400

Table 6-303 Response body parameters

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

Status code: 401

Table 6-304 Response body parameters

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

Status code: 500

Table 6-305 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 6-306 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 6-307 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts.
limit	No	Integer	Number of items displayed on each page.
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. Currently, only **create_time** is supported.
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.
room_name	No	String	Fuzzy search by livestreaming room name.

Request Parameters

Table 6-308 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 6-309 Response header parameters

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

Table 6-310 Response body parameters

Parameter	Type	Description
count	Integer	Total number of virtual human livestreaming tasks.
smart_live_jobs	Array of **SmartLiveJob** objects	Virtual human livestreaming task list.

Table 6-311 SmartLiveJob

Parameter	Type	Description
job_id	String	Virtual human livestreaming task ID.
room_id	String	Live room ID.

Parameter	Type	Description
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	Virtual human livestreaming duration, in seconds.
start_time	String	Start time of a virtual human livestreaming task. The format complies with RFC 3339, for example, 2021-01-10T08:43:17Z.
end_time	String	End time of a virtual human 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 human 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 human 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 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	Virtual human livestream push duration, in seconds.
block_reason	String	Information about live room blocking.
cover_url	String	Live room thumbnail URL

Parameter	Type	Description
co_streamer_config	**CoStreamerConfig** object	Co-streamer configuration
live_job_log	**LiveJobLog** object	Livestreaming task records

Table 6-312 ErrorResponse

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

Table 6-313 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 6-314 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.

Table 6-315 LiveEventCallBackConfig

Parameter	Type	Description
live_event_type_callback_url	String	Live event callback URL. HTTPS URL, which must contain an authentication string.

Parameter	Type	Description
auth_type	String	Authentication type. • **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.
key	String	Key

Parameter	Type	Description

callback_event_type	Array of strings	Live event types in callbacks.
		
		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://xxx/xx/xx\",\"stream_key\":\"xxxxx\",\"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 6-316 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 6-317 CoStreamerConfig

Parameter	Type	Description
voice_config	**VoiceConfig** object	Voice configuration parameter.
streamer_action	String	Behavior of the streamer when the co-streamer speaks. ● **SILENCE**: silent ● **VOLUME_DOWN**: decreased volume

Table 6-318 VoiceConfig

Parameter	Type	Description
voice_asset_id	String	Timbre asset ID.
speed	Integer	Speech speed. The value defaults to **100** and ranges from 50 to 200. **NOTE** ● The value **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.
pitch	Integer	Pitch. The value defaults to **100** and ranges from 50 to 200.
volume	Integer	Volume. The value defaults to **140** and ranges from 90 to 240.

Table 6-319 LiveJobLog

Parameter	Type	Description
interaction_records_url	String	Live interaction record file address

Status code: 400

Table 6-320 Response body parameters

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

Status code: 401

Table 6-321 Response body parameters

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

Status code: 500

Table 6-322 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 6-323 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 6-324 Query Parameters

Parameter	Mandatory	Type	Description
auth_key	No	String	Authentication key. Authentication key generated using HMACSHA256.

Parameter	Mandatory	Type	Description
expires_time	No	Long	Expiration time of the authentication key. Number of milliseconds elapsed since January 1, 1970 (midnight in UTC/GMT).
refresh_url	No	Boolean	Whether to refresh the URL.

Request Parameters

Table 6-325 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 6-326 Request body parameters

Parameter	Mandatory	Type	Description
total	Yes	Integer	Number of events.

Parameter	Mandatory	Type	Description
events	No	Array of **LiveEvent** objects	Event content.
review_config	No	**ReviewConfig** object	Content review configuration.

Table 6-327 LiveEvent

Parameter	Mandatory	Type	Description
timestamp	Yes	Long	Event timestamp. Number of milliseconds since 1970-01-01 00:00:00.
type	No	Integer	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

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.
			
			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
			
			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

			Example:
			
			``json
			{
			  "timestamp": 1694481227655,
			  "type": 2,
			  "content": "{\"user\":{\"userId\":\"2978899271\",\"name\":\"***\",\"level\":1,\"badge\":\"\",\"badgeLevel\":0}}"
			}
			``
			
			● **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.
			
			Example:
			
			``json
			{
			  "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}}"
			}
			``
			
			● **type=5 Subscription**
			
			Not in use.
			
			● **type=6 Number of viewers in a room**
			
			Definition of content:
			
			● numberOfViewers: number of viewers in a room. The value is an integer.
			
			Example:
			
			``json
			{
			  "timestamp": 1694481236886,
			  "type": 6,
			  "content": "{\"numberOfViewers\":5466}"
			}
			``

Table 6-328 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 6-329 Response header parameters

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

Table 6-330 Response body parameters

Parameter	Type	Description
live_event_report_url	String	URL for uploading the updated livestreaming event.

Status code: 400

Table 6-331 Response body parameters

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

Status code: 401

Table 6-332 Response body parameters

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

Status code: 500

Table 6-333 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 6-334 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 6-335 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 6-336 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	Automatically activates a product.

Table 6-337 ProductCoverInfo

Parameter	Mandatory	Type	Description
asset_id	No	String	Asset ID

Table 6-338 ProductTextInfo

Parameter	Mandatory	Type	Description
title	No	String	Text title
text	No	String	Text

Table 6-339 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	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.

Response Parameters

Status code: 200

Table 6-340 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID

Table 6-341 Response body parameters

Parameter	Type	Description
product_id	String	Product ID

Status code: 400

Table 6-342 Response body parameters

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

Status code: 500

Table 6-343 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 6-344 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 6-345 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts.
limit	No	Integer	Number of items displayed on each page.
sort_key	No	String	Sorting field. Currently, only **create_time** is supported.
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 6-346 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 6-347 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID

Table 6-348 Response body parameters

Parameter	Type	Description
count	Integer	Total number of product information records

Parameter	Type	Description
products	Array of **ProductDetailInfo** objects	Product information list

Table 6-349 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.
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 6-350 ProductCoverDetailInfo

Parameter	Type	Description
asset_id	String	Asset ID
cover_url	String	Thumbnail image path.
thumbnail_url	String	Thumbnail path.

Table 6-351 ProductTextInfo

Parameter	Type	Description
title	String	Text title
text	String	Text

Table 6-352 ProductMediaDetailInfo

Parameter	Type	Description
asset_id	String	Asset ID
asset_type	String	Asset type. Options: • **IMAGE**: image • **VIDEO**: video • **AUDIO**: audio
order	Integer	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.
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 6-353 Response body parameters

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

Status code: 500

Table 6-354 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 6-355 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 6-356 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 6-357 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
state	No	String	Product status. Options: • **ACTIVED**: activated • **UNACTIVED**: unactivated

Table 6-358 ProductCoverInfo

Parameter	Mandatory	Type	Description
asset_id	No	String	Asset ID

Table 6-359 ProductTextInfo

Parameter	Mandatory	Type	Description
title	No	String	Text title
text	No	String	Text

Table 6-360 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	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.

Response Parameters

Status code: 200

Table 6-361 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID

Status code: 400

Table 6-362 Response body parameters

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

Status code: 500

Table 6-363 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 6-364 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 6-365 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 6-366 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID

Table 6-367 Response body parameters

Parameter	Type	Description
product_id	String	Product ID
name	String	Product name

Parameter	Type	Description
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	**ProductCover DetailInfo** object	Product thumbnail information
text_list	Array of **ProductTextI nfo** objects	Text list
asset_list	Array of **ProductMedi aDetailInfo** 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 6-368 ProductCoverDetailInfo

Parameter	Type	Description
asset_id	String	Asset ID
cover_url	String	Thumbnail image path.
thumbnail_url	String	Thumbnail path.

Table 6-369 ProductTextInfo

Parameter	Type	Description
title	String	Text title

Parameter	Type	Description
text	String	Text

Table 6-370 ProductMediaDetailInfo

Parameter	Type	Description
asset_id	String	Asset ID
asset_type	String	Asset type. Options: • **IMAGE**: image • **VIDEO**: video • **AUDIO**: audio
order	Integer	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.
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 6-371 Response body parameters

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

Status code: 500

Table 6-372 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 6-373 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 6-374 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 6-375 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID

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

```
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 6-378 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-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 6-380 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 6-381 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	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.

Table 6-382 ProductTextInfo

Parameter	Mandatory	Type	Description
title	No	String	Text title
text	No	String	Text

Response Parameters

Status code: 200

Table 6-383 Response header parameters

Parameter	Type	Description
X-Request-Id	String	Request ID

Status code: 400

Table 6-384 Response body parameters

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

Status code: 500

Table 6-385 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 Image Modeling Management

7.1 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 7-1 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 7-2 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 7-3 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.
command_message	No	String	Command type. Options: • **UPDATE_VIDEO**: Updating a video. • **UPLOAD_VIDEO**: Uploading a video.

Parameter	Mandatory	Type	Description
video_multipart_count	No	Integer	Number of training video parts uploaded.
is_background_replacement	No	Boolean	Indicates whether to replace the background 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.
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.

Response Parameters

Status code: 200

Table 7-4 Response header parameters

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

Table 7-5 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.

Parameter	Type	Description
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_image1_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_image2_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 7-6 Response body parameters

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

Status code: 500

Table 7-7 Response body parameters

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

Example Requests

```
https://xxx.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://xxx.com/efc5300ecdba4ea48d1ff13a9d907bc0_trainingVideo?
parma1=XXX&param2=YYY", "https://xxx.com/efc5300ecdba4ea48d1ff13a9d907bc0_trainingVideo?
parma1=XXX&param2=YYY" ],
  "cover_upload_url" : "https://xxx.com/efc5300ecdba4ea48d1ff13a9d907bc0_cover?
parma1=XXX&param2=YYY",
  "id_card_image1_upload_url" : "https://xxx.com/efc5300ecdba4ea48d1ff13a9d907bc0_idCardImage1_tmp?
parma1=XXX&param2=YYY",
  "id_card_image2_upload_url" : "https://xxx.com/efc5300ecdba4ea48d1ff13a9d907bc0_idCardImage2_tmp?
parma1=XXX&param2=YYY",
  "grant_file_upload_url" : "https://xxx.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**.

7.2 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 7-8 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 7-9 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts.
limit	No	Integer	Number of items displayed on each page.
sort_key	No	String	Sorting field. Currently, only **create_time** is supported.
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.

Parameter	Mandatory	Type	Description
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

Request Parameters

Table 7-10 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 7-11 Response header parameters

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

Table 7-12 Response body parameters

Parameter	Type	Description
count	Integer	Number of virtual avatar model training tasks.
jobs	Array of **TrainingJobBasicInfo** objects	Virtual avatar model training tasks.

Table 7-13 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. • **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_MAIN_FILE_UPLOAD**: Waiting for main file upload. • **JOB_SUCCESS**: Training succeeded. • **WAIT_USER_CONFIRM**: Waiting for users to confirm the training result. • **JOB_REJECT**: Training rejected. • **JOB_PENDING**: Training pending. • **JOB_FINISH**: Training finished and cannot be changed.
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
matting_type	String	Matting type. The default value is **AI**. ● **AI**: AI matting ● **MANUAL**: manual matting
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.

Status code: 400

Table 7-14 Response body parameters

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

Status code: 500

Table 7-15 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://xxx.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://xxx.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://xxx.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://xxx.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://xxx.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://xxx.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://xxx.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://xxx.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://xxx.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" : "65e9fb9ac78546268e7d60d5003bfbdc",
  "name" : "Name 10",
  "state" : "INFERENCE_DATA_PREPROCESS_FAILED",
  "asset_id" : "71a0df4bd5966a33818af2b5094cf197",
  "project_id" : "***",
  "cover_download_url" : "https://xxx.com/65e9fb9ac78546268e7d60d5003bfbdc_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**.

7.3 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 7-16 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 7-17 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 7-18 Response header parameters

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

Table 7-19 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. • **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_MAIN_FILE_UPLOAD**: Waiting for main file upload. • **JOB_SUCCESS**: Training succeeded. • **WAIT_USER_CONFIRM**: Waiting for users to confirm the training result. • **JOB_REJECT**: Training rejected. • **JOB_PENDING**: Training pending. • **JOB_FINISH**: Training finished and cannot be changed.
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
matting_type	String	Matting type. The default value is **AI**. ● **AI**: AI matting ● **MANUAL**: manual matting
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.
app_user_id	String	Customized user ID. This parameter is carried if **X-App-UserId** is set during task creation.
training_video_download_url	String	URL for downloading the virtual avatar training video. The URL is valid for 24 hours.
id_card_image1_download_url	String	URL for downloading the ID card front-side photo. The URL is valid for 24 hours.
id_card_image2_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.
operation_logs	Array of **OperationLogInfo** objects	Operation logs.

Parameter	Type	Description
comment_logs	Array of **CommentLog Info** objects	Comment logs.
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.
is_background_replacement	Boolean	Indicates whether to replace the background for a virtual avatar. If yes, training videos require green-screen shooting.
worker_type	Array of strings	Compilation task model.

Table 7-20 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 execution result. Options: ● **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**: Training data preprocessing failed. ● **SYSTEM_TRAIN_DATA_PREPROCESS_SUCCESS**: Training data preprocessed. ● **SYSTEM_TRAINING**: Training started. ● **ADMIN_STOP_TRAIN**: Training manually terminated. ● **SYSTEM_TRAIN_FAILED**: Training failed. ● **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. ● **SYSTEM_MARKABLE_VIDEO**: Identifies a video generation task. ● **SYSTEM_MASK_VERIFY_VIDEO**: Verifies a video generation task. ● **SYSTEM_MASK_VERIFY_VIDEO_SUCCESS**: Video generation task verified. ● **SYSTEM_MASK_VERIFY_VIDEO_FAILED**: Video generation task verification failed. ● **SYSTEM_MARKABLE_VIDEO_SUCCESS**: Video generation task identified.

Parameter	Type	Description
		• **SYSTEM_MARKABLE_VIDEO_FAILED**: Video generation task identification failed. • **SYSTEM_MASK_VIDEO_AND_ACTION_TIME_SUCCESS**: Auto identified. • **SYSTEM_MASK_VIDEO_AND_ACTION_TIME_FAILED**: Auto identification failed. • **ADMIN_MASK_UPLOADED**: Mask file uploaded. • **ADMIN_UPDATE_VIDEO**: Video replacement by administrator. • **USER_UPDATE_VIDEO**: Video update by users. • **ADMIN_MASK_ACTION_TIME**: Calibration by administrator.
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 7-21 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 7-22 InferenceVideoMarkInfo

Parameter	Type	Description
video_start_ti me	String	Start time of the inference preprocessing video. Format: HH:MM:SS.mmm.
video_end_ti me	String	End time of the inference preprocessing video. Format: HH:MM:SS.mmm.

Table 7-23 InferenceActionMarkInfo

Parameter	Type	Description
action_info	Array of **ActionMarkIt em** objects	Actions.

Table 7-24 ActionMarkItem

Parameter	Type	Description
action_start_ti me	String	Start time of the inference preprocessing video. Format: HH:MM:SS.mmm.
action_end_ti me	String	End time of the inference preprocessing video. Format: HH:MM:SS.mmm.
action_type	String	Action type. Options: • **SILENCE** • **ACTION**

Table 7-25 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 7-26 Response body parameters

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

Status code: 500

Table 7-27 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://xxx.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://xxx.com/efc5300ecdba4ea48d1ff13a9d907bc0_trainingVideo?
param1=XXX&param2=YYY",
 "id_card_image1_download_url" : "https://xxx.com/efc5300ecdba4ea48d1ff13a9d907bc0_idCardImage1?
param1=XXX&param2=YYY",
 "id_card_image2_download_url" : "https://xxx.com/efc5300ecdba4ea48d1ff13a9d907bc0_idCardImage2?
param1=XXX&param2=YYY",
 "grant_file_download_url" : "https://xxx.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://xxx.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**.

7.4 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 7-28 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 7-29 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 7-30 Response header parameters

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

Status code: 400

Table 7-31 Response body parameters

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

Status code: 500

Table 7-32 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**.

7.5 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 7-33 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 7-34 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.

Table 7-35 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
video_multipart_count	No	Integer	Number of training video parts uploaded.
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.

Response Parameters

Status code: 200

Table 7-36 Response header parameters

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

Table 7-37 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.

Parameter	Type	Description
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.
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_upl oad_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 7-38 Response body parameters

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

Status code: 500

Table 7-39 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://xxx.com/efc5300ecdba4ea48d1ff13a9d907bc0_trainingVideo?
param1=XXX&param2=YYY", "https://xxx.com/efc5300ecdba4ea48d1ff13a9d907bc0_trainingVideo?
param1=XXX&param2=YYY" ],
  "cover_upload_url" : "https://xxx.com/efc5300ecdba4ea48d1ff13a9d907bc0_cover?
param1=XXX&param2=YYY",
  "id_card_image1_upload_url" : "https://xxx.com/efc5300ecdba4ea48d1ff13a9d907bc0_idCardImage1_tmp?
param1=XXX&param2=YYY",
  "id_card_image2_upload_url" : "https://xxx.com/efc5300ecdba4ea48d1ff13a9d907bc0_idCardImage2_tmp?
param1=XXX&param2=YYY",
  "grant_file_upload_url" : "https://xxx.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**.

7.6 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 7-40 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 7-41 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 7-42 Request body parameters

Parameter	Mandatory	Type	Description
command	Yes	String	Command type. Options: ● **SUBMITVERIFYING**: A video is submitted for review. ● **CONFIRM_ACCEPT**: User confirms the training result. ● **CONFIRM_REJECT**: User rejects the training result. ● **CONFIRM_ANSWER**: User reply. ● **CONFIRM_PENDING**: User pends a task. ● **CONFIRM_ACTIVE**: User activates a task. ● **GET_MULTIPART_UPLOADED**: Information about uploaded parts has been obtained. ● **CONFIRM_MULTIPART_UPLOADED**: All video parts have been uploaded. **NOTE** ● **CONFIRM_ACCEPT**, **CONFIRM_REJECT**, **CONFIRM_ANSWER**, **CONFIRM_PENDING**, and **CONFIRM_ACTIVE** commands are available only for NA users.

Parameter	Mandatory	Type	Description
command_me ssage	No	String	Command type. Options: ● **UPDATE_VIDEO**: Updating a video. ● **UPLOAD_VIDEO**: Uploading a video.
comment_dat a	No	**CommentDat a** object	Comment data.

Table 7-43 CommentData

Parameter	Mandatory	Type	Description
comment_titl e	No	String	Title.
comment_me ssage	No	String	Message.
attachment_n ame	No	Array of strings	Attachment name.

Response Parameters

Status code: 200

Table 7-44 Response header parameters

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

Table 7-45 Response body parameters

Parameter	Type	Description
commond_res ult	String	Command execution result. Options: ● **EXCUTE_SUCCESS**: Command execution succeeded. ● **EXCUTE_FAILED**: Command execution failed.
attachment_u pload_url	Array of strings	URL for uploading the attachment.

Parameter	Type	Description
multipart_dat a	Array of **MultipartUpl oadInfo** objects	Information of the uploaded parts of the training video.

Table 7-46 MultipartUploadInfo

Parameter	Type	Description
part_number	String	Part number.
etag	String	Part file tag.

Status code: 400

Table 7-47 Response body parameters

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

Status code: 500

Table 7-48 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**.

8 Voice Modeling Task Management

8.1 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 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
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**
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
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

Response Parameters

Status code: 200

Table 8-4 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**.

Parameter	Type	Description
authorization _letter_upload ing_url	String	Upload URL of the authorization letter.

Table 8-5 segment_uploading_url

Parameter	Type	Description
audio_uploadi ng_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 8-6 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**.

8.2 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 8-7 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 8-8 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.
X-App-UserId	No	String	Third-party user ID, which does not allow Chinese characters.

Table 8-9 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**
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
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

Response Parameters

Status code: 200

Table 8-10 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**.

Parameter	Type	Description
authorization _letter_upload ing_url	String	Upload URL of the authorization letter.

Table 8-11 segment_uploading_url

Parameter	Type	Description
audio_uploadi ng_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 8-12 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**.

8.3 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 8-13 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 8-14 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 8-15 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.
sex	No	String	Voice gender, which can be male or female. ● **FEMALE** ● **MALE**
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

Parameter	Mandatory	Type	Description
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

Response Parameters

Status code: 200

Table 8-16 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 8-17 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.

Parameter	Type	Description
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 8-18 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**.

8.4 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 8-19 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 8-20 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset where the query starts.
limit	No	Integer	Number of items displayed on each page.
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.

Parameter	Mandatory	Type	Description
job_id	No	String	Task ID.
voice_name	No	String	Voice name.
tag	No	String	Task tag.

Request Parameters

Table 8-21 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 8-22 Response body parameters

Parameter	Type	Description
count	Integer	Total number of tasks that meet the query criteria.
jobs	Array of **TrainingJobInfo** objects	Virtual avatar model training tasks.

Table 8-23 TrainingJobInfo

Parameter	Type	Description
job_type	String	Training type. ● **LLM_MAJOR**: LLM in Chinese and English ● **LLM_MINOR**: LLM in Chinese and non-Chinese/English languages ● **BASIC**: basic edition (20 sentences) ● **MIDDLE**: advanced edition (100 sentences) ● **ADVANCE**: premium edition ● **THIRD_PARTY**: third-party Mobvoi (training edition)

Parameter	Type	Description
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**: 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**: The task failed. ● **SUCCEED**: The task has been completed.
reject_times	Integer	Number of times that the status occurs in the current task.
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.
lastupdate_time	Long	Time when the task status is updated.
voice_authorization_url	String	Link to the user's authorization letter.

Parameter	Type	Description
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

Status code: 400

Table 8-24 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**.

8.5 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 8-25 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 8-26 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.
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 8-27 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**

Parameter	Mandatory	Type	Description
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 8-28 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**.

8.6 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 8-29 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 8-30 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'.

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 8-31 Response body parameters

Parameter	Type	Description
job_type	String	Training type. ● **LLM_MAJOR**: LLM in Chinese and English ● **LLM_MINOR**: LLM in Chinese and non-Chinese/English languages ● **BASIC**: basic edition (20 sentences) ● **MIDDLE**: advanced edition (100 sentences) ● **ADVANCE**: premium edition ● **THIRD_PARTY**: third-party Mobvoi (training edition)
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.

Parameter	Type	Description
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**: 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**: The task failed. • **SUCCEED**: The task has been completed.
reject_times	Integer	Number of times that the status occurs in the current task.
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.
lastupdate_time	Long	Time when the task status is updated.
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

Status code: 400

Table 8-32 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**.

8.7 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 8-33 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 8-34 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 8-35 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**.

8.8 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 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

None

Response Parameters

Status code: 200

Table 8-37 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_upload ing_url	String	Upload URL of the authorization letter.

Table 8-38 segment_url

Parameter	Type	Description
audio_uploadi ng_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 8-39 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 8-40 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**.

8.9 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 8-41 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 8-42 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 8-43 system_audit_result

Parameter	Type	Description
audit_time	Long	Operation time.
errors	Array of **errors** objects	Error list.

Table 8-44 errors

Parameter	Type	Description
audio_name	String	Audio file name.
text_name	String	Text file name.
error_code	String	Error code.
error_messag e	String	Error information.

Table 8-45 admin_audit_result

Parameter	Type	Description
message	String	Review information.
attachment_n ame	String	Attachment name.
attachment_u rl	String	URL for downloading the attachment.
audit_time	Long	Operation time.

Status code: 400

Table 8-46 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/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**.

8.10 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 8-47 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**.

Table 8-48 Query Parameters

Parameter	Mandatory	Type	Description
job_id	Yes	String	Task ID.
index	Yes	Integer	Statement index.

Request Parameters

None

Response Parameters

Status code: 200

Table 8-49 Response body parameters

Parameter	Type	Description
confirm_result	Boolean	Whether the confirmation is successful.
unmatched_index_hit	Array of integers	Text index that does not match the explanation.

Status code: 400

Table 8-50 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**.

8.11 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 8-51 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 8-52 Query Parameters

Parameter	Mandatory	Type	Description
job_id	Yes	String	Task ID.

Request Parameters

None

Response Parameters

Status code: 200

Table 8-53 Response body parameters

Parameter	Type	Description
confirmed_ind ex	Array of integers	Confirmed statement index.

Status code: 400

Table 8-54 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**.

9 TTS Management

9.1 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 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-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 9-3 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.
pitch	No	Integer	Pitch. The value defaults to **100** and ranges from **50** to **200**.
volume	No	Integer	Volume. The value defaults to **140** and ranges from **90** to **240**.

Response Parameters

Status code: 200

Table 9-4 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.

Status code: 400

Table 9-5 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

Parameter	Type	Description
request_id	String	Unique ID of the request.

Status code: 500

Table 9-6 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.

Status Code	Description
500	Server error.

Error Codes

See **Error Codes**.

9.2 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 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**.
job_id	Yes	String	Task ID.

Request Parameters

Table 9-8 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.

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 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 9-9 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.
message	String	Error message.
files	Array of **AuditionFile** objects	List of preview files.

Table 9-10 AuditionFile

Parameter	Type	Description
download_url	String	Link for downloading a preview file. The validity period is one hour.

Status code: 400

Table 9-11 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 9-12 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**.

10 Appendix

10.1 Status Codes

Table 10-1 describes the status codes that may be returned when a MetaStudio API is called.

Table 10-1 Status codes

Status Code	Description
200 OK	The request has succeeded.
201 Created	The request has been fulfilled and resulted in a new resource being created.
202 Accepted	The request has been accepted for processing, but the processing 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 could not be understood by the server. The client should not repeat the request without modifications.
401 Unauthorized	The authentication information provided by the client is incorrect or invalid.
403 Forbidden	The server understood the request, but is refusing to fulfill it. The client should not repeat the request without modifications.
404 Not Found	The requested resource could not be found. The client should not repeat the request without modifications.
405 Method Not Allowed	The method specified in the request is not supported for the requested resource. The client should not repeat the request without modifications.

Status Code	Description
406 Not Acceptable	The server could not fulfill the request according to the content characteristics of the request.
407 Proxy Authenticatio n Required	This code is similar to 401 (Unauthorized), but indicates that the client must first authenticate itself with the proxy.
408 Request Timeout	The client did not produce a request within the time that the server was prepared to wait. The client may repeat the request without modifications at any later time.
409 Conflict	The request could not be completed due to a conflict with the current state of the resource. This status code indicates that the resource that the client is attempting to create already exists, or that the request has failed to be processed because of the update of the conflict request.
500 Internal Server Error	The server is able to receive the request but unable to understand it.
501 Not Implemented	The server does not support the functionality required to fulfill the request.
502 Bad Gateway	The server, while acting as a gateway or proxy, received an invalid response from the upstream server it accessed in attempting to fulfill the request.
503 Service Unavailable	The server is currently unable to handle the request. The client should not repeat the request without modifications.
504 Gateway Timeout	A gateway timeout error occurred.

10.2 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
500	MSS.4200000 7	Infer Error	Infer Error	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.10000001	System problem, please contact technical support	System problem, please contact technical support	Contact technical support.
400	MSS.10000002	Request JSON exception	Request JSON exception	Check the request body JSON.
400	MSS.10000003	Parameter validation abnormal	Parameter validation abnormal	Check the validity of the input parameter.
400	MSS.10001002	Illegal URL parameter, please check	Illegal URL parameter, please check	Check the URL validity.
400	MSS.10001006	Asset create job failed	Asset create job failed	Create a new asset generation task.
400	MSS.10001007	Asset file too large, please do not exceed 5242880 bytes	Asset file too large, please do not exceed 5242880 bytes	Compress the file size or replace it with a small file.
400	MSS.10001008	Asset main file already exists	Asset main file already exists	Do not upload the main file repeatedly.
400	MSS.10001009	Asset cover file already exists	Asset cover file already exists	Do not upload the cover file repeatedly.
400	MSS.10001010	Asset state unavailable	Asset state unavailable	Use the ACTIVED state.
400	MSS.10001012	Asset file already exists	Asset file already exists	Do not upload files repeatedly.
400	MSS.10001013	Asset state invalid change	Asset state invalid change	Only assets in the ACTIVED or UNACTIVED state can be updated.
400	MSS.10001014	Asset state error update	Asset state error update	The asset status can be updated only to ACTIVED or UNACTIVED.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.10001016	File not found in OBS	File not found in OBS	Upload the file to OBS.
400	MSS.10001017	Failed to read oidc token	Failed to read oidc token	Contact technical support.
400	MSS.10001018	Failed to upload the file	Failed to upload the file	Contact technical support.
400	MSS.10001019	Image file blocked	Image file blocked	Use compliant images
400	MSS.10001020	SFS Cache file process error	SFS Cache file process error	Contact technical support.
400	MSS.10001022	Try get lock fail	Try get lock fail	Contact technical support.
400	MSS.10001024	dac file total size greater than quota	dac file total size greater than quota	Purchase an asset package.
400	MSS.10001025	the {0} category dac file not exist	the {0} category dac file not exist	Use the correct file type
400	MSS.10001026	the {0} category dac file has existed	the {0} category dac file has existed	Use the correct file type
400	MSS.10001027	the {0} category dac file more than {1}	the {0} category dac file more than {1}	Use the correct file type
400	MSS.10001028	the category dac file not match {0}	the category dac file not match {0}	Use the correct file type
400	MSS.10001030	transfer asset job is not exist	transfer asset job is not exist	Query the correct transfer task.
400	MSS.10001031	transfer asset job is time out	transfer asset job is time out	Use the correct transfer task

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.10001033	creating file too many	creating file too many	Delete unnecessary files that are being created or confirm existing files that are being created.
400	MSS.10001034	File type is not supported	File type is not supported	Use the correct file type
400	MSS.10001035	Text content include sensitive word	Text content include sensitive word	Use compliant text
400	MSS.10001036	Asset list does not contain specified cover asset	Asset list does not contain specified cover asset	Please use the picture in the material list as the product cover.
400	MSS.10001037	Asset list contains unavailable asset	Asset list contains unavailable asset	Do not use abnormal assets as materials.
400	MSS.10001038	Asset list contains mismatched asset type	Asset list contains mismatched asset type	Do not use an asset that is different from the material requirement type as material
400	MSS.10001039	Asset list contains duplicate asset	Asset list contains duplicate asset	Do not use duplicate assets as material
400	MSS.10001040	Linked asset item unavailable	Linked asset item unavailable	Use an activated asset as the offering material.
400	MSS.10001041	Product not found	Product not found	Check the offering data or add an offering.
400	MSS.10001042	Product text or asset list exceeds the limit	Product text or asset list exceeds the limit	Do not exceed the material quantity limit.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.10001043	sfs business type illegal	sfs business type illegal	Use the correct cache service type.
400	MSS.10001044	copy asset file failed	copy asset file failed	Contact technical support.
400	MSS.10001045	copy asset name to long	copy asset name to long	Shorten Copy Asset File Name
400	MSS.10001046	Authorization token is illegal	Authorization token is illegal	Check the validity of the token.
400	MSS.10001047	Authorization token is expired	Authorization token is expired	Check the validity of the token.
400	MSS.10001048	The {0} category dac file is not supported	The {0} category dac file is not supported	Use the correct file type
404	MSS.10001001	Asset not found	Asset not found	Check the asset metadata or add an asset.
404	MSS.10001004	The file not found	The file not found	Check the asset metadata or add an asset file.
404	MSS.10001011	Asset main file not found	Asset main file not found	Please check the asset master file
500	MSS.10000004	Public communication error	Public communication error	Contact technical support.
500	MSS.10000032	Read video review result failed.	Read video review result failed.	Contact technical support.
500	MSS.10000101	IAM service processing error	IAM service processing error	Contact technical support.
500	MSS.10000102	OBS service processing error	OBS service processing error	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.10000103	Moderation service processing error	Moderation service processing error	Contact technical support.
500	MSS.10000104	CAS service processing error	CAS service processing error	Contact technical support.
500	MSS.10000105	DAP service processing error	DAP service processing error	Contact technical support.
500	MSS.10010011	image is illegal	image is illegal	Use compliant images
500	MSS.10010012	text include sensitive word	text include sensitive word	Use Compliance Text
500	MSS.10010013	process time out	process time out	Contact technical support.
500	MSS.10010014	Timeout or job not exist, please check.	Timeout or job not exist, please check.	Contact technical support.
500	MSS.10010015	Incorrect file type.	Incorrect file type.	Upload the correct file type.
500	MSS.10010016	PPT page too many.	PPT page too many.	Do not upload too many ppt pages.
500	MSS.10010017	execute command failed.	execute command failed.	Contact technical support.
500	MSS.10010018	thumbnails convert failed.	thumbnails convert failed.	Contact technical support.
500	MSS.10010020	file not exist.	file not exist.	Contact technical support.
500	MSS.42000001	Internal error	Internal error	Contact technical support.
500	MSS.42000002	TTSC task failed	TTSC task failed	Check TTS permissions and configuration
500	MSS.42000003	Load Model failed	Load Model failed	Check model file
500	MSS.42000005	Action info error	Action info error	Check Action file

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.42001001	Model not zip file	Model not zip file	Check model file
500	MSS.42001002	Audio file is not valid	Audio file is not valid	Check audio file
500	MSS.42001003	Mask file not exist	Mask file not exist	Check mask file
500	MSS.42001004	ori_4k not zip file	ori_4k not zip file	check ori_4k file
500	MSS.42001005	TTSC return zero length pcm	TTSC return zero length pcm	Check if text and TTS language match or audio file length is zero
400	MSS.41000001	Task status is incorrect	Incorrect task status prevents normal execution	Check task status
400	MSS.41000002	BAD_REQUEST (The task name is illegal)	name contains special code	Check if task name contains special characters
400	MSS.41000004	train job count is over limit	train job count is over limit	Clear old tasks
400	MSS.41000014	Failed to obtain obs segment url	obs section failed	Resubmit the task or contact the development engineer
400	MSS.41000018	When deleting a task, the task cannot be queried or the task cannot be deleted.	When deleting a task, the task cannot be queried or the task cannot be deleted.	When deleting a task, the task cannot be queried or the task cannot be deleted.
403	MSS.41000012	Task concurrency limit exceeded	insufficient resource quota	Wait for the previous task to complete before submitting a new task

Status Code	Error Codes	Error Message	Description	Solution
404	MSS.41000003	Task does not exist	train job is not exist	Check whether the task id is correct
500	MSS.41000005	Witness verification failed	Automatic witness verification failed	Check whether the ID card and the video character are consistent
500	MSS.41000007	The submitted video length is illegal	The submitted video length is illegal	Check if there are any issues with the submitted video
500	MSS.41000015	Failed to obtain obs uploadid	Failed to obtain obs uploadid	Resubmit the task or contact the development engineer
500	MSS.41000016	Failed to query assets	Failed to query assets	Check whether the trained model is deleted or contact the asset library development engineer
500	MSS.41000017	Failed to update assets	Failed to update assets	Check whether the model is deleted or contact the asset library development engineer
500	MSS.41000019	Failed to acquire instance lock	Failed to acquire instance lock	Check whether redis is abnormal
400	47010152	The format of the extended parameter is invalid	The format of the extended parameter is invalid	Ensure that the extended parameter is in the correct format.
400	MSS.47010001	Dialog does not exist	Dialog does not exist	Please bring the correct dialog ID to visit.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47010019	The count of skill has exceed max value.	The count of skill has exceed max value.	Contact R&D engineers to expand the capacity.
400	MSS.47010020	The skill name already exists.	The skill name already exists.	Use a skill name that has not been configured.
400	MSS.47010021	The skill identify already exists.	The skill identify already exists.	Use another English skill ID that has not been configured.
400	MSS.47010022	The skill does not exist	The skill does not exist	Use the correct skill ID.
400	MSS.47010024	The Q&A pair topic already exists.	The Q&A pair topic already exists.	Configure other Q&A pair topic.
400	MSS.47010026	The number of Q&A pairs exceeds the upper limit.	The number of Q&A pairs exceeds the upper limit.	Contact R&D engineers to expand the capacity.
400	MSS.47010027	The Q&A pair does not exist.	The Q&A pair does not exist.	Please use the correct question ID
400	MSS.47010029	The questioning method already exists.	The questioning method already exists.	Please configure other questioning method that do not exist.
400	MSS.47010030	The questioning method does not exist.	The questioning method does not exist.	Please use the correct questioning method ID
400	MSS.47010032	The list of questioning method is empty.	The list of questioning method is empty.	Enter a correct questioning method list.
400	MSS.47010033	The application name already exists.	The application name already exists.	Use a application name that does not exist.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47010034	The application does not exist.	The application does not exist.	Please use the correct application ID.
400	MSS.47010040	The number of concurrent intelligent interactions exceeds the maximum.	The number of concurrent intelligent interactions exceeds the maximum.	Disable unused intelligent interaction pages or contact R&D engineers to expand the capacity.
400	MSS.47010041	The activation code does not exist.	The activation code does not exist.	Use a correct activation code ID or configure a new activation code.
400	MSS.47010049	The slider verification code does not exist.	The slider verification code does not exist.	Obtain the slider verification code again.
400	MSS.47010050	Failed to verify the slider verification code.	Failed to verify the slider verification code.	Verify the slider verification code again.
400	MSS.47010051	The number of times that the slider verification code fails to be verified exceeds the maximum.	The number of times that the slider verification code fails to be verified exceeds the maximum.	Obtain a new slider verification code for verification.
400	MSS.47010052	The activation code already exists.	The activation code already exists.	Only one activation code can be configured for each robot.
400	MSS.47010054	The agency does not exist, failed to remove the agency.	The agency does not exist, failed to remove the agency.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47010059	The room ID does not exist.	The room ID does not exist.	The message carries the correct room ID
400	MSS.47010060	The welcome speech does not exist.	The welcome speech does not exist.	Please use the correct welcome speech ID to access
400	MSS.47010062	The welcome speech already exists.	The welcome speech already exists.	Only one welcome speech can be configured for each robot.
400	MSS.47010064	The number of questioning method exceeds the upper limit.	The number of questioning method exceeds the upper limit.	Contact technical support for capacity expansion.
400	MSS.47010065	The dialog task does not exist. Querying the smart chat task failed.	The dialog task does not exist. Querying the smart chat task failed.	Use a correct task ID or contact technical support.
400	MSS.47010066	Hot question does not exist.	Hot question does not exist.	Use the correct hotspot issue ID to query or check whether the hotspot issue is correctly configured.
400	MSS.47010068	The number of hot questions exceeds the upper limit.	The number of hot questions exceeds the upper limit.	Contact technical support.
400	MSS.47010069	The hot question already exists.	The hot question already exists.	Configure other hot question.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47010071	Configuration audit failed because the input content contains sensitive information.	Configuration audit failed because the input content contains sensitive information.	Modify the configuration and delete sensitive information.
400	MSS.47010072	The Q&A pair list is empty.	The Q&A pair list is empty.	Carry the correct Q&A pair information
400	MSS.47010073	The number of Q&A pairs exceeds the upper limit.	The number of Q&A pairs exceeds the upper limit.	The number of Q&A pairs in the list cannot exceed the upper limit.
400	MSS.47010076	hot words sis-hot-words is empty	hot words sis-hot-words is empty	Carry the correct sisHotWords
400	MSS.47010077	target hot words already exists	target hot words already exists	Only one hot word record can be created for the same region and language.
400	MSS.47010078	target hot words not exist or no permission	target hot words not exist or no permission	Check the hot words and permission.
400	MSS.47010080	The vocabularyId is empty	The vocabularyId is empty	Carry the correct vocabularyId
400	MSS.47010081	The sisProjectId is empty	The sisProjectId is empty	Carry the correct sisProjectId
400	MSS.47010082	The language is empty	The language is empty	Carry the correct language
400	MSS.47010090	The app ID is empty.	The app ID is empty.	Enter a correct app ID.
400	MSS.47010091	The app key is empty.	The app key is empty.	Enter a correct app key.
400	MSS.47010092	The app secret is empty.	The app secret is empty.	Enter the correct app secret information.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47010093	The value of app type is invalid.	The value of app type is invalid.	Enter a correct App Type.
400	MSS.47010094	The mobvoi config is empty	The mobvoi config is empty	Please bring the correct configuration with mobvoi.
400	MSS.47010095	The region is invalid.	The region is invalid.	Ensure that the region information is correct.
400	MSS.47010097	The value of Cbs Project Id is invalid.	The value of Cbs Project Id is invalid.	Enter a correct CBS project ID.
400	MSS.47010098	Failed to create the application configuration. The role ID is empty	Failed to create the application configuration. The role ID is empty	Carry the correct role ID
400	MSS.47010102	The robot ID is empty.	The robot ID is empty.	Carry the correct robot ID.
400	MSS.47010103	Dialog request failed. The action is not supported.	Dialog request failed. The action is not supported.	The dialog request must contain the correct action command.
400	MSS.47010106	The dialog fails to be established because the parameters carried in the dialog are invalid.	The dialog fails to be established because the parameters carried in the dialog are invalid.	Correct parameter information is carried during dialog link setup.
400	MSS.47010109	Failed to start the dialog. The dialog is not in the waitConnect state.	Failed to start the dialog. The dialog is not in the waitConnect state.	Internal error information, which does not affect services and does not need to be handled.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47010114	Third-party text driver failed. The text length exceeds the maximum.	Third-party text driver failed. The text length exceeds the maximum.	The third-party text driver must contain text data of the correct length.
400	MSS.47010115	Third-party text driver failed. The value of seq is smaller than the minimum value.	Third-party text driver failed. The value of seq is smaller than the minimum value.	The third-party text driver must carry the correct seq parameter information.
400	MSS.47010116	The operation command is not supported.	The operation command is not supported.	Use the correct operation command.
400	MSS.47010117	The payload parameter in the dialog request is empty.	The payload parameter in the dialog request is empty.	The dialog request carries the correct payload parameter.
400	MSS.47010118	The data parameter in the dialog request is empty.	The data parameter in the dialog request is empty.	The dialog request carries the correct data parameter.
400	MSS.47010123	The chat has stopped	The chat has stopped	Not involved
400	MSS.47010128	The role ID of Mobvoi is invalid	The role ID of Mobvoi is invalid	Please configure valid Role ID
400	MSS.47010129	The robot type is invalid	The robot type is invalid	Carry the correct robot type
400	MSS.47010130	The third-party language model is empty.	The third-party language model is empty.	Enter the correct third-party language model configuration.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47010131	The third-party language model url is empty.	The third-party language model url is empty.	Enter a correct third-party language model url.
400	MSS.47010132	The application type is not supported	The application type is not supported	Please use the correct app
400	MSS.47010133	Failed to chat with the third-party language model	Failed to chat with the third-party language model	Contact Technical Support
400	MSS.47010134	Invalid third-party language model address.	Invalid third-party language model address.	Configure a correct third-party language model address.
400	MSS.47010135	Invalid tailSilenceTime	Invalid tailSilenceTime	Configure a correct tailSilenceTime
400	MSS.47010137	roleType is invalid	roleType is invalid	Configure a correct roleType
400	MSS.47010140	sis region is invalid	sis region is invalid	Configure a correct sis region
400	MSS.47010150	The number of requests sent to Mobvoi exceeds the maximum number of concurrent requests.	The number of requests sent to Mobvoi exceeds the maximum number of concurrent requests.	Increase the number of concurrent contact Mobvoi.
400	MSS.47010202	The SDK resource does not exist	The SDK resource does not exist	Ensure that the SDK resources for voice wakeup exist in the OBS bucket and the configuration information is correct.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.47010203	The dialog does not have enough wakeup channels	The dialog does not have enough wakeup channels	Ensure that there are sufficient voice wakeup channel resources.
400	MSS.47010204	The osType is invalid	The osType is invalid	Ensure that the value of osType is correct.
401	MSS.47010043	Activation code authentication failed.	Activation code authentication failed.	Use the correct activation code to log in.
401	MSS.47010046	Once authentication code authentication failed.	Once authentication code authentication failed.	Use a correct once authentication code.
401	MSS.47010105	Invalid token information.	Invalid token information.	Carry the correct token information.
401	MSS.47010127	Mobvoi configuration authenticate failed	Mobvoi configuration authenticate failed	Check the configuration information
403	MSS.47010009	No permission to access	No permission to access	Access the correct interface.
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 tenant.
403	MSS.47010031	No permission to access the questioning method configuration.	No permission to access the questioning method configuration.	Access the configuration of the questioning method under the current tenant.

Status Code	Error Codes	Error Message	Description	Solution
403	MSS.47010035	No permission to access the application configuration.	No permission to access the application configuration.	Access the application configuration of the tenant.
403	MSS.47010042	No permission to access the activation configuration	No permission to access the activation configuration	Access the activation code configuration of the tenant.
403	MSS.47010044	The number of authentication failures of the activation code exceeds the maximum. The activation code is locked.	The number of authentication failures of the activation code exceeds the maximum. The activation code is locked.	After the account is unlocked, use the correct activation code to log in to the system.
403	MSS.47010045	The activation code has expired.	The activation code has expired.	Contact R D engineers to reset the validity period of the activation code.
403	MSS.47010047	The number of once authentication failures exceeds the maximum. The once code is locked.	The number of once authentication failures exceeds the maximum. The once code is locked.	After the account is unlocked, use the correct once authentication code to log in to the system.
403	MSS.47010058	No permission to perform the agency operation.	No permission to perform the agency operation.	Use an account with the Security Administrator permission.

Status Code	Error Codes	Error Message	Description	Solution
403	MSS.47010061	You do not have the permission to access the welcome speech configuration.	You do not have the permission to access the welcome speech configuration.	Access the welcome speech configuration of the current tenant.
403	MSS.47010063	No permission to access the dialog information.	No permission to access the dialog information.	Access the dialog information of the current tenant.
403	MSS.47010067	No permission to access the hot question configuration.	No permission to access the hot question configuration.	Access the hot question configuration of the current tenant.
403	MSS.47010088	No permission to access the project ID	No permission to access the project ID	Carry the correct tenant ID.
403	MSS.47010151	The number of uploaded log files exceeds the maximum.	The number of uploaded log files exceeds the maximum.	Try again later or contact technical support
429	MSS.47010004	Request too frequently.	Request too frequently.	Do not send requests frequently.
500	MSS.47010003	System processing failed	System processing failed	Contact technical support.
500	MSS.47010005	Failed to query tenant information.	Failed to query tenant information.	Not involved
500	MSS.47010006	The subscribed resource expires, and the dialog task is disabled.	The subscribed resource expires, and the dialog task is disabled.	Please renew in time

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.47010007	Failed to read data.	Failed to read data.	Contact technical support.
500	MSS.47010008	Tenant data is deleted, and the task is stopped.	Tenant data is deleted, and the task is stopped.	Not involved
500	MSS.47010025	Failed to create the Q&A pair topic identify.	Failed to create the Q&A pair topic identify.	Contact technical support.
500	MSS.47010036	Failed to export the skill configuration.	Failed to export the skill configuration.	Contact technical support.
500	MSS.47010037	Failed to start the smart chat task.	Failed to start the intelligent interaction task.	Contact technical support.
500	MSS.47010038	Failed to stop the smart chat task.	Failed to stop the smart chat task.	Contact technical support.
500	MSS.47010039	Failed to query the smart chat task.	Failed to query the smart chat task.	Contact technical support.
500	MSS.47010048	Failed to generate the slider verification code.	Failed to generate the slider verification code.	Contact technical support.
500	MSS.47010053	Failed to create the agency.	Failed to create the agency.	Contact technical support.
500	MSS.47010055	Failed to query the agency.	Failed to query the agency.	Contact technical support.
500	MSS.47010056	Failed to query the project ID.	Failed to query the project ID.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.47010057	The target region does not have matched tenant information.	The target region does not have matched tenant information.	Select a correct region.
500	MSS.47010070	Content audit failed.	Content audit failed.	Contact technical support.
500	MSS.47010100	Internal error.	Internal error.	Contact technical support.
500	MSS.47010101	Failed to parse the message.	Failed to parse the message.	Contact technical support.
500	MSS.47010104	Connection to the third-party app timed out.	Connection to the third-party app timed out.	Check whether the third-party app configuration is correct or contact R&D engineers.
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	Failed to start the dialog and disconnected from the worker.	Failed to start the dialog and disconnected from the worker.	Contact technical support.
500	MSS.47010112	Failed to send the dialog message.	Failed to send the dialog message.	Contact technical support.
500	MSS.47010119	ChannelRecord is null	ChannelRecord is null	If the error persists, contact technical support.
500	MSS.47010120	The number of interactive authorizations is insufficient for iFLYTEK.	The number of interactive authorizations is insufficient for iFLYTEK.	Contact HKUST customer service.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.47010121	The number of tokens for interaction between the iFLYTEK is insufficient.	The number of tokens for interaction between the iFLYTEK is insufficient.	Contact HKUST customer service.
500	MSS.47010122	Internal RPC communication failure	Internal RPC communication failure	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 authenticate failed.	Spark configuration authenticate failed.	Contact the administrator.
500	MSS.47010126	The call number or word number is insufficient for mobvoi	The call number or word number is insufficient for mobvoi	Contact the administrator to supplement the authorization quantity
500	MSS.47010136	ifly application scene config error	ifly application scene config error	Contact the administrator.
500	MSS.47010141	There are some errors on sis agency	There are some errors on sis agency	Contact the administrator.
200	MSS.47000000	SUCCESS	Success	Success
200	MSS.50000001	Internal error	Undefined internal error	Contact technical support.
200	MSS.50000002	TTS task failed	Failed to request the TTS task	Contact technical support.
200	MSS.50001001	Could not found a face in a image, please check	Could not found a face in a image, please check	Please upload a photo containing a frontal face

Status Code	Error Codes	Error Message	Description	Solution
200	MSS.50001002	Wav file is invalid	The uploaded .wav file is invalid when the audio driver is created	Please upload a valid .wav audio file
200	MSS.50001003	Base 64 of the image is invalid	The input photo content is abnormal after Base 64 decoding	Please upload photos that can be decoded using Base 64
200	MSS.50001004	audio is too short	When the audio driver is created, the uploaded WAV audio is too short	Please uploada lengthened audio file
200	MSS.50001005	Image file is not valid or not support	The input photo file format is not supported	Please upload a photo file in a valid format
200	MSS.50001006	Face and image ratio does not match the requirements	The proportion of faces in the input photo to the entire image does not meet the requirements	Please upload a face image whose percentage ranges from 2% to 70%
200	MSS.50001007	Upload video file failed	Failed to upload the video after the video is created	Contact technical support.
200	MSS.50001008	Upload image file failed	Failed to upload the cover image after the video is created	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
200	MSS.50001009	Query upload url failed	Failed to obtain the upload URL after the video is created	Contact technical support.
200	MSS.50001010	Image file download fail	Failed to obtain the input photo	Contact technical support.
200	MSS.50001011	Failed to load the audio file, please check it	Failed to obtain the input audio	Contact technical support.
200	MSS.50001012	Text len exceed limit	The length of the input text does not match the limit	The number of characters in the uploaded text must be less than 1800
200	MSS.50001013	Audio size exceed limit	The input audio size does not match the limit	The size of the audio file to be uploaded must be less than 11 MB
200	MSS.50001014	Image size exceed limit	The size of the input image does not match the restriction	The size of the uploaded image must be less than 48 MB
200	MSS.50001015	Detect face number more than one	The number of detected faces is greater than 1. Currently, only the single-face photo driver is supported	Please upload an image that contains only one face
200	MSS.50001016	Larger rotation angle of the face, need a positive face photo	The face deflection range in the input photo does not match the requirements	Please upload a photo of the front face

Status Code	Error Codes	Error Message	Description	Solution
200	MSS.50001017	Face is not integrate or not human, please check	The face in the input photo is incomplete or the person is not a natural person	Please upload a complete natural face photo
200	MSS.50001018	Mouth too open	The mouth opening range in the input photo does not match the restriction. Currently, only the mouth closing photo drive is supported	Please upload a photo of the mouth closed
400	MSS.20010005	script name duplicate	script name duplicate	Do not use duplicate script names
400	MSS.20010008	asset name duplicate	asset name duplicate	Do not use duplicate asset names
400	MSS.20010016	asset contains multiple engines	asset contains multiple engines	Check asset engine attributes to ensure that engine assets are unified under a script.
400	MSS.20010025	dhis request unavailable	dhis request unavailable	Contact technical support.
400	MSS.20010031	room name duplicate	room name duplicate	Change the room name again.
400	MSS.20010045	roomInfo not found	roomInfo not found	Check whether the entered room information is correct.
400	MSS.20010066	Tasks in the Finish state cannot be changed.	Tasks in the Finish state cannot be changed.	Tasks in the Finish state cannot be changed.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.20010067	audio file not found, please check field audio_config	audio file not found, please check field audio_config	Check audio_config.
400	MSS.20010070	field verify fail	field verify fail	Check whether the * parameter is correct.
400	MSS.20010073	The script id cannot be empty when using audio	The script id cannot be empty when using audio	The script id cannot be empty when using audio
400	MSS.20010074	The job info is not existed or the job is over	The job info is not existed or the job is over	Check whether the task exists or has expired.
400	MSS.20010083	InteractionRuleGroup not found	InteractionRuleGroup not found	Check whether the rule library parameters are correct.
400	MSS.20010084	InteractionRuleGroup name duplicate	InteractionRuleGroup name duplicate	Change the rule library name and try again.
400	MSS.20010087	NO Live event call back config	NO Live event call back config	Check whether the event call back config is set.
400	MSS.20010093	The URL is invalid!	The URL is invalid!	Check whether the URL is correct.
400	MSS.20010101	External asset Repeated download fail. url is {0}, errorInfo is	External asset Repeated download fail. url is {0}, errorInfo is	Check whether the URL is correct.
400	MSS.20010103	audio file TotalSize exceeds the limit. Current TotalSize {0}M, Limit Size {1}M	audio file TotalSize exceeds the limit. Current TotalSize {0}M, Limit Size {1}M	Change the number or size of video files.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.20010104	image file TotalSize exceeds the limit. Current TotalSize {0}M, Limit Size {1}M	image file TotalSize exceeds the limit. Current TotalSize {0}M, Limit Size {1}M	Change the number or size of image files.
400	MSS.20010105	video file TotalSize exceeds the limit. Current TotalSize {0}M, Limit Size {1}M	video file TotalSize exceeds the limit. Current TotalSize {0}M, Limit Size {1}M	Change the number or size of audio files.
400	MSS.20010106	ScriptName: {0} video file TotalCount exceeds the limit. Current TotalCount {1}, Limit TotalCount {2}	ScriptName: {0} video file TotalCount exceeds the limit. Current TotalCount {1}, Limit TotalCount {2}	Change the number of videos in the script*.
400	MSS.20010107	interaction ruleName:{0} video file TotalCount exceeds the limit. Current TotalCount {1}, Limit TotalCount {2}	interaction ruleName:{0} video file TotalCount exceeds the limit. Current TotalCount {1}, Limit TotalCount {2}	Change the number of videos in rule *.
400	MSS.20010108	roomInfo text totalLength exceeds the limit. Current totalLength {0}, Limit totalLength {1}	roomInfo text totalLength exceeds the limit. Current totalLength {0}, Limit totalLength {1}	Please change the total number of characters in the room script.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.20010109	ScriptName: {0} text length exceeds the limit. Current Length {1}, Limit Length {2}	ScriptName: {0} text length exceeds the limit. Current Length {1}, Limit Length {2}	Please change the number of texts in the script
400	MSS.20010110	interaction ruleName {0} contains incorrect parameters. error: {1}	interaction ruleName {0} contains incorrect parameters. error: {1}	Modify the incorrect parameter in the rule
400	MSS.20010115	Quotas delete failed, resourceId: {1} is used	Quotas delete failed, resourceId: {1} is used	Contact technical support.
401	MSS.20010039	live event report authentication fail	live event report authentication fail	Contact technical support.
401	MSS.20010054	live event report expires Time fail	live event report expires Time fail	Contact technical support.
401	MSS.20010077	expires too long, report url not allowed refresh	expires too long, report url not allowed refresh	Contact technical support.
403	MSS.20010056	2d digital human video ncj insufficient resource quota	2d digital human video ncj insufficient resource quota	Please try again later
403	MSS.20010065	insufficient resource live concurrent quota	insufficient resource live concurrent quota	Please contact the development engineer Or buy live-related packages

Status Code	Error Codes	Error Message	Description	Solution
403	MSS.20010075	insufficient resource chat concurrent quota	insufficient resource chat concurrent quota	Please contact the development engineer Or purchase an intelligent interaction package
403	MSS.20010076	chat task has been expired	chat task has been expired	chat task has been expired
403	MSS.20010082	don't have the permission to edit the system template	don't have the permission to edit the system template	Check whether you have the system administrator rights.
403	MSS.20010091	photo digital human video ncj insufficient resource quota	photo digital human video ncj insufficient resource quota	Please try again later
403	MSS.20010092	business card ncj insufficient resource quota	business card ncj insufficient resource quota	Please try again later
404	MSS.20010009	animation task not exist	animation task not exist	Trigger a video synthesis task again.
404	MSS.20010079	no match id.	no match id.	Check the input parameters.
429	MSS.20010011	exceed waiting task upper limit	exceed waiting task upper limit	Please create a video task later.
429	MSS.20010035	There are not enough resources	There are not enough resources	There are not enough live resources,Please contact the development engineer

Status Code	Error Codes	Error Message	Description	Solution
429	MSS.20010102	tenant worker resources are insufficient	tenant worker resources are insufficient	The live resource package is insufficient,Please contact the development engineer
500	MSS.20010001	name include invalid symbol	name include invalid symbol	Please modify invalid characters in the name.
500	MSS.20010003	no match template	no match template	Check whether the enumeration is correct.
500	MSS.20010006	moderation error	moderation error	Contact technical support.
500	MSS.20010007	text include sensitive word	text include sensitive word	Modify sensitive words in the commentary.
500	MSS.20010010	query asset error	query asset error	Contact technical support.
500	MSS.20010012	scene and material do not match	scene and material do not match	Check the scenario label.
500	MSS.20010013	models and animation do not match	models and animation do not match	Check whether the role model and action style_id are the same.
500	MSS.20010014	material is not exist	material is not exist	The presentation material has been permanently deleted.
500	MSS.20010015	xml parse fail	xml parse fail	Text contains unenclosed xml tags
500	MSS.20010017	the script name contains sensitive characters	the script name contains sensitive characters	Check the script name
500	MSS.20010018	query digital human error	query digital human error	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.20010019	the video name contains sensitive characters	the video name contains sensitive characters	Modify the asset_name field.
500	MSS.20010020	please use the correct scene asset	please use the correct scene asset	please use the correct scene asset
500	MSS.20010021	please use the correct role model asset	please use the correct role model asset	please use the correct role model asset
500	MSS.20010022	please use the correct role actions asset	please use the correct role actions asset	please use the correct role actions asset
500	MSS.20010023	The animation task is not finished.	The animation task is not finished.	The animation task is not finished.Just a moment, please.
500	MSS.20010024	confirm file upload fail,	confirm file upload fail,	Contact technical support.
500	MSS.20010026	the file to be uploaded does not exist or size is 0	the file to be uploaded does not exist or size is 0	Check whether the audio file is uploaded.
500	MSS.20010027	two digital task has not script shoot	two digital task has not script shoot	two digital task has not script shoot
500	MSS.20010030	the room name contains sensitive characters	the room name contains sensitive characters	Change the name of the live broadcast room.
500	MSS.20010032	the room description contains sensitive characters	the room description contains sensitive characters	Modify the description of the live broadcast room.
500	MSS.20010033	the script description contains sensitive characters	the script description contains sensitive characters	Please modify sensitive words in the script.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.20010034	the script title contains sensitive characters	the script title contains sensitive characters	Please modify sensitive words in paragraph titles.
500	MSS.20010036	There are several jobs in progress in this room	There are several jobs in progress in this room	There are several jobs in progress in this room
500	MSS.20010037	Live task has been expired	Live task has been expired	Live task has been expired
500	MSS.20010038	the live interaction contains sensitive characters	the live interaction contains sensitive characters	Modify sensitive words in the rule.
500	MSS.20010040	Failed to publish message to nats.	Failed to publish message to nats.	Contact technical support.
500	MSS.20010041	Failed to subscribe single message	Failed to subscribe single message	Contact technical support.
500	MSS.20010042	No such subject, delete subject failed	No such subject, delete subject failed	Contact technical support.
500	MSS.20010043	Nats internal error.	Nats internal error.	Contact technical support.
500	MSS.20010044	digital human asset not available	digital human asset not available	The digital person asset is unavailable. Please replace the digital person asset.
500	MSS.20010046	roomId job exist	roomId job exist	roomId job not exist
500	MSS.20010047	asset not exist	asset not exist	asset not exist
500	MSS.20010048	the task is already running	the task is already running	the task is already running

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.20010049	the image type to be uploaded does not meet the requirements	the image type to be uploaded does not meet the requirements	the image type to be uploaded does not meet the requirements
500	MSS.20010050	the asset info is invalid, please check the digital human config info	the asset info is invalid, please check the digital human config info	the asset info is invalid, please check the digital human config info
500	MSS.20010051	the job_id doesn't exist or has been expired!	the job_id doesn't exist or has been expired!	the job_id doesn't exist or has been expired!
500	MSS.20010052	Edit script failed!	Edit script failed!	Contact technical support.
500	MSS.20010053	Invalid command, please check your command	Invalid command, please check your command	Check your command parameter.
500	MSS.20010055	the live reply contains sensitive characters, errDetail = {0}	the live reply contains sensitive characters, errDetail = {0}	Modify sensitive words in the reply.
500	MSS.20010057	the number of image, video or human layers exceeds the limit	the number of image, video or human layers exceeds the limit	the number of image, video or human layers exceeds the limit
500	MSS.20010058	must include model layer	must include model layer	must include model layer
500	MSS.20010059	The job info is not existed or the job is over	The job info is not existed or the job is over	The job info is not existed or the job is over
500	MSS.20010060	tms request unavailable	tms request unavailable	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.20010068	External asset download fail	External asset download fail	Contact technical support.
500	MSS.20010069	Live room is not available	Live room is not available	Contact technical support.
500	MSS.20010071	the asset is unavailable	the asset is unavailable	Contact technical support.
500	MSS.20010072	the number of pages in the script exceeds the limit	the number of pages in the script exceeds the limit	Please reduce the number of pages of the script
500	MSS.20010078	live call back fail	live call back fail	Contact technical support.
500	MSS.20010080	Failed to send audit task	Failed to send audit task	Contact technical support.
500	MSS.20010081	failed to create the script cover	failed to create the script cover	Contact technical support.
500	MSS.20010085	The current model is 1080p, and the resolution width and height cannot be greater than 1920	The current model is 1080p, and the resolution width and height cannot be greater than 1920	The current model is 1080p, and the resolution width and height cannot be greater than 1920
500	MSS.20010086	No textConfig exist	No textConfig exist	No textConfig exist
500	MSS.20010088	Load language failed	Load language failed	Contact technical support.
500	MSS.20010089	The uploaded script is null	The uploaded script is null	Check whether the text is entered.
500	MSS.20010090	Detect language error	Detect language error	Contact technical support.
500	MSS.20010094	External asset readInputStream fail	External asset readInputStream fail	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.20010095	External asset download is incomplete	External asset download is incomplete	Contact technical support.
500	MSS.20010096	The video_making _type is MODEL, model_id cannot be empty	The video_making _type is MODEL, model_id cannot be empty	The video_making_typ e is MODEL, model_id cannot be empty
500	MSS.20010097	The video_making _type is PICTURE, human_image cannot be empty	The video_making _type is PICTURE, human_image cannot be empty	The video_making_typ e is PICTURE, human_image cannot be empty
500	MSS.20010098	please use the correct role HUMAN_MO DEL_2D asset	please use the correct role HUMAN_MO DEL_2D asset	please use the correct role HUMAN_MODEL_ 2D asset
500	MSS.20010099	The job is not running state. jobId is {0}, state is {1}	The job is not running state. jobId is {0}, state is {1}	The job is not running state. jobId is , state is
500	MSS.20010100	InteractionRul eGroup not found, roomId is {0}	InteractionRul eGroup not found, roomId is {0}	Check whether the parameter settings are correct.
500	MSS.20010111	audio asset not found	audio asset not found	Check whether the audio information is correct.
500	MSS.20010112	Text driven, introduction text cannot be null	Text driven, introduction text cannot be null	Text driven, introduction text cannot be null
500	MSS.42000001	Internal error	Internal error	Contact technical support.
500	MSS.42000002	TTSC task failed	TTSC task failed	Check TTS permissions and configuration

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.42000003	Load Model failed	Load Model failed	Check model file
500	MSS.42000005	Action info error	Action info error	Check Action file
500	MSS.42001001	Model not zip file	Model not zip file	Check model file
500	MSS.42001002	Audio file is not valid	Audio file is not valid	Check audio file
500	MSS.42001003	Mask file not exist	Mask file not exist	Check mask file
500	MSS.42001004	ori_4k not zip file	ori_4k not zip file	check ori_4k file
500	MSS.42001005	TTSC return zero length pcm	TTSC return zero length pcm	Check if text and TTS language match or audio file length is zero
500	MSS.47000001	ERROR	Internal error	Contact technical support.
500	MSS.47000002	infer service error	The inference service is abnormal.	Contact technical support.
500	MSS.47000003	Failed to prepare the task: {0}	An error occurs in the task preparation phase.	Contact technical support.
500	MSS.47000004	Failed to create infer model: {0}	Failed to load the model.	Contact technical support.
500	MSS.47000005	join room fail	Failed to join the RTC room.	Contact technical support.
500	MSS.47000006	manager service error: {0}	The manager service has error	Contact technical support.
500	MSS.47000007	job stop by manager command	The task receives an external end command.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.47000008	subscribe job edit command fail	Failed to subscribe to the task command.	Contact technical support.
500	MSS.47000009	fsm state {0} time out	Inference-related state timeout	Contact technical support.
500	MSS.47000010	ics service error: {0}	The ics service has error	Contact technical support.
400	MSS.00020004	project id not find	The project ID in the tenant account token is empty.	Check whether the account token is obtained properly.
400	MSS.00020005	tenant info not find	The tenant information does not exist in the system.	The user needs to access the MetaStudio service page or interface once.
400	MSS.00020012	total quota is less	The quota allocated to the user exceeds the limit of the total quota.	Decrease the allocated amount.
400	MSS.00025001	allocate resource error	An error occurs when the SP allocates resources.	1. Check whether the parameters for invoking the SP allocation interface are correct. 2. Check whether the number of resources that can be allocated to the SP meets the maximum number of resources of the SP.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.00025002	activated quantity exceeds the limit	The number of resources activated by the SP exceeds the value of this parameter.	Reduce the number of activated resources.
400	MSS.00025003	resourceActivationExpireTime is expire	The resource activated by the SP has expired. The current time is later than the resource expiration time.	Check whether the resource has expired. Activate other normal resources.
400	MSS.00025004	available quantity is insufficient	The number of resources in the pay-per-use resource package allocated by the SP exceeds the number of resources that can be allocated.	Check the number of remaining resources in the pay-per-use resource package. Allocate other resources or purchase them.
400	MSS.00025006	sp resource is insufficient	The quantity of allocated or reclaimed resources does not meet the requirements. The quantity of allocated or reclaimed resources can be allocated or reclaimed.	Check allocatable and recyclable resources and reduce the number of allocated or reclaimed resources.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.00025008	customer name already exists in sp	The customer has been associated with another SP.	Contact the customer to check whether the SP has been associated with another SP. Disassociate the SP and try again.
401	MSS.00020002	phrase token fail	An exception occurred when parsing the token.	Obtain the token of the IAM account and try again.
401	MSS.00020010	no system admin privilege	Non-system administrator cannot invoke the system administrator URL.	Please apply to become a system administrator.
401	MSS.00022007	black mode reject	The account is in the blocklist, and the interface invoking is restricted.	Contact the operation personnel to confirm and remove the blocklist.
401	MSS.00023001	insufficient privilege	Insufficient permission. The parameter in the token is invalid or the required permission is insufficient.	Check whether the account token is correct and whether the account token has the corresponding permission.
401	MSS.00023003	frozen or restricted	The account is frozen or restricted.	Check whether the account is restricted. If you have any questions, contact customer service.
403	MSS.00020006	projectid not match	The projectId in the token does not match that in the path.	Check whether the token and projectId in the interface invoking are the same user project.

Status Code	Error Codes	Error Message	Description	Solution
403	MSS.00020009	invalid parameter	invalid parameter	Check the interface document and interface parameters.
403	MSS.00020011	quota is less	The purchased resource quantity or quota is insufficient when the resource is being used.	1. Check whether sufficient resources are subscribed to. 2. Check whether the allocated quota is sufficient.
403	MSS.00022001	insufficient modelingCount	insufficient modelingCount	Please increase the image quota of the double digital person.
403	MSS.00022002	insufficient visualMotionCaptureTime	insufficient visualMotionCaptureTime	Check the number of resources.
403	MSS.00022003	insufficient liveTime	insufficient liveTime	Check the number of resources.
403	MSS.00022004	insufficient videoTime	insufficient videoTime	Check the number of resources.
403	MSS.00022005	insufficient ttsaContentTime	insufficient ttsaContentTime	Check the number of resources.
403	MSS.00022006	insufficient expireTime	insufficient expireTime	Check the number of resources.
403	MSS.00022008	not have agreement	not have agreement	Invoke this interface again after signing the privacy statement agreement.
403	MSS.00022009	Tenant Status is BLOCK	The user's IAM account is frozen.	Check whether the IAM account is frozen.

Status Code	Error Codes	Error Message	Description	Solution
403	MSS.00022010	have not completed real-name authentication	The IAM account is not authenticated by real name.	Complete real-name authentication.
403	MSS.00024001	privilege not find	The account does not have the required permission to invoke the interface.	Check whether the account has the permission to invoke the required interface. If the account does not have the permission, contact operation personnel to apply for the permission.
403	MSS.00024002	quota not find	quota not find	Contact technical support.
403	MSS.00024003	appUser not authority	appUser authentication failed	Contact technical support.
403	MSS.00025005	SP privilege not find	SP privilege not find	Add SP permissions to the user
500	MSS.00020001	internal server error	internal server error	Contact technical support.
500	MSS.00020007	try get lock fail	try get lock fail	Contact technical support.
500	MSS.00021002	cbc order not exist	cbc order not exist	Contact technical support.
500	MSS.00021003	the resource to unfreeze does not exist	the resource to unfreeze does not exist	Contact technical support.
500	MSS.00021004	the resource to delete does not exist	the resource to delete does not exist	Contact technical support.
500	MSS.00021005	cbc unfreeze fail	cbc unfreeze fail	Contact technical support.
500	MSS.00021006	cbc delete fail	cbc delete fail	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.00021008	cbc resource is not free	cbc resource is not free	Contact technical support.
500	MSS.00021009	the resource does not exist	the resource does not exist	Contact technical support.
500	MSS.00021010	the resource to freeze does not exist	the resource to freeze does not exist	Contact technical support.
500	MSS.00021011	resource not find	resource not find	Contact technical support.
500	MSS.00021012	cbc subscribe fail	cbc subscribe fail	Contact technical support.
500	MSS.00021014	Call iam met error	Call iam met error	Contact technical support.
500	MSS.00021015	failed to generate certificate	failed to generate certificate	Contact technical support.
500	MSS.00021016	failed to verifier token	failed to verifier token	Reget the correct token
500	MSS.00021101	failed to create asset info from cbc	Failed to call the CBC API	Contact technical support.
500	MSS.00021103	failed to create asset info from smn	The interface that calls SMN fails	Contact technical support.
500	MSS.00021104	Failed to freeze the deposit	Failed to freeze the deposit.	Recharge the account.
500	MSS.00021105	Failed to verify risk control	Failed to verify risk control	Contact technical support.
500	MSS.0002120001	failed to cleanUp from dac	Failed to clear DAC resources	Contact technical support.
500	MSS.0002120002	failed to setAssetQuotas from dac	Failed to set the asset quota in the DAC.	Contact technical support.
500	MSS.0002120004	failed to setVdsQuotas from cjms	failed to setVdsQuotas from cjms	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.000212005	request bls fail	request bls fail	Contact technical support.
500	MSS.000212006	cjms usage reaches upper limit	cjms usage reaches upper limit	Contact technical support.
500	MSS.000212007	failed to setQuotas from mps	Failed to set a quota for MPS	Contact technical support.
500	MSS.000212008	failed to setQuotas from vcms	Failed to set a quota for vcms	Contact technical support.
500	MSS.000212009	failed to setQuotas from dhtms	DHTM failed to set a quota	Contact technical support.
500	MSS.0002500 7	customer info not find	customer info not find	Have the user log in to the MetaStudio page
500	MSS.0002500 9	SP has been linked	The user is associated with an SP	Disassociate the user from the original SP
500	MSS.000250 10	The tenant is an SP	The tenant is already an SP	Delete the SP permissions of the user
503	MSS.0002000 3	mongo operation fail	The SQL statement failed to be executed	Contact technical support.
503	MSS.0002000 8	service unavailable	The connection failed	Contact technical support.
503	MSS.0002100 1	iam service unavailable	Failed to connect to IAM	Contact technical support.
503	MSS.0002110 2	CBC service unavailable	Failed to connect to CBC	Contact technical support.
503	MSS.0002300 2	quota config error	The quota configuration parameter is incorrect	Modify the parameters

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.20050004	Failed to obtain asset information.	Failed to obtain asset information.	Contact technical support.
400	MSS.20050005	Failed to obtain asset information. The asset ID or project ID is invalid.	Failed to obtain asset information. The asset ID or project ID is invalid.	Check the asset ID or project ID.
400	MSS.20050013	Failed to obtain the task information. The task ID or project ID is invalid.	Failed to obtain the task information. The task ID or project ID is invalid.	Check the task ID and project ID.
400	MSS.20050015	The websocket request failed.	The websocket request failed.	Check whether the message sent by the WebSocket is empty.
400	MSS.20050029	The AK/SK is not configured.	The AK/SK is not configured.	Configure the AK/SK.
400	MSS.20050035	Invalid AK/SK.	Invalid AK/SK.	Replace the AK/SK.
401	MSS.20050023	WebSocket interface authentication failed.	WebSocket interface authentication failed.	Check the carried authentication information.
429	MSS.20050025	Creating a Language Asynchronous Task Flow Control.	Creating a Language Asynchronous Task Flow Control.	Please try again later.
500	MSS.20050012	Failed to generate the audition voice.	Failed to generate the audition voice.	Contact technical support.
500	MSS.20050028	Failure returned by the algorithm side.	Failure returned by the algorithm side.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	MSS.20050032	The TTS returns a failure.	The TTS returns a failure.	Contact technical support.
500	MSS.20050033	Return failure.	Return failure.	Contact technical support.
500	MSS.20050034	Text-to-speech failed.	Text-to-speech failed.	Contact technical support.
400	MSS.20020001	The task status does not allow the current operation.	illegal job state	Confirm if the current task status is correct.
400	MSS.20020002	job is not existed	job not found	Confirm whether the job information is correct
400	MSS.20020004	There is an issue with the training data. Please check and resubmit	illegal training set	Check if the training data meets the requirements
400	MSS.20020005	training failure	job training failure	Contact technical support.
400	MSS.20020007	illegal file	illegal file	commit valid file
400	MSS.20020008	The number of tasks in production has reached the maximum limit. Please try again later	too many jobs	The number of tasks in production has reached the maximum limit. Please try again later
400	MSS.20020010	The authorization letter file is incorrect. Please check and upload it again.	The authorization letter file is incorrect. Please check and upload it again.	The authorization letter file is incorrect. Please check and upload it again.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.20020011	The format of the uploaded audio file is incorrect. Use the correct audio file according to the guide.	The format of the uploaded audio file is incorrect. Use the correct audio file according to the guide.	The format of the uploaded audio file is incorrect. Use the correct audio file according to the guide.
400	MSS.20020012	unexpected file in package	unexpected file in package	The file type in the compressed package does not meet the requirements of the task. Please resubmit according to the requirements.
400	MSS.20020013	package is not a valid zip	package is not a valid zip	Please upload a valid zip file.
400	MSS.20020014	no quota	no quota	Purchase Quota
400	MSS.20020015	the content of text is not match the language	the content of text is not match the language	Verify if the text and voice match, and re-upload if necessary.
400	MSS.20020016	unexpected wav and txt count	unexpected wav and txt count	Please upload the corpus again according to the requirements
400	MSS.20020017	unexpected wav count	unexpected wav count	Please upload the corpus again according to the requirements
400	MSS.20020018	illegal audio format	illegal audio format	Please re-upload after confirming the audio format.
400	MSS.20020022	too many entries in package	too many entries in package	Remove unnecessary files and upload again.

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.20020023	training package too large	training package too large	Please confirm that the contents of the compressed file are correct before re-uploading.
400	MSS.20020024	file in package too large	file in package too large	Please confirm that the contents of the compressed file are correct before re-uploading.
400	MSS.20020025	unexpected directory in package	unexpected directory in package	Remove unnecessary directories and re-upload.
400	MSS.20020026	entry in package has illegal name	entry in package has illegal name	Rename the file and upload it again after correction
400	MSS.20020027	training data not exist	training data not exist	uploading the training data
400	MSS.20020028	voice and txt not match	voice and txt not match	Confirm the audio and upload it again
400	MSS.20020029	audio is too long or too short!	audio is too long or too short!	Please re-upload valid audio
400	MSS.20020030	pre uploaded file not exist	pre uploaded file not exist	Please upload file first
400	MSS.20020031	commit file not same with pre uploaded	commit file not same with pre uploaded	Please commit file correctly
400	MSS.20020032	fail to get temp example audio	fail to get temp example audio	retry
400	MSS.20020033	asset not exist example audio	asset not exist example audio	please contact with admin

Status Code	Error Codes	Error Message	Description	Solution
400	MSS.20020034	split wav by annotation info failed.	split wav by annotation info failed.	please contact with admin
400	MSS.20020035	jss split wav failed	jss split wav failed	please contact with admin
400	MSS.20020036	jss has not uploaded annotation file	jss has not uploaded annotation file	please contact with admin

10.3 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 Management Console**
- **Obtaining a Project ID by Calling an API**

Obtaining a Project ID from the Management 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.

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

Figure 10-1 Obtaining a project ID
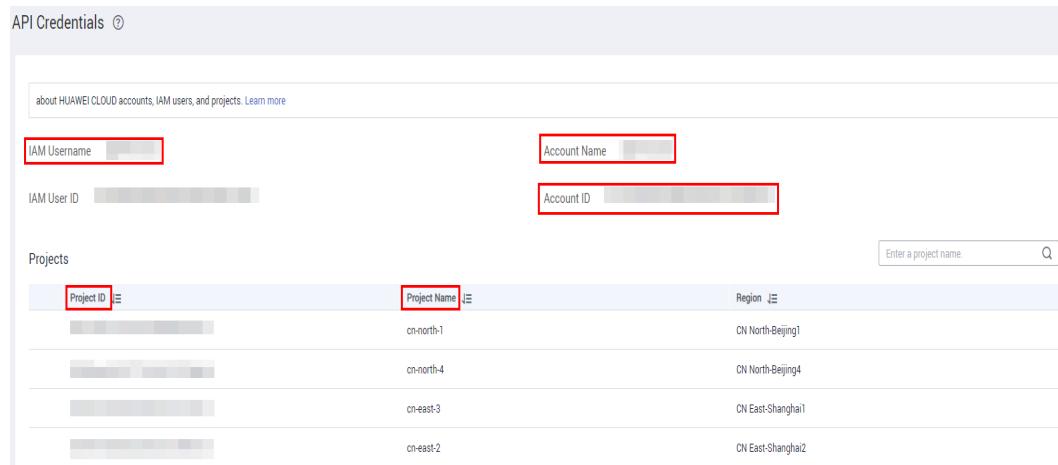
----End

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 **Endpoints**. 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"
    }
}
```

10.4 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 10-2 Obtaining an account ID
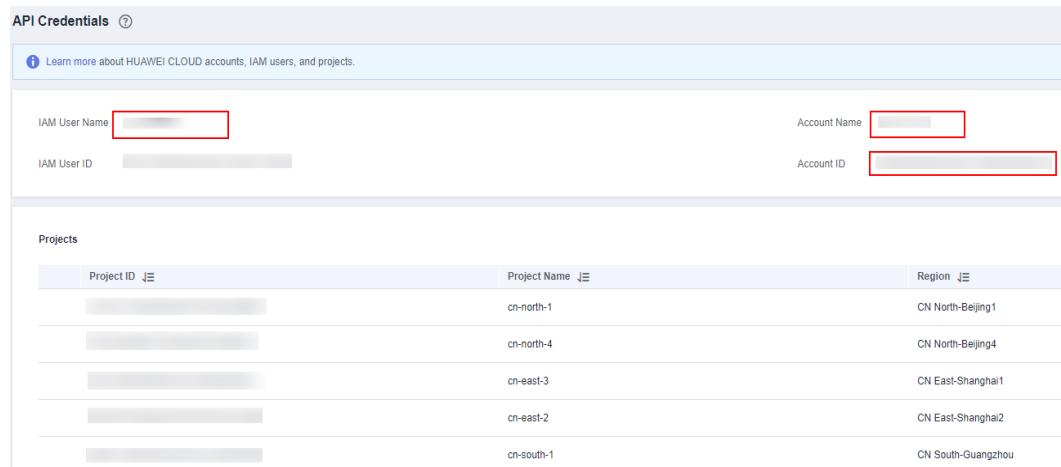
----End

10.5 HTTP Commands for Controlling Livestreaming

Virtual avatar livestreaming can be taken over by humans through the HTTP API. After the takeover by humans, virtual avatars can speak through:

- Text control: The corresponding command is **INSERT_PLAY_SCRIPT**, and the params structure is **PlayTextInfo**.
- Audio control: The corresponding command is **INSERT_PLAY_AUDIO**, and the params structure is **PlayTextInfo**.

When the command of the API for **controlling virtual human livestreaming** is **GET_CURRENT_PLAYING_SCRIPTS**, the response structure is **LivePlayingScriptList**.

PlayTextInfo

Table 10-2 PlayTextInfo

Parameter	Mandatory (Yes/No)	Type	Description
text_config	No	**Table 10-3** object	Script configuration.

Paramet er	Mandat ory (Yes/No)	Type	Description
play_typ e	No	String	Playback mode. The options are as follows: • **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. The options are as follows: • **STREAMER**: streamer • **CO_STREAMER**: assistant Default value: **STREAMER** The value contains 0 to 32 characters.
rule_inde x	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 10-3 TextConfig

Paramet er	Mandat ory (Yes/No)	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

Paramet er	Mandat ory (Yes/No)	Type	Description
			start and end of the tag. The property can be set to Chinese 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 human. </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 10-4 PlayAudioInfo

Paramet er	Mandat ory (Yes/No)	Type	Description
audio_url	No	String	Audio URL. The value contains 0 to 2,048 characters.

Parameter	Mandatory (Yes/No)	Type	Description
play_type	No	String	Playback mode. The options are as follows: • **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.
play_role	No	String	Playback role. The options are as follows: • **STREAMER**: streamer • **CO_STREAMER**: assistant 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 10-5 LivePlayingScriptList

Parameter	Mandatory (Yes/No)	Type	Description
scene_scripts	No	Array of **Table 10-6**	Scripts. Array length: 1–100

Table 10-6 LivePlayingScriptInfo

Paramet er	Mandat ory (Yes/No)	Type	Description
script_na me	No	String	Script name. The value contains 1 to 256 characters.
model_as set_id	No	String	Virtual human model asset ID. The value contains 0 to 64 characters.
shoot_scr ipts	No	Array of **Table 10-7**	Video shooting scripts. Array length: 0–100

Table 10-7 LivePlayingShootScriptItem

Paramet er	Mandat ory (Yes/No)	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.

# 10.6 RTSA Commands for Controlling Livestreaming

The RTSA commands for controlling livestreaming are described as follows:

- **Virtual Human Livestreaming Status Changes**
- **RTSA Command Definition**

Virtual Human Livestreaming Status Changes

Figure 10-3 shows how the virtual human livestreaming status changes.

Figure 10-3 Livestreaming status changes
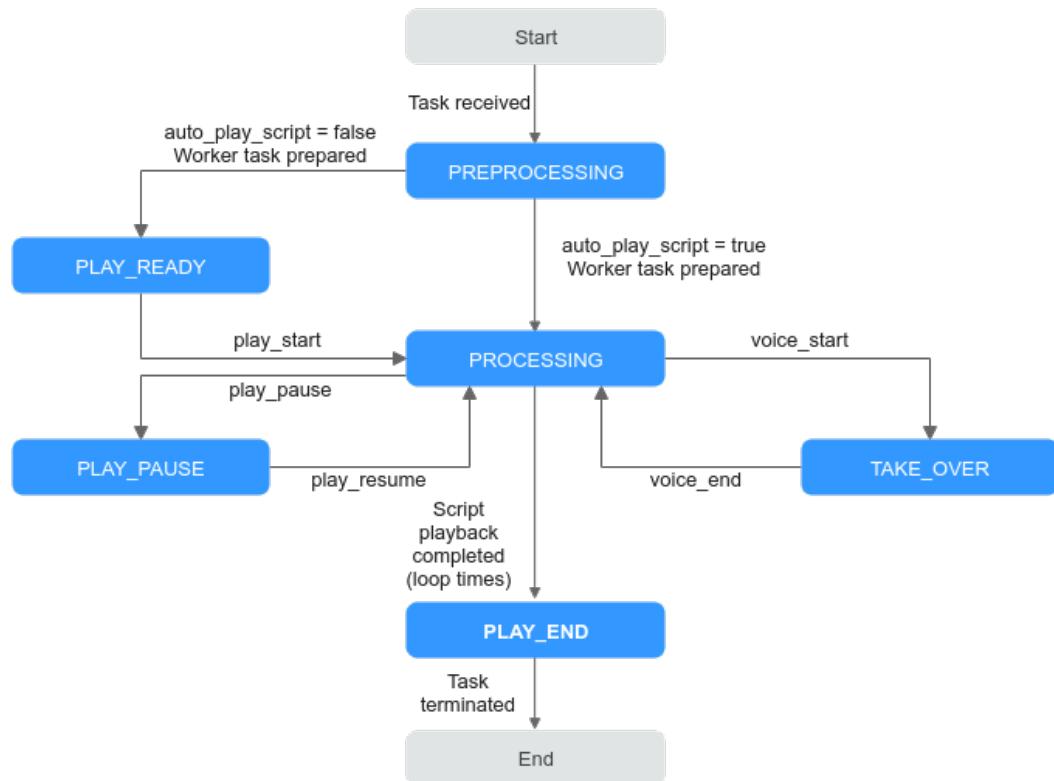
The flowchart is described as follows:

- **PREPROCESSING**: The image model loading starts on MetaStudio.
- **PLAY_READY**: The image model has been loaded. In this case, the virtual human is in a silent status, and waits for an instruction to start playing the script.
- **PROCESSING**: working status of a virtual human. The virtual human livestreams as instructed by the text or audio preset in the livestreaming task.
- **PLAY_PAUSE**: The virtual human livestreaming is paused. In this case, the virtual human is in a silent status, and waits for an instruction to resume playing 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 human 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 human remains silent and waits for an instruction to start playing the script.

– **PROCESSING**: The livestreaming task is ongoing.

– **PLAY_PAUSE**: The virtual human 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 human starts playing the script.

■ **play_pause**: The virtual human pauses the script playback and remains silent.

■ **play_resume**: The virtual human resumes playing the script.

■ **voice_start**: starting the real-time virtual human voice playback

■ **voice_end**: ending the real-time virtual human 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 human speaks a complete sentence.

10.7 SSML Definition of Text Control

Text control on MetaStudio uses Speech Synthesis Markup Language (SSML) to control the behaviors of virtual humans, 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 humans.

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.

  – **_** 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.

  📖 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 10-8 Property description

Property Name	Property Type	Property Value	Mandatory (Yes/No)	Description
time	String	Value range: 200 ms to 10s	No	Mute pause duration, in milliseconds.

Property Name	Property Type	Property Value	Mandatory (Yes/No)	Description
strength	String	The options are as follows: ● **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**

  : 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 10-9 Property description

Property Name	Property Type	Property Value	Mandatory (Yes/No)	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**

- **Tag relationship**

  Text can be included but any other tag cannot.

- **Example value**

  The<phoneme ph="tian1 qi1">weather</phoneme>is good today.

say-as

- **Description**

  : 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 10-10 Property description

Property Name	Property Type	Property Value	Mandatory (Yes/No)	Description
interpret-as	String	• **money**: money • **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="money">15.55 RMB</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 10-11 Property description

Property Name	Property Type	Property Value	Mandatory (Yes/No)	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**

  : Controls the local speaking speed.

- **Syntax**

  ```
  <prosody rate="50">Text </prosody>
  ```

- **Property**

  Table 10-12 Property description

Property Name	Property Type	Property Value	Mandatory (Yes/No)	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 human.</prosody>
  ```

11 Change History

Table 11-1 Change history

Released On	Description
2024-03-30	This issue is the first official release.