Media Live

API Reference

Issue 01

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HUAWEI CLOUD COMPUTING TECHNOLOGIES CO., LTD.

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1 Before You Start

Media Live is a broadcast-grade livestreaming service that supports features such as channel management and content encryption, making it an ideal option for media and broadcasting.

This document describes how to use application programming interfaces (APIs) to perform operations on Media Live, such as managing live transcoding templates and creating channels. For details about all supported operations, see **API Overview**.

Before calling a Media Live API, ensure that you are familiar with concepts related to Media Live. For details, see *Media Live User Guide*.

Media Live supports Representational State Transfer (REST) APIs, allowing you to call APIs using HTTPS. For details about API calling, see **Calling APIs**.

Endpoints

An endpoint is the request address for calling an API. Endpoints vary depending on regions. For the endpoints of Media Live, see **Table 1-1**. You can also query the endpoints of services from **Regions and Endpoints**.

Table 1-1 Endpoints

Region Name	Region Code	Endpoint
CN-Hong Kong	ap-southeast-1	live.ap-southeast-1.myhuaweicloud.com
AP-Singapore	ap-southeast-3	live.ap-southeast-3.myhuaweicloud.com

Constraints

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

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Table 1-2 API request throttling

API Category	API Name	Max. User Requests	Max. API Requests
OTT Channel Management	• Creating an OTT Channel • Querying Channel Information • Deleting Channel Information • Modifying Channel Packaging Information • Modifying Channel Input Information • Modifying Channel Recording Information • Modifying General Channel Information • Changing the Channel Status • Modifying Channel Transcoding Template Information • Querying Channel Statistics	80 times/minute	80 times/minute
Integration with Cloud Eye	• Querying Dimension Configurations • Querying Instances	80 times/minute	80 times/minute

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API Category	API Name	Max. User Requests	Max. API Requests
StreamConnect	• Creating a Flow • Querying Flows • Deleting a Flow • Obtaining Flow Details • Starting a Flow Task • Stopping a Flow Task • Modifying a Flow Source • Creating an Output of Pushing Streams to a Third Party Through SRT • Updating an Output of Pushing Streams to a Third Party Through SRT • Querying Outputs of Pushing Streams to a Third Party Through SRT • Deleting an Output of Pushing Streams to a Third Party Through SRT	80 times/minute	80 times/minute

Concepts

- Account

  An account is created upon successful registration with the cloud platform. The account has full access permissions for all of its cloud services and resources. It can be used to reset user passwords and grant user permissions.

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An account is a payment entity. Accounts should not be used directly 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 account, 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. Deploying cloud resources in different regions can better suit certain user requirements or comply with local laws or regulations.

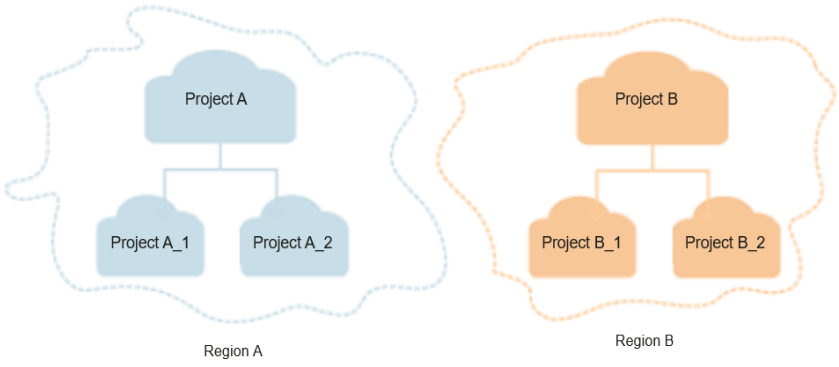
- AZ

  An AZ contains one or more physical data centers equipped with independent ventilation, fire, water, and electricity facilities. Compute, networking, storage, and other resources in an AZ are logically divided into multiple clusters. AZs within a region are interconnected using high-speed optical fibers to allow you to build cross-AZ, high-availability systems.

- Project

  Projects group and isolate resources (including compute, storage, and networking 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



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2 API Overview

The following tables list the Media Live APIs. Before calling a Media Live API, obtain a user token. The obtained token can then be used to authenticate the calling of other APIs. For details about how to call a Media Live API, see **Example 1: Creating a Channel**.

OTT Channel Management

Table 2-1 OTT channel management APIs

API	Description
POST /v1/{project_id}/ott/channels	**Creating an OTT Channel**
GET /v1/{project_id}/ott/channels	**Querying Channel Information**
DELETE /v1/{project_id}/ott/channels	**Deleting Channel Information**
PUT /v1/{project_id}/ott/channels/endpoints	**Modifying Channel Packaging Information**
PUT /v1/{project_id}/ott/channels/input	**Modifying Channel Input Information**
PUT /v1/{project_id}/ott/channels/record-settings	**Modifying Channel Recording Information**
PUT /v1/{project_id}/ott/channels/general	**Modifying General Channel Information**
PUT /v1/{project_id}/ott/channels/state	**Changing the Channel Status**
PUT /v1/{project_id}/ott/channels/encorder-settings	**Modifying Channel Transcoding Template Information**
POST /v1/{project_id}/ott/channels/statistic	**Querying Channel Statistics**

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Integration with Cloud Eye

Table 2-2 APIs for integration with Cloud Eye

API	Description
GET /v1/{project_id}/ott/dims-info	**Querying Dimension Configurations**
POST /v1/{project_id}/ott/instances	**Querying Instances**

StreamConnect

Table 2-3 StreamConnect APIs

API	Description
POST /v1/{project_id}/flows	**Creating a Flow**
GET /v1/{project_id}/flows	**Querying Flows**
DELETE /v1/{project_id}/flows	**Deleting a Flow**
GET /v1/{project_id}/flows/detail	**Obtaining Flow Details**
PUT /v1/{project_id}/flows/start	**Starting a Flow Task**
PUT /v1/{project_id}/flows/stop	**Stopping a Flow Task**
PUT /v1/{project_id}/flows/sources	**Modifying a Flow Source**
POST /v1/{project_id}/flows/outputs	**Creating an Output of Pushing Streams to a Third Party Through SRT**
PUT /v1/{project_id}/flows/outputs	**Updating an Output of Pushing Streams to a Third Party Through SRT**
GET /v1/{project_id}/flows/outputs	**Querying Outputs of Pushing Streams to a Third Party Through SRT**
DELETE /v1/{project_id}/flows/outputs	**Deleting an Output of Pushing Streams to a Third Party Through SRT**

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3 Calling APIs

3.1 Making an API Request

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

Request URI

A request URI is in the following format:

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

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

Table 3-1 URI parameter description

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

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

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

Figure 3-1 Example URI

NOTE

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

Request Methods

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

Table 3-2 HTTP methods

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

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

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

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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 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:443
Content-Type	Specifies the type (or format) of the message body. The default value **application/json** is recommended. Other values of this field will be provided for specific APIs if any.	Yes	application/json
Content-Length	Specifies the length of the request body. The unit is byte.	No	3495
X-Project-Id	Specifies the project ID. Obtain the project ID by following the instructions in **Obtaining a Project ID**.	No This field is mandatory for requests that use AK/SK authentication in the Dedicated Cloud (DeC) scenario or multi-project scenario.	e9993fc787d94b6c886cbaa340f9c0f4

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

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

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

If all data required for the API request is available, you can send the request to call the API through **curl**, **Postman**, or coding.

3.2 Authentication

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

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

AK/SK Authentication

NOTE

- AK/SK authentication supports API requests with a body not larger than 12 MB. For API requests with a larger body, token authentication is recommended.
- An AK/SK pair can either be permanent or temporary. If it is temporary, the **X-Security-Token** field must be included in the request header. The value is the security token of the temporary AK/SK pair.
- API Gateway checks the time format and compares the request time with the time when API Gateway received the request. If the time difference exceeds 15 minutes, API Gateway will reject the request. So, the local time on the client must be synchronized with the clock server to avoid a large offset in the value of **X-Sdk-Date** in the request header.

In AK/SK authentication, an AK/SK pair is used to sign a request and the signature is then added to the request header for identity verification.

- 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 pair to sign requests based on a 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.

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Token Authentication

NOTE

- A token remains valid for 24 hours after it is generated. You can cache a token and reuse it for authentication instead of generating a new one each time.
- Before using a token, ensure that it has sufficient time remaining before expiration. Using a near-expiry token may cause API call failures.

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

Calling APIs of this service requires a project-level token. That is, when calling the **Obtaining a User Token** API, set **auth.scope** in the request body to **project**.

```
{
    "auth": {
        "identity": {
            "methods": [
                "password"
            ],
            "password": {
                "user": {
                    "name": "username",   // IAM user name
                    "password": $ADMIN_PASS,  // IAM user password. You are advised to store it in ciphertext in the configuration file or an environment variable and decrypt it when needed to ensure security.
                    "domain": {
                        "name": "domainname"  // Name of the account that the IAM user belongs to
                    }
                }
            }
        },
        "scope": {
            "project": {
                "name": "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 **ABCDEFG....**, **X-Auth-Token: ABCDEFG....** can be added to a request as follows:

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

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**.

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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 for the API used to **create an IAM user**.

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_[redacted]_null_af2953f2bcc67a42325a69a19e6c32a2",
"Date": "Tue, 21 May 2024 09:03:40 GMT",
"Content-Type": "application/json; charset=utf8"
```

(Optional) Response Body

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

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

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

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```
        "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.

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4 Examples

4.1 Example 1: Creating a Channel

This section describes how to call Media Live APIs to create a channel.

Used APIs

To use token-based authentication, **obtain a user token** and add **X-Auth-Token** to the request header of the service API when making an API request.

Procedure

Step 1 **Obtain a user token** and use it to authenticate the calling of Media Live APIs.

For details, see **Making an API Request**. **CN North-Beijing4** is used as an example. If you need to call a Media Live API in another region, replace the endpoint with the **IAM endpoint** of that region.

```
POST https://iam.cn-north-4.myhuaweicloud.com/v3/auth/tokens
Content-Type: application/json
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username",
          "password": "password",
          "domain": {
            "name": "domainname"
          }
        }
      }
    },
    "scope": {
      "project": {
        "name": "projectname"
 }
    }
  }
}
```

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As shown in **Figure 4-1**, information in the red box indicates the user token.

Figure 4-1 Obtaining the user token

Step 2 Select the POST request method and enter the request URI.

```
POST https://live.cn-north-4.myhuaweicloud.com/v1/{project_id}/ott/channels
```

live.cn-north-4.myhuaweicloud.com is the endpoint of Media Live. You can obtain the endpoint from **Before You Start**.

NOTE

The region where an IAM API is called must be the same as the region where a Media Live API is called. For example, the user token obtained when you call an IAM API in the **CN North-Beijing4** region can only be used to authenticate the requests for calling Media Live APIs in the **CN North-Beijing4** region.

Step 3 In the request header, add **X-Auth-Token** and set its value to be the token obtained in **Step 1**.

Step 4 Transfer the following parameters in the request body. For details about the parameters, see the API for **creating an OTT channel**.

```
{
    "domain": "push.domain.com",
    "app_name": "ott",
    "id": "testChannel",
    "name": "testChannel",
    "input": {
        "input_protocol": "FLV_PULL",
        "sources": [
            {
                "url": "http://push.domain.com/ott/testChannel/index.flv",
                "bitrate": 2048,
                "width": 2096,
                "height": 1024
            }
        ]
    },
    "record_settings": {
        "rollingbuffer_duration": 3600
    },
    "encoder_settings": [
        {
            "template_id": "hd"
        }
```

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```
  ],
  "endpoints": [
    {
      "hls_package": [
        {
          "url": "pull.domain.com/ott/testChannel/index.m3u8",
          "stream_selection": [
            {
              "key": "bitrate=900000-1800000",
              "max_bandwidth": 1800000,
              "min_bandwidth": 900000
            }
          ],
          "segment_duration_seconds": 4,
          "encryption": {
                "level": "content",
                "resource_id": "test",
                "system_ids": [
                  "FairPlay"
                ],
                "url": "http://IP.Port/tkm/v1/owner/Data",
                "speke_version": "1.0",
                "request_mode": "direct_http",
                "http_headers": [
                  {
                    "key": "Authorization",
                    "value": "Basic aHVhd2VpY********************XM1Qjd6"
                  }
                ]
              }
        }
      ]
    }
  ],
  "state": "ON"
}
```

If the request succeeds, only a status code 201 Created is returned.

If the request fails, the following error code and error description are returned along with a status code 400 Bad Request:

```
"result_code": "LIVE.100011001",
"result_msg": "Request parameters is invalid"
```

----End

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5 OTT Channel Management

5.1 Creating an OTT Channel

Function

Creates an OTT channel.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:createChannel	Write	-	-	-	-

URI

POST /v1/{project_id}/ott/channels

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".

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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. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Table 5-3 Request body parameters

Parameter	Mandatory	Type	Description
domain	Yes	String	Ingest domain name of a channel.
app_name	Yes	String	Group name or application name.
id	Yes	String	(Mandatory) Unique ID of a channel.
name	No	String	Channel name. This parameter is optional.

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Parameter	Mandatory	Type	Description
state	Yes	String	Channel status. • **ON**: After a channel is delivered, functions such as stream pull, transcoding, and recording are automatically enabled. • **OFF**: Only the channel information is saved but the channel is not started.
mode	No	String	Channel mode. **ADD_CDN**: one-stop service, with origin servers and CDN bound together (default) **ONLY_OS**: independent origin service, with CDN decoupled from origin servers
region	No	String	This parameter is valid when **mode** is set to **ONLY_OS**. It indicates the region where the channel is located. Options: CN North-Beijing4: cn-north-4 CN East-Shanghai1: cn-east-3 AP-Singapore: ap-southeast-3 CN-Hong Kong: ap-southeast-1 ME-Riyadh: me-east-1 AF-Johannesburg: af-south-1 EU-Dublin: eu-west-101
input	Yes	**InputStreamInfo** object	Channel input stream information.
encoder_settings	No	Array of **encoder_settings** objects	Transcoding template configuration.
record_settings	Yes	**record_settings** object	Catch-up TV configuration.
endpoints	No	Array of **EndpointItem** objects	Channel output stream information.
encoder_settings_expand	No	**EncoderSettingsExpand** object	Audio output configuration

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Table 5-4 InputStreamInfo

Parameter	Mandatory	Type	Description
input_protocol	Yes	String	Channel input protocol • **FLV_PULL** • **RTMP_PUSH** • **HLS_PULL** • **SRT_PULL** • **SRT_PUSH**
sources	No	Array of **SourcesInfo** objects	Information about the primary source stream of a channel. This parameter is optional when the stream input protocol is **RTMP_PUSH** or **SRT_PUSH**. In other cases, this parameter is mandatory.
secondary_sources	No	Array of **SecondarySourcesInfo** objects	Standby input stream array. This parameter is optional. If there is a standby input stream, ensure that the number of channels, codec, and resolution of the primary and standby input streams are the same. If the stream input protocol is **RTMP_PUSH**, you do not need to specify this parameter.
failover_conditions	No	**FailoverConditions** object	(Optional) Configuration provided by the channel supplier to switch between the primary and standby media stream URLs.

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Parameter	Mandatory	Type	Description
max_bandwidth_limit	No	Integer	Maximum bandwidth required when the input protocol is **HLS_PULL**. A streaming URL provided by the user includes the parameter **BANDWIDTH** for audios/videos with different bitrates. • If the maximum bandwidth is specified, Media Live will pull the media stream that has the highest bitrate and a bandwidth lower than the maximum bandwidth from the URL, and push the stream to the origin server. • If the maximum bandwidth is not specified, Media Live will pull the media stream with the largest **BANDWIDTH** value from the URL, and push the stream to the origin server.
ip_port_mode	No	Boolean	When the stream push protocol is **SRT_PUSH** and streams are pushed to the origin server, the encoder does not support the input of **streamid**. In this case, set this parameter to **true**.
ip_whitelist	No	String	IP address whitelist for stream push by customers when the SRT_PUSH type is used
scte35_source	No	String	SCTE-35 signal source of an advertisement. Only **HLS_PULL** channels support this configuration. Currently, this field can only be set to **SEGMENTS**.

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Parameter	Mandatory	Type	Description
ad_triggers	No	Array of strings	Configures an ad trigger. Options: • **Splice insert** • **Provider advertisement** • **Distributor advertisement** • **Provider placement opportunity** • **Distributor placement opportunity**
audio_selectors	No	Array of **InputAudioSelector** objects	Configures an audio selector (a maximum of 8).

Table 5-5 SourcesInfo

Parameter	Mandatory	Type	Description
url	No	String	Channel source stream URL, which is used for external stream pull.
bitrate	No	Integer	Bitrate. This parameter is mandatory when live transcoding is not required. Unit: bit/s. Value range: (0, 104,857,600] (100 Mbit/s)
width	No	Integer	Width corresponding to the resolution. This parameter is optional. Value range: 0–4096 (4K)
height	No	Integer	Height corresponding to the resolution. This parameter is optional. Value range: 0–2160 (4K)
enable_snapshot	No	Boolean	Whether to use the stream for snapshot capturing.
bitrate_for3u8	No	Boolean	Whether to use **bitrate** to fix the bitrate. Default value: **false**
passphrase	No	String	Encryption information when the protocol is **SRT_PUSH**.

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Parameter	Mandatory	Type	Description
backup_urls	No	Array of strings	Standby streaming URL list
stream_id	No	String	Stream ID of the streaming URL in an **SRT_PULL** channel.
latency	No	Integer	Stream pull latency of an **SRT_PULL** channel.
pbkeylen	No	Integer	SRT encryption algorithm 16 = AES-128 24 = AES-192 32 = AES-256

Table 5-6 SecondarySourcesInfo

Parameter	Mandatory	Type	Description
url	No	String	Channel source stream URL, which is used for external stream pull.
bitrate	No	Integer	Bitrate. This parameter is mandatory when live transcoding is not required. Unit: bit/s. Value range: (0, 104,857,600] (100 Mbit/s)
width	No	Integer	Width corresponding to the resolution. This parameter is optional. Value range: 0–4096 (4K)
height	No	Integer	Height corresponding to the resolution. This parameter is optional. Value range: 0–2160 (4K)
bitrate_for3u8	No	Boolean	Whether to use **bitrate** to fix the bitrate. Default value: **false**
passphrase	No	String	Encryption information when the protocol is **SRT_PUSH**
backup_urls	No	Array of strings	Standby streaming URL list
stream_id	No	String	Stream ID of the streaming URL in an **SRT_PULL** channel.

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Parameter	Mandatory	Type	Description
latency	No	Integer	Stream pull latency of an **SRT_PULL** channel.
pbkeylen	No	Integer	SRT encryption algorithm 16 = AES-128 24 = AES-192 32 = AES-256

Table 5-7 FailoverConditions

Parameter	Mandatory	Type	Description
input_loss_threshold_msec	No	Integer	Duration threshold for stopping input streams. When the threshold is reached, the primary/standby switchover is automatically triggered. Unit: millisecond. Value range: 0–3,600,000 (Optional) The default value is **2,000** ms.
input_preference	No	String	Whether the primary ingest URL has the highest priority (**PRIMARY**) or the primary and standby URLs are switched equally (**EQUAL**). In the equal switchover mode, the standby URL is used and will not be automatically switched to the primary URL. (Optional) The default value is **EQUAL**.

Table 5-8 InputAudioSelector

Parameter	Mandatory	Type	Description
name	Yes	String	Name of an audio selector. Enter only letters, digits, hyphens (-), and underscores (_). The name of each selector must be unique within the same channel.

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Parameter	Mandatory	Type	Description
selector_settings	No	**AudioSelectorSettings** object	Configures an audio selector.

Table 5-9 AudioSelectorSettings

Parameter	Mandatory	Type	Description
audio_language_selection	No	**AudioSelectorLangSelection** object	Configures a language selector.
audio_pid_selection	No	**AudioSelectorPidSelection** object	Configures a PID selector.
audio_hls_selection	No	**AudioSelectorHlsSelection** object	Configures an HLS selector.

Table 5-10 AudioSelectorLangSelection

Parameter	Mandatory	Type	Description
language_code	Yes	String	Enter a language code of 2 or 3 lowercase letters.

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Parameter	Mandatory	Type	Description
language_selection_policy	No	String	Language output policy. Options: • **LOOSE**: loose match. For example, if the language code **eng** is selected, an audio stream in English will be preferentially selected. If there is no audio stream in English, the audio stream with the lowest PID will be selected. • **STRICT**: strict match. For example, if the language code **eng** is selected, only an audio stream in English will be selected. If there is no audio stream in English, a muted segment will be automatically added. When this audio selector is used to play the video, the video is muted.

Table 5-11 AudioSelectorPidSelection

Parameter	Mandatory	Type	Description
pid	Yes	Integer	Sets the PID value.

Table 5-12 AudioSelectorHlsSelection

Parameter	Mandatory	Type	Description
name	Yes	String	HLS audio selector name
group_id	Yes	String	HLS audio selector GID

Table 5-13 encoder_settings

Parameter	Mandatory	Type	Description
template_id	No	String	Transcoding template ID.

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Table 5-14 record_settings

Parameter	Mandatory	Type	Description
rollingbuffer_duration	Yes	Integer	Maximum catch-up TV recording duration. The recording is continuous in this period. This parameter is mandatory. Unit: second. The value **0** indicates that recording is not supported. The maximum recording duration is 14 days.

Table 5-15 EndpointItem

Parameter	Mandatory	Type	Description
hls_package	No	Array of **HlsPackageItem** objects	HLS packaging information.
dash_package	No	Array of **DashPackageItem** objects	DASH packaging information.
mss_package	No	Array of **MssPackageItem** objects	MSS packaging information.

Table 5-16 HlsPackageItem

Parameter	Mandatory	Type	Description
id	No	String	Unique ID of the package, which is created by the service and returned during query. This parameter is mandatory when endpoints are modified.
url	No	String	A customized streaming URL, including the method, domain name, and path.
stream_selection	No	Array of **StreamSelectionItem** objects	Filters out a stream whose bitrate is in the range of [min, max] from all streams. If bitrate filtering is not required, you do not need to specify this parameter.

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Parameter	Mandatory	Type	Description
hls_version	No	String	HLS version number.
segment_duration_seconds	Yes	Integer	Output segment duration of a channel. This parameter is mandatory. Unit: second. Value range: 1 to 10 **NOTE** Changing the segment duration will affect time-shifted viewing and catch-up TV of the recorded content. Exercise caution when performing this operation.
playlist_window_seconds	No	Integer	Total output segment duration of a channel. The value is the output segment duration multiplied by the number of segments. There are at least three returned segments. Unit: second. Value range: 0–86,400 (value of converting 24 hours to seconds)
encryption	No	**Encryption** object	Encryption information.
ads	No	Object	Advertising configuration
ext_args	No	Object	Other additional parameters
request_args	No	**PackageRequestArgs** object	Playback configuration
ad_marker	No	Array of strings	Advertisement ID. For HLS, the value is **["ENHANCED_SCTE35"]**.
enable_access	No	Boolean	When **mode** is set to **ONLY_OS**, this parameter specifies whether the output can pull streams from the origin server. The default value is **false**. **true**: allowed **false**: not allowed

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Parameter	Mandatory	Type	Description
allow_all_ip_access	No	Boolean	Whether to allow all IP addresses to access. The default value is **false**. **true**: allowed. The **ip_whitelist** configuration does not take effect. **false**: not allowed. The **ip_whitelist** configuration takes effect. Access is allowed only for IP addresses specified in **ip_whitelist**.
ip_whitelist	No	String	Whitelist of IP addresses that can pull streams from the origin server when **mode** is set to **ONLY_OS**.
cdn_identifier_header	No	**HttpHeader** object	HTTP header CDN authentication header.
origin_domain_master	No	String	Origin domain name – Primary region Same as **CreateOttChannelInfoReq.region** Regular expression: ^([a-zA-Z0-9]([a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?.){2,}[a-zA-Z]{2,16}$ Maximum length: 255 characters
origin_domain_slave	No	String	Origin domain name – Standby region Constraints: Huawei Cloud (International) Standby origin server of AP-Singapore: CN-Hong Kong Standby origin server of CN-Hong Kong: AP-Singapore Standby origin server of ME-Riyadh: AP-Singapore Standby origin server of AF-Johannesburg: AP-Singapore

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Parameter	Mandatory	Type	Description
manifest_name	No	String	Name of the index file of the output. Default value: **index** Length: 0–128 characters Character set: letters, digits, hyphens (-), periods (.), and underscores (_). Paths with slashes (/) are not allowed.
slave_url	No	String	Custom streaming URL, including the method, domain name, and path.
manifest_selection	No	**ManifestSelection** object	Flow selection configuration.

Table 5-17 DashPackageItem

Parameter	Mandatory	Type	Description
id	No	String	Unique ID of the package, which is created by the service and returned during query. This parameter is mandatory when endpoints are modified.
url	No	String	A customized streaming URL, including the method, domain name, and path.
stream_selection	No	Array of **StreamSelectionItem** objects	Filters out a stream whose bitrate is in the range of [min, max] from all streams. If bitrate filtering is not required, you do not need to specify this parameter.
segment_duration_seconds	Yes	Integer	Output segment duration of a channel. This parameter is mandatory. Unit: second. Value range: 1 to 10 **NOTE** Changing the segment duration will affect time-shifted viewing and catch-up TV of the recorded content. Exercise caution when performing this operation.

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Parameter	Mandatory	Type	Description
playlist_window_seconds	No	Integer	Total output segment duration of a channel. The value is the output segment duration multiplied by the number of segments. There are at least three returned segments. Unit: second. Value range: 0–86,400 (value of converting 24 hours to seconds)
encryption	No	**Encryption** object	Encryption information.
ads	No	Object	Advertising configuration
ext_args	No	Object	Other additional parameters
request_args	No	**PackageRequestArgs** object	Playback configuration
ad_marker	No	String	Advertisement ID. For DASH, the value is **xml+bin**.
suggested_presentation_delay	No	Integer	Recommended stream delay Unit: second. Value range: 1 to 120
minimum_update_period	No	Integer	Shortest index update period Unit: second. Value range: 1 to 120
min_buffer_time	No	Integer	Minimum buffer time Unit: second. Value range: 1 to 120
enable_access	No	Boolean	Default value: **false** **true**: allowed **false**: not allowed

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Parameter	Mandatory	Type	Description
allow_all_ip_access	No	Boolean	Whether to allow all IP addresses to access. The default value is **false**. **true**: allowed. The **ip_whitelist** configuration does not take effect. **false**: not allowed. The **ip_whitelist** configuration takes effect. Access is allowed only for IP addresses specified in **ip_whitelist**.
ip_whitelist	No	String	This parameter is valid when **allow_all_ip_access** is set to **false**. IP addresses allowed for access. Separate multiple IP addresses with commas (,). The value must be in CIDR format.
cdn_identifier_header	No	**HttpHeader** object	HTTP header CDN authentication header.
origin_domain_master	No	String	Origin domain name – Primary region Same as **CreateOttChannelInfoReq.region** Regular expression: ^([a-zA-Z0-9]([a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?.){2,}[a-zA-Z]{2,16}$ Maximum length: 255 characters
origin_domain_slave	No	String	Origin domain name – Standby region Constraints: Huawei Cloud (International) Standby origin server of AP-Singapore: CN-Hong Kong Standby origin server of CN-Hong Kong: AP-Singapore Standby origin server of ME-Riyadh: AP-Singapore Standby origin server of AF-Johannesburg: AP-Singapore

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Parameter	Mandatory	Type	Description
manifest_name	No	String	Name of the index file of the output. Default value: **index** Length: 0–128 characters Character set: letters, digits, hyphens (-), periods (.), and underscores (_). Paths with slashes (/) are not allowed.
slave_url	No	String	Custom streaming URL, including the method, domain name, and path.
manifest_selection	No	**ManifestSelection** object	Flow selection configuration.

Table 5-18 MssPackageItem

Parameter	Mandatory	Type	Description
id	No	String	Unique ID of the package, which is created by the service and returned during query. This parameter is mandatory when endpoints are modified.
url	No	String	A customized streaming URL, including the method, domain name, and path.
stream_selection	No	Array of **StreamSelectionItem** objects	Filters out a stream whose bitrate is in the range of [min, max] from all streams. If bitrate filtering is not required, you do not need to specify this parameter.
segment_duration_seconds	Yes	Integer	Output segment duration of a channel. This parameter is mandatory. Unit: second. Value range: 1 to 10 **NOTE** Changing the segment duration will affect time-shifted viewing and catch-up TV of the recorded content. Exercise caution when performing this operation.

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Parameter	Mandatory	Type	Description
playlist_window_seconds	No	Integer	Total output segment duration of a channel. The value is the output segment duration multiplied by the number of segments. There are at least three returned segments. Unit: second. Value range: 0–86,400 (value of converting 24 hours to seconds)
encryption	No	**Encryption** object	Encryption information.
ext_args	No	Object	Other additional parameters
delay_segment	No	Integer	Playback delay, in seconds.
request_args	No	**PackageRequestArgs** object	Playback configuration
enable_access	No	Boolean	Default value: **false** **true**: allowed **false**: not allowed
allow_all_ip_access	No	Boolean	Whether to allow all IP addresses to access. The default value is **false**. **true**: allowed. The **ip_whitelist** configuration does not take effect. **false**: not allowed. The **ip_whitelist** configuration takes effect. Access is allowed only for IP addresses specified in **ip_whitelist**.
ip_whitelist	No	String	This parameter is valid when **allow_all_ip_access** is set to **false**. IP addresses allowed for access. Separate multiple IP addresses with commas (,). The value must be in CIDR format.
cdn_identifier_header	No	**HttpHeader** object	HTTP header CDN authentication header.

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Parameter	Mandatory	Type	Description
origin_domain_master	No	String	Origin domain name – Primary region Same as **CreateOttChannelInfoReq.region** Regular expression: ^([a-zA-Z0-9]([a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?.){2,}[a-zA-Z]{2,16}$ Maximum length: 255 characters
origin_domain_slave	No	String	Origin domain name – Standby region Constraints: Huawei Cloud (International) Standby origin server of AP-Singapore: CN-Hong Kong Standby origin server of CN-Hong Kong: AP-Singapore Standby origin server of ME-Riyadh: AP-Singapore Standby origin server of AF-Johannesburg: AP-Singapore
manifest_name	No	String	Name of the index file of the output. Default value: **index** Length: 0–128 characters Character set: letters, digits, hyphens (-), periods (.), and underscores (_). Paths with slashes (/) are not allowed.
slave_url	No	String	Custom streaming URL, including the method, domain name, and path.
manifest_selection	No	**ManifestSelection** object	Flow selection configuration.

Table 5-19 StreamSelectionItem

Parameter	Mandatory	Type	Description
key	No	String	Parameter used for bitrate filtering in a streaming URL.

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Parameter	Mandatory	Type	Description
max_bandwidth	No	Integer	Maximum bitrate, in bit/s. Value range: 0-104,857,600 (100 Mbit/s)
min_bandwidth	No	Integer	Minimum bitrate, in bit/s. Value range: 0-104,857,600 (100 Mbit/s)

Table 5-20 Encryption

Parameter	Mandatory	Type	Description
key_rotation_interval_seconds	No	Integer	Key cache time. If the key remains unchanged, the data is cached for seven days by default. This field is reserved and cannot be configured.
encryption_method	No	String	Encryption mode. This field is reserved and cannot be configured.
level	No	String	The options are as follows: • **content**: One channel corresponds to one key. • **profile**: One bitrate corresponds to one key. Default value: **content**
resource_id	Yes	String	DRM content ID generated by the customer
system_ids	Yes	Array of strings	Enumerated value of **system_id**. Options: **HLS**: FairPlay **DASH**: Widevine, PlayReady **MSS**: PlayReady
url	Yes	String	DRM address for obtaining a key
speke_version	Yes	String	DRM SPEKE version. Currently, only version 1.0 is supported.

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Parameter	Mandatory	Type	Description
request_mode	Yes	String	Request mode. Options: **direct_http**: accessing the DRM using HTTP(S) **functiongraph_proxy**: accessing the DRM using a FunctionGraph proxy
http_headers	No	Array of **HttpHeader** objects	Authentication information to be added to the DRM request header. A maximum of five items can be added. Only the **direct_http** request mode allows configuring **http_headers**.
urn	No	String	The **functiongraph_proxy** request mode requires the URN of FunctionGraph.

Table 5-21 HttpHeader

Parameter	Mandatory	Type	Description
key	Yes	String	**key** field name in the request header
value	Yes	String	**value** corresponding to the **key** in the request header

Table 5-22 PackageRequestArgs

Parameter	Mandatory	Type	Description
record	No	Array of **RecordRequestArgs** objects	Recording configuration
timeshift	No	Array of **TimeshiftRequestArgs** objects	Time shifting configuration
live	No	Array of **LiveRequestArgs** objects	Livestreaming configuration

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Table 5-23 RecordRequestArgs

Parameter	Mandatory	Type	Description
start_time	No	String	Start time
end_time	No	String	End time
format	No	String	Format
unit	No	String	Unit

Table 5-24 TimeshiftRequestArgs

Parameter	Mandatory	Type	Description
back_time	No	String	Time shifting duration field name
unit	No	String	Unit

Table 5-25 LiveRequestArgs

Parameter	Mandatory	Type	Description
delay	No	String	Delay field
unit	No	String	Unit

Table 5-26 ManifestSelection

Parameter	Mandatory	Type	Description
stream_order	No	String	Stream Sorting Mode. • ORIGINAL: Maintain the original order, follow the sequence of transcoding templates configured in the channel settings. • VIDEO_BITRATE_ASCENDING: Sort by ascending video bitrate. • VIDEO_BITRATE_DESCENDING: Sort by descending video bitrate.

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Parameter	Mandatory	Type	Description
min_video_bandwidth	No	Integer	Minimum video bitrate for filtering. Unit: bit/s; the value must be smaller than max_video_bandwidth.
max_video_bandwidth	No	Integer	Maximum bitrate for video bitrate filtering. Unit: bit/s; the value must be greater than min_video_bandwidth.

Table 5-27 EncoderSettingsExpand

Parameter	Mandatory	Type	Description
audio_descriptions	No	Array of **audio_descriptions** objects	Description of an audio output setting
video_descriptions	No	**VideoDescriptions** object	Description of the video output configuration.

Table 5-28 audio_descriptions

Parameter	Mandatory	Type	Description
name	Yes	String	Name of an audio output setting. Enter only letters, digits, hyphens (-), and underscores (_). Names of audio output settings in the same channel must be different.
audio_selector_name	Yes	String	Audio selector name

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Parameter	Mandatory	Type	Description
language_code_control	No	String	Language code control. The setting will change only the audio's language displayed externally, not its actual language. Options: • **FOLLOW_INPUT**: If the output audio of the selected audio selector has a language, this language will be used. Otherwise, the language code and stream name specified here will be used. The default value is recommended. • **USE_CONFIGURED**: The language and stream name of the output audio can be customized.
language_code	No	String	Language code, which consists of 2 or 3 lowercase letters.
stream_name	No	String	Stream name

Table 5-29 VideoDescriptions

Parameter	Mandatory	Type	Description
gop_duration_seconds	No	Integer	Custom GOP duration, in seconds. The value ranges from 0 to 10. The default value is **0**, indicating that the GOP duration of the source stream is used. The value cannot be **7** or **9**. If the value is invalid, the default value is used.

Response Parameters

Status code: 201

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Table 5-30 Response body parameters

Parameter	Type	Description
result_code	String	Error code.
result_msg	String	Error description.
domain	String	Ingest domain name.
app_name	String	Group name or application name. This parameter is mandatory.
id	String	Unique ID of a channel. This parameter is mandatory.
sources	Array of **SourceRsp** objects	Ingest URL list. During channel creation, the ingest URL list is returned only when the input stream protocol is **RTMP_PUSH**.

Table 5-31 SourceRsp

Parameter	Type	Description
url	String	RTMP ingest URL.
bitrate	Integer	Bitrate. Unit: bit/s. Value range: (0, 104,857,600] (100 Mbit/s)
width	Integer	Width corresponding to the resolution. Value range: 0–4096 (4K)
height	Integer	Height corresponding to the resolution. Value range: 0–2160 (4K)
enable_snapshot	Boolean	Whether to use the stream for snapshot capturing.

Status code: 400

Table 5-32 Response body parameters

Parameter	Type	Description
result_code	String	Error code.
result_msg	String	Error description.
domain	String	Ingest domain name.

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Parameter	Type	Description
app_name	String	Group name or application name. This parameter is mandatory.
id	String	Unique ID of a channel. This parameter is mandatory.

Example Requests

```
POST https://{endpoint}/v1/{project_id}/ott/channels

{
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test",
  "name" : "testname",
  "input" : {
    "input_protocol" : "FLV_PULL",
    "sources" : [ {
      "url" : "http://192.168.0.1/ott/test.flv?vhost=pull.testott.hls.com",
      "bitrate" : 1024,
      "width" : 100,
      "height" : 100
    } ],
    "failover_conditions" : {
      "input_loss_threshold_msec" : 100,
      "input_preference" : "EQUAL"
    }
  },
  "record_settings" : {
    "rollingbuffer_duration" : 86400
  },
  "endpoints" : [ {
    "hls_package" : [ {
      "url" : "pull.testott.hls.com/ott/test/index.m3u8",
      "hls_version" : "1",
      "segment_duration_seconds" : 4,
      "playlist_window_seconds" : 3600
    } ],
    "dash_package" : [ {
      "url" : "pull.testott.hls.com/ott/test/index.mpd",
      "segment_duration_seconds" : 4,
      "playlist_window_seconds" : 3600
    } ],
    "mss_package" : [ {
      "url" : "pull.testott.hls.com/ott/channel/manifest",
      "segment_duration_seconds" : 4,
      "playlist_window_seconds" : 3600
    } ]
  } ],
  "state" : "OFF"
}
```

Example Responses

Status code: 201

Demo Information

```
{
  "result_code" : "LIVE.100000000",
  "result_msg" : "SUCCESS",
  "domain" : "push.testott.hls.com",
```

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```
 "app_name" : "ott",
 "id" : "test",
 "sources" : [ {
  "url" : "rtmp://push.testott.hls.com/ott/test_1024?request_source=ott&channel_id=test",
  "bitrate" : 1024,
  "width" : 100,
  "height" : 100
 } ]
}
```

Status code: 400

Error response

```
{
 "result_code" : "LIVE.100011001",
 "result_msg" : "output url pull.testott.hls.com/ott/test/index.m3u8 is exist",
 "domain" : "push.testott.hls.com",
 "app_name" : "ott",
 "id" : "test"
}
```

Status Codes

Status Code	Description
201	Demo Information
400	Error response

Error Codes

See **Error Codes**.

5.2 Querying Channel Information

Function

Queries channel information. Batch query is supported.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:listChannel	List	-	-	-	-

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URI

GET /v1/{project_id}/ott/channels

Table 5-33 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".

Table 5-34 Query Parameters

Parameter	Mandatory	Type	Description
data_display	No	String	Whether to obtain the hidden secret key information.
domain	No	String	**Definition** Ingest domain name. **Constraints** N/A **Range** The value can contain 1 to 255 characters. Only lowercase letters, hyphens (-), and underscores (_) are allowed. **Default Value** N/A
app_name	No	String	**Definition** Group name or application name. **Constraints** N/A **Range** The value can contain 1 to 64 characters and must start with a letter. Only letters, hyphens (-), and underscores (_) are allowed. **Default Value** N/A

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Parameter	Mandatory	Type	Description
id	No	String	**Definition** Channel ID. **Constraints** N/A **Range** The value can contain 2 to 64 characters and must start with a letter. Only letters, hyphens (-), and underscores (_) are allowed. **Default Value** N/A
limit	No	Integer	**Definition** Number of pages in a single request. **Constraints** N/A **Range** 1 to 100 **Default Value** 10
offset	No	Integer	**Definition** Offset where the query starts. **Constraints** N/A **Range** 0 to 2147483647 **Default Value** 0

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Request Parameters

Table 5-35 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Response Parameters

Status code: 200

Table 5-36 Response body parameters

Parameter	Type	Description
total	Integer	Total number of channels.
channels	Array of **CreateOttChannelInfoReq** objects	Channel information.

Table 5-37 CreateOttChannelInfoReq

Parameter	Type	Description
domain	String	Ingest domain name of a channel.
app_name	String	Group name or application name.
id	String	(Mandatory) Unique ID of a channel.

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Parameter	Type	Description
name	String	Channel name. This parameter is optional.
state	String	Channel status. • **ON**: After a channel is delivered, functions such as stream pull, transcoding, and recording are automatically enabled. • **OFF**: Only the channel information is saved but the channel is not started.
mode	String	Channel mode. **ADD_CDN**: one-stop service, with origin servers and CDN bound together (default) **ONLY_OS**: independent origin service, with CDN decoupled from origin servers
region	String	This parameter is valid when **mode** is set to **ONLY_OS**. It indicates the region where the channel is located. Options: CN North-Beijing4: cn-north-4 CN East-Shanghai1: cn-east-3 AP-Singapore: ap-southeast-3 CN-Hong Kong: ap-southeast-1 ME-Riyadh: me-east-1 AF-Johannesburg: af-south-1 EU-Dublin: eu-west-101
input	**InputStreamInfo** object	Channel input stream information.
encoder_settings	Array of **encoder_settings** objects	Transcoding template configuration.
record_settings	**record_settings** object	Catch-up TV configuration.
endpoints	Array of **EndpointItem** objects	Channel output stream information.
encoder_settings_expand	**EncoderSettingsExpand** object	Audio output configuration

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Table 5-38 InputStreamInfo

Parameter	Type	Description
input_protocol	String	Channel input protocol • **FLV_PULL** • **RTMP_PUSH** • **HLS_PULL** • **SRT_PULL** • **SRT_PUSH**
sources	Array of **SourcesInfo** objects	Information about the primary source stream of a channel. This parameter is optional when the stream input protocol is **RTMP_PUSH** or **SRT_PUSH**. In other cases, this parameter is mandatory.
secondary_sources	Array of **SecondarySourcesInfo** objects	Standby input stream array. This parameter is optional. If there is a standby input stream, ensure that the number of channels, codec, and resolution of the primary and standby input streams are the same. If the stream input protocol is **RTMP_PUSH**, you do not need to specify this parameter.
failover_conditions	**FailoverConditions** object	(Optional) Configuration provided by the channel supplier to switch between the primary and standby media stream URLs.
max_bandwidth_limit	Integer	Maximum bandwidth required when the input protocol is **HLS_PULL**. A streaming URL provided by the user includes the parameter **BANDWIDTH** for audios/videos with different bitrates. • If the maximum bandwidth is specified, Media Live will pull the media stream that has the highest bitrate and a bandwidth lower than the maximum bandwidth from the URL, and push the stream to the origin server. • If the maximum bandwidth is not specified, Media Live will pull the media stream with the largest **BANDWIDTH** value from the URL, and push the stream to the origin server.

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Parameter	Type	Description
ip_port_mode	Boolean	When the stream push protocol is **SRT_PUSH** and streams are pushed to the origin server, the encoder does not support the input of **streamid**. In this case, set this parameter to **true**.
ip_whitelist	String	IP address whitelist for stream push by customers when the SRT_PUSH type is used
scte35_source	String	SCTE-35 signal source of an advertisement. Only **HLS_PULL** channels support this configuration. Currently, this field can only be set to **SEGMENTS**.
ad_triggers	Array of strings	Configures an ad trigger. Options: • **Splice insert** • **Provider advertisement** • **Distributor advertisement** • **Provider placement opportunity** • **Distributor placement opportunity**
audio_selectors	Array of **InputAudioSelector** objects	Configures an audio selector (a maximum of 8).

Table 5-39 SourcesInfo

Parameter	Type	Description
url	String	Channel source stream URL, which is used for external stream pull.
bitrate	Integer	Bitrate. This parameter is mandatory when live transcoding is not required. Unit: bit/s. Value range: (0, 104,857,600] (100 Mbit/s)
width	Integer	Width corresponding to the resolution. This parameter is optional. Value range: 0–4096 (4K)
height	Integer	Height corresponding to the resolution. This parameter is optional. Value range: 0–2160 (4K)

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Parameter	Type	Description
enable_snapshot	Boolean	Whether to use the stream for snapshot capturing.
bitrate_for3u8	Boolean	Whether to use **bitrate** to fix the bitrate. Default value: **false**
passphrase	String	Encryption information when the protocol is **SRT_PUSH**.
backup_urls	Array of strings	Standby streaming URL list
stream_id	String	Stream ID of the streaming URL in an **SRT_PULL** channel.
latency	Integer	Stream pull latency of an **SRT_PULL** channel.
pbkeylen	Integer	SRT encryption algorithm 16 = AES-128 24 = AES-192 32 = AES-256

Table 5-40 SecondarySourcesInfo

Parameter	Type	Description
url	String	Channel source stream URL, which is used for external stream pull.
bitrate	Integer	Bitrate. This parameter is mandatory when live transcoding is not required. Unit: bit/s. Value range: (0, 104,857,600] (100 Mbit/s)
width	Integer	Width corresponding to the resolution. This parameter is optional. Value range: 0–4096 (4K)
height	Integer	Height corresponding to the resolution. This parameter is optional. Value range: 0–2160 (4K)
bitrate_for3u8	Boolean	Whether to use **bitrate** to fix the bitrate. Default value: **false**
passphrase	String	Encryption information when the protocol is **SRT_PUSH**
backup_urls	Array of strings	Standby streaming URL list

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Parameter	Type	Description
stream_id	String	Stream ID of the streaming URL in an **SRT_PULL** channel.
latency	Integer	Stream pull latency of an **SRT_PULL** channel.
pbkeylen	Integer	SRT encryption algorithm 16 = AES-128 24 = AES-192 32 = AES-256

Table 5-41 FailoverConditions

Parameter	Type	Description
input_loss_threshold_msec	Integer	Duration threshold for stopping input streams. When the threshold is reached, the primary/standby switchover is automatically triggered. Unit: millisecond. Value range: 0–3,600,000 (Optional) The default value is **2,000** ms.
input_preference	String	Whether the primary ingest URL has the highest priority (**PRIMARY**) or the primary and standby URLs are switched equally (**EQUAL**). In the equal switchover mode, the standby URL is used and will not be automatically switched to the primary URL. (Optional) The default value is **EQUAL**.

Table 5-42 InputAudioSelector

Parameter	Type	Description
name	String	Name of an audio selector. Enter only letters, digits, hyphens (-), and underscores (_). The name of each selector must be unique within the same channel.

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Parameter	Type	Description
selector_settings	**AudioSelectorSettings** object	Configures an audio selector.

Table 5-43 AudioSelectorSettings

Parameter	Type	Description
audio_language_selection	**AudioSelectorLangSelection** object	Configures a language selector.
audio_pid_selection	**AudioSelectorPidSelection** object	Configures a PID selector.
audio_hls_selection	**AudioSelectorHlsSelection** object	Configures an HLS selector.

Table 5-44 AudioSelectorLangSelection

Parameter	Type	Description
language_code	String	Enter a language code of 2 or 3 lowercase letters.
language_selection_policy	String	Language output policy. Options: • **LOOSE**: loose match. For example, if the language code **eng** is selected, an audio stream in English will be preferentially selected. If there is no audio stream in English, the audio stream with the lowest PID will be selected. • **STRICT**: strict match. For example, if the language code **eng** is selected, only an audio stream in English will be selected. If there is no audio stream in English, a muted segment will be automatically added. When this audio selector is used to play the video, the video is muted.

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Table 5-45 AudioSelectorPidSelection

Parameter	Type	Description
pid	Integer	Sets the PID value.

Table 5-46 AudioSelectorHlsSelection

Parameter	Type	Description
name	String	HLS audio selector name
group_id	String	HLS audio selector GID

Table 5-47 encoder_settings

Parameter	Type	Description
template_id	String	Transcoding template ID.

Table 5-48 record_settings

Parameter	Type	Description
rollingbuffer_duration	Integer	Maximum catch-up TV recording duration. The recording is continuous in this period. This parameter is mandatory. Unit: second. The value **0** indicates that recording is not supported. The maximum recording duration is 14 days.

Table 5-49 EndpointItem

Parameter	Type	Description
hls_package	Array of **HlsPackageItem** objects	HLS packaging information.
dash_package	Array of **DashPackageItem** objects	DASH packaging information.

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Parameter	Type	Description
mss_package	Array of **MssPackageItem** objects	MSS packaging information.

Table 5-50 HlsPackageItem

Parameter	Type	Description
id	String	Unique ID of the package, which is created by the service and returned during query. This parameter is mandatory when endpoints are modified.
url	String	A customized streaming URL, including the method, domain name, and path.
stream_selection	Array of **StreamSelectionItem** objects	Filters out a stream whose bitrate is in the range of [min, max] from all streams. If bitrate filtering is not required, you do not need to specify this parameter.
hls_version	String	HLS version number.
segment_duration_seconds	Integer	Output segment duration of a channel. This parameter is mandatory. Unit: second. Value range: 1 to 10 **NOTE** Changing the segment duration will affect time-shifted viewing and catch-up TV of the recorded content. Exercise caution when performing this operation.
playlist_window_seconds	Integer	Total output segment duration of a channel. The value is the output segment duration multiplied by the number of segments. There are at least three returned segments. Unit: second. Value range: 0–86,400 (value of converting 24 hours to seconds)
encryption	**Encryption** object	Encryption information.
ads	Object	Advertising configuration
ext_args	Object	Other additional parameters
request_args	**PackageRequestArgs** object	Playback configuration

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Parameter	Type	Description
ad_marker	Array of strings	Advertisement ID. For HLS, the value is **["ENHANCED_SCTE35"]**.
enable_access	Boolean	When **mode** is set to **ONLY_OS**, this parameter specifies whether the output can pull streams from the origin server. The default value is **false**. **true**: allowed **false**: not allowed
allow_all_ip_access	Boolean	Whether to allow all IP addresses to access. The default value is **false**. **true**: allowed. The **ip_whitelist** configuration does not take effect. **false**: not allowed. The **ip_whitelist** configuration takes effect. Access is allowed only for IP addresses specified in **ip_whitelist**.
ip_whitelist	String	Whitelist of IP addresses that can pull streams from the origin server when **mode** is set to **ONLY_OS**.
cdn_identifier_header	**HttpHeader** object	HTTP header CDN authentication header.
origin_domain_master	String	Origin domain name – Primary region Same as **CreateOttChannelInfoReq.region** Regular expression: ^([a-zA-Z0-9]([a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?.){2,}[a-zA-Z]{2,16}$ Maximum length: 255 characters
origin_domain_slave	String	Origin domain name – Standby region Constraints: Huawei Cloud (International) Standby origin server of AP-Singapore: CN-Hong Kong Standby origin server of CN-Hong Kong: AP-Singapore Standby origin server of ME-Riyadh: AP-Singapore Standby origin server of AF-Johannesburg: AP-Singapore

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Parameter	Type	Description
manifest_name	String	Name of the index file of the output. Default value: **index** Length: 0–128 characters Character set: letters, digits, hyphens (-), periods (.), and underscores (_). Paths with slashes (/) are not allowed.
slave_url	String	Custom streaming URL, including the method, domain name, and path.
manifest_selection	**ManifestSelection** object	Flow selection configuration.

Table 5-51 DashPackageItem

Parameter	Type	Description
id	String	Unique ID of the package, which is created by the service and returned during query. This parameter is mandatory when endpoints are modified.
url	String	A customized streaming URL, including the method, domain name, and path.
stream_selection	Array of **StreamSelectionItem** objects	Filters out a stream whose bitrate is in the range of [min, max] from all streams. If bitrate filtering is not required, you do not need to specify this parameter.
segment_duration_seconds	Integer	Output segment duration of a channel. This parameter is mandatory. Unit: second. Value range: 1 to 10 **NOTE** Changing the segment duration will affect time-shifted viewing and catch-up TV of the recorded content. Exercise caution when performing this operation.
playlist_window_seconds	Integer	Total output segment duration of a channel. The value is the output segment duration multiplied by the number of segments. There are at least three returned segments. Unit: second. Value range: 0–86,400 (value of converting 24 hours to seconds)

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Parameter	Type	Description
encryption	**Encryption** object	Encryption information.
ads	Object	Advertising configuration
ext_args	Object	Other additional parameters
request_args	**PackageRequestArgs** object	Playback configuration
ad_marker	String	Advertisement ID. For DASH, the value is **xml+bin**.
suggested_presentation_delay	Integer	Recommended stream delay Unit: second. Value range: 1 to 120
minimum_update_period	Integer	Shortest index update period Unit: second. Value range: 1 to 120
min_buffer_time	Integer	Minimum buffer time Unit: second. Value range: 1 to 120
enable_access	Boolean	Default value: **false** **true**: allowed **false**: not allowed
allow_all_ip_access	Boolean	Whether to allow all IP addresses to access. The default value is **false**. **true**: allowed. The **ip_whitelist** configuration does not take effect. **false**: not allowed. The **ip_whitelist** configuration takes effect. Access is allowed only for IP addresses specified in **ip_whitelist**.
ip_whitelist	String	This parameter is valid when **allow_all_ip_access** is set to **false**. IP addresses allowed for access. Separate multiple IP addresses with commas (,). The value must be in CIDR format.
cdn_identifier_header	**HttpHeader** object	HTTP header CDN authentication header.

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Parameter	Type	Description
origin_domain_master	String	Origin domain name – Primary region Same as **CreateOttChannelInfoReq.region** Regular expression: ^([a-zA-Z0-9]([a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?.){2,}[a-zA-Z]{2,16}$ Maximum length: 255 characters
origin_domain_slave	String	Origin domain name – Standby region Constraints: Huawei Cloud (International) Standby origin server of AP-Singapore: CN-Hong Kong Standby origin server of CN-Hong Kong: AP-Singapore Standby origin server of ME-Riyadh: AP-Singapore Standby origin server of AF-Johannesburg: AP-Singapore
manifest_name	String	Name of the index file of the output. Default value: **index** Length: 0–128 characters Character set: letters, digits, hyphens (-), periods (.), and underscores (_). Paths with slashes (/) are not allowed.
slave_url	String	Custom streaming URL, including the method, domain name, and path.
manifest_selection	**ManifestSelection** object	Flow selection configuration.

Table 5-52 MssPackageItem

Parameter	Type	Description
id	String	Unique ID of the package, which is created by the service and returned during query. This parameter is mandatory when endpoints are modified.
url	String	A customized streaming URL, including the method, domain name, and path.

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Parameter	Type	Description
stream_selection	Array of **StreamSelectionItem** objects	Filters out a stream whose bitrate is in the range of [min, max] from all streams. If bitrate filtering is not required, you do not need to specify this parameter.
segment_duration_seconds	Integer	Output segment duration of a channel. This parameter is mandatory. Unit: second. Value range: 1 to 10 **NOTE** Changing the segment duration will affect time-shifted viewing and catch-up TV of the recorded content. Exercise caution when performing this operation.
playlist_window_seconds	Integer	Total output segment duration of a channel. The value is the output segment duration multiplied by the number of segments. There are at least three returned segments. Unit: second. Value range: 0–86,400 (value of converting 24 hours to seconds)
encryption	**Encryption** object	Encryption information.
ext_args	Object	Other additional parameters
delay_segment	Integer	Playback delay, in seconds.
request_args	**PackageRequestArgs** object	Playback configuration
enable_access	Boolean	Default value: **false** **true**: allowed **false**: not allowed
allow_all_ip_access	Boolean	Whether to allow all IP addresses to access. The default value is **false**. **true**: allowed. The **ip_whitelist** configuration does not take effect. **false**: not allowed. The **ip_whitelist** configuration takes effect. Access is allowed only for IP addresses specified in **ip_whitelist**.

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Parameter	Type	Description
ip_whitelist	String	This parameter is valid when **allow_all_ip_access** is set to **false**. IP addresses allowed for access. Separate multiple IP addresses with commas (,). The value must be in CIDR format.
cdn_identifier_header	**HttpHeader** object	HTTP header CDN authentication header.
origin_domain_master	String	Origin domain name – Primary region Same as **CreateOttChannelInfoReq.region** Regular expression: ^([a-zA-Z0-9]([a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?.){2,}[a-zA-Z]{2,16}$ Maximum length: 255 characters
origin_domain_slave	String	Origin domain name – Standby region Constraints: Huawei Cloud (International) Standby origin server of AP-Singapore: CN-Hong Kong Standby origin server of CN-Hong Kong: AP-Singapore Standby origin server of ME-Riyadh: AP-Singapore Standby origin server of AF-Johannesburg: AP-Singapore
manifest_name	String	Name of the index file of the output. Default value: **index** Length: 0–128 characters Character set: letters, digits, hyphens (-), periods (.), and underscores (_). Paths with slashes (/) are not allowed.
slave_url	String	Custom streaming URL, including the method, domain name, and path.
manifest_selection	**ManifestSelection** object	Flow selection configuration.

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Table 5-53 StreamSelectionItem

Parameter	Type	Description
key	String	Parameter used for bitrate filtering in a streaming URL.
max_bandwidth	Integer	Maximum bitrate, in bit/s. Value range: 0-104,857,600 (100 Mbit/s)
min_bandwidth	Integer	Minimum bitrate, in bit/s. Value range: 0-104,857,600 (100 Mbit/s)

Table 5-54 Encryption

Parameter	Type	Description
key_rotation_interval_seconds	Integer	Key cache time. If the key remains unchanged, the data is cached for seven days by default. This field is reserved and cannot be configured.
encryption_method	String	Encryption mode. This field is reserved and cannot be configured.
level	String	The options are as follows: • **content**: One channel corresponds to one key. • **profile**: One bitrate corresponds to one key. Default value: **content**
resource_id	String	DRM content ID generated by the customer
system_ids	Array of strings	Enumerated value of **system_id**. Options: **HLS**: FairPlay **DASH**: Widevine, PlayReady **MSS**: PlayReady
url	String	DRM address for obtaining a key
speke_version	String	DRM SPEKE version. Currently, only version 1.0 is supported.

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Parameter	Type	Description
request_mode	String	Request mode. Options: **direct_http**: accessing the DRM using HTTP(S) **functiongraph_proxy**: accessing the DRM using a FunctionGraph proxy
http_headers	Array of **HttpHeader** objects	Authentication information to be added to the DRM request header. A maximum of five items can be added. Only the **direct_http** request mode allows configuring **http_headers**.
urn	String	The **functiongraph_proxy** request mode requires the URN of FunctionGraph.

Table 5-55 HttpHeader

Parameter	Type	Description
key	String	**key** field name in the request header
value	String	**value** corresponding to the **key** in the request header

Table 5-56 PackageRequestArgs

Parameter	Type	Description
record	Array of **RecordRequestArgs** objects	Recording configuration
timeshift	Array of **TimeshiftRequestArgs** objects	Time shifting configuration
live	Array of **LiveRequestArgs** objects	Livestreaming configuration

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Table 5-57 RecordRequestArgs

Parameter	Type	Description
start_time	String	Start time
end_time	String	End time
format	String	Format
unit	String	Unit

Table 5-58 TimeshiftRequestArgs

Parameter	Type	Description
back_time	String	Time shifting duration field name
unit	String	Unit

Table 5-59 LiveRequestArgs

Parameter	Type	Description
delay	String	Delay field
unit	String	Unit

Table 5-60 ManifestSelection

Parameter	Type	Description
stream_order	String	Stream Sorting Mode. • ORIGINAL: Maintain the original order, follow the sequence of transcoding templates configured in the channel settings. • VIDEO_BITRATE_ASCENDING: Sort by ascending video bitrate. • VIDEO_BITRATE_DESCENDING: Sort by descending video bitrate.
min_video_bandwidth	Integer	Minimum video bitrate for filtering. Unit: bit/s; the value must be smaller than max_video_bandwidth.

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Parameter	Type	Description
max_video_bandwidth	Integer	Maximum bitrate for video bitrate filtering. Unit: bit/s; the value must be greater than min_video_bandwidth.

Table 5-61 EncoderSettingsExpand

Parameter	Type	Description
audio_descriptions	Array of **audio_descriptions** objects	Description of an audio output setting
video_descriptions	**VideoDescriptions** object	Description of the video output configuration.

Table 5-62 audio_descriptions

Parameter	Type	Description
name	String	Name of an audio output setting. Enter only letters, digits, hyphens (-), and underscores (_). Names of audio output settings in the same channel must be different.
audio_selector_name	String	Audio selector name
language_code_control	String	Language code control. The setting will change only the audio's language displayed externally, not its actual language. Options: • **FOLLOW_INPUT**: If the output audio of the selected audio selector has a language, this language will be used. Otherwise, the language code and stream name specified here will be used. The default value is recommended. • **USE_CONFIGURED**: The language and stream name of the output audio can be customized.
language_code	String	Language code, which consists of 2 or 3 lowercase letters.

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Parameter	Type	Description
stream_name	String	Stream name

Table 5-63 VideoDescriptions

Parameter	Type	Description
gop_duration_seconds	Integer	Custom GOP duration, in seconds. The value ranges from 0 to 10. The default value is **0**, indicating that the GOP duration of the source stream is used. The value cannot be **7** or **9**. If the value is invalid, the default value is used.

Status code: 400

Table 5-64 Response body parameters

Parameter	Type	Description
result_code	String	Error code.
result_msg	String	Error description.
domain	String	Ingest domain name.
app_name	String	Group name or application name. This parameter is mandatory.
id	String	Unique ID of a channel. This parameter is mandatory.

Example Requests

```
GET https://{endpoint}/v1/{project_id}/ott/channels?app_name=ott&domain=push.testott.hls.com&id=test
```

Example Responses

Status code: 200

Demo Information

```
{
  "total" : 1,
  "channels" : [ {
    "domain" : "push.testott.hls.com",
    "app_name" : "ott",
    "id" : "test",
    "name" : "testname",
    "input" : {
```

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```
  "input_protocol" : "RTMP_PUSH",
  "sources" : [ {
    "url" : "rtmp://push.testott.hls.com/ott/test_1024?request_source=ott&channel_id=test",
    "bitrate" : 1024,
    "width" : 100,
    "height" : 100
  } ],
  "failover_conditions" : {
    "input_loss_threshold_msec" : 100,
    "input_preference" : "EQUAL"
  }
},
"record_settings" : {
  "rollingbuffer_duration" : 86400
},
"endpoints" : [ {
  "hls_package" : [ {
    "url" : "pull.testott.hls.com/ott/test/index.m3u8",
    "stream_selection" : [ {
      "key" : "sss",
      "max_bandwidth" : 0,
      "min_bandwidth" : 0
    } ],
    "segment_duration_seconds" : 4,
    "playlist_window_seconds" : 3600,
    "request_args" : {
      "record" : [ {
        "start_time" : "begin",
        "end_time" : "end",
        "format" : "timestamp",
        "unit" : "second"
      } ],
      "timeshift" : [ {
        "back_time" : "begin",
        "unit" : "second"
      } ],
      "live" : null
    },
    "hls_version" : "1"
  } ],
  "dash_package" : [ {
    "url" : "pull.testott.hls.com/ott/test/index.mpd",
    "stream_selection" : [ {
      "key" : "bitrate=900000-1800000",
      "max_bandwidth" : 1800000,
      "min_bandwidth" : 900000
    } ],
    "segment_duration_seconds" : 4,
    "playlist_window_seconds" : 3600,
    "request_args" : {
      "record" : [ {
        "start_time" : "begin",
        "end_time" : "end",
        "format" : "timestamp",
        "unit" : "second"
      } ],
      "timeshift" : [ {
        "back_time" : "begin",
        "unit" : "second"
      } ],
      "live" : null
    }
  } ],
  "mss_package" : [ {
    "url" : "pull.testott.hls.com/ott/channel/manifest",
    "stream_selection" : [ {
      "key" : "bitrate=900000-1800000",
      "max_bandwidth" : 1800000,
      "min_bandwidth" : 900000
```


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```
      } ],
      "segment_duration_seconds" : 4,
      "playlist_window_seconds" : 3600,
      "request_args" : {
        "record" : [ {
          "start_time" : "begin",
          "end_time" : "end",
          "format" : "timestamp",
          "unit" : "second"
        } ],
        "timeshift" : [ {
          "back_time" : "begin",
          "unit" : "second"
        } ],
        "live" : null
      }
    } ]
  } ],
  "state" : "OFF"
 } ]
}
```

Status code: 400

Error response

```
{
  "result_code" : "LIVE.103011019",
  "result_msg" : "The resource to access is not exists",
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "agbc"
}
```

Status Codes

Status Code	Description
200	Demo Information
400	Error response

Error Codes

See **Error Codes**.

5.3 Deleting Channel Information

Function

Deletes channel information.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

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Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:deleteChannel	Write	-	-	-	-

URI

DELETE /v1/{project_id}/ott/channels

Table 5-65 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 5-66 Query Parameters

Parameter	Mandatory	Type	Description
domain	Yes	String	**Definition** Ingest domain name. **Constraints** N/A **Range** The value can contain 1 to 255 characters. Only lowercase letters, hyphens (-), and underscores (_) are allowed. **Default Value** N/A

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Parameter	Mandatory	Type	Description
app_name	Yes	String	**Definition** Group name or application name. **Constraints** N/A **Range** The value can contain 1 to 64 characters and must start with a letter. Only letters, hyphens (-), and underscores (_) are allowed. **Default Value** N/A
id	Yes	String	**Definition** Channel ID. **Constraints** N/A **Range** The value can contain 2 to 64 characters and must start with a letter. Only letters, hyphens (-), and underscores (_) are allowed. **Default Value** N/A

Request Parameters

Table 5-67 Request header parameters

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

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Parameter	Mandatory	Type	Description
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Response Parameters

Status code: 200

Table 5-68 Response body parameters

Parameter	Type	Description
result_code	String	Error code
result_msg	String	Error message
domain	String	Ingest domain name
app_name	String	Group name or application name. This parameter is mandatory.
id	String	(Mandatory) Unique ID of a channel.

Status code: 400

Table 5-69 Response body parameters

Parameter	Type	Description
result_code	String	Error code.
result_msg	String	Error description.
domain	String	Ingest domain name.
app_name	String	Group name or application name. This parameter is mandatory.
id	String	Unique ID of a channel. This parameter is mandatory.

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Example Requests

```
DELETE https://{endpoint}/v1/{project_id}/ott/channels?
app_name=ott&domain=push.testott.hls.com&id=test
```

Example Responses

Status code: 200

Demo Information

```
{
  "result_code" : "LIVE.100000000",
  "result_msg" : "SUCCESS",
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test"
}
```

Status code: 400

Error response

```
{
  "result_code" : "LIVE.103011019",
  "result_msg" : "The resource to access is not exists",
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test"
}
```

Status Codes

Status Code	Description
200	Demo Information
400	Error response

Error Codes

See **Error Codes**.

5.4 Modifying Channel Packaging Information

Function

Modifies channel packaging information.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

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Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:updateChannelEndpoint	Write	-	-	-	-

URI

PUT /v1/{project_id}/ott/channels/endpoints

Table 5-70 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 5-71 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

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Table 5-72 Request body parameters

Parameter	Mandatory	Type	Description
domain	Yes	String	Ingest domain name of a channel.
app_name	Yes	String	Group name or application name.
id	Yes	String	Unique ID of a channel. This parameter is mandatory.
endpoints	No	Array of **EndpointItem** objects	Channel output stream information.

Table 5-73 EndpointItem

Parameter	Mandatory	Type	Description
hls_package	No	Array of **HlsPackageItem** objects	HLS packaging information.
dash_package	No	Array of **DashPackageItem** objects	DASH packaging information.
mss_package	No	Array of **MssPackageItem** objects	MSS packaging information.

Table 5-74 HlsPackageItem

Parameter	Mandatory	Type	Description
id	No	String	Unique ID of the package, which is created by the service and returned during query. This parameter is mandatory when endpoints are modified.
url	No	String	A customized streaming URL, including the method, domain name, and path.

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Parameter	Mandatory	Type	Description
stream_selection	No	Array of **StreamSelectionItem** objects	Filters out a stream whose bitrate is in the range of [min, max] from all streams. If bitrate filtering is not required, you do not need to specify this parameter.
hls_version	No	String	HLS version number.
segment_duration_seconds	Yes	Integer	Output segment duration of a channel. This parameter is mandatory. Unit: second. Value range: 1 to 10 **NOTE** Changing the segment duration will affect time-shifted viewing and catch-up TV of the recorded content. Exercise caution when performing this operation.
playlist_window_seconds	No	Integer	Total output segment duration of a channel. The value is the output segment duration multiplied by the number of segments. There are at least three returned segments. Unit: second. Value range: 0–86,400 (value of converting 24 hours to seconds)
encryption	No	**Encryption** object	Encryption information.
ads	No	Object	Advertising configuration
ext_args	No	Object	Other additional parameters
request_args	No	**PackageRequestArgs** object	Playback configuration
ad_marker	No	Array of strings	Advertisement ID. For HLS, the value is **["ENHANCED_SCTE35"]**.

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Parameter	Mandatory	Type	Description
enable_access	No	Boolean	When **mode** is set to **ONLY_OS**, this parameter specifies whether the output can pull streams from the origin server. The default value is **false**. **true**: allowed **false**: not allowed
allow_all_ip_access	No	Boolean	Whether to allow all IP addresses to access. The default value is **false**. **true**: allowed. The **ip_whitelist** configuration does not take effect. **false**: not allowed. The **ip_whitelist** configuration takes effect. Access is allowed only for IP addresses specified in **ip_whitelist**.
ip_whitelist	No	String	Whitelist of IP addresses that can pull streams from the origin server when **mode** is set to **ONLY_OS**.
cdn_identifier_header	No	**HttpHeader** object	HTTP header CDN authentication header.
origin_domain_master	No	String	Origin domain name – Primary region Same as **CreateOttChannelInfoReq.region** Regular expression: ^([a-zA-Z0-9]([a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?.){2,}[a-zA-Z]{2,16}$ Maximum length: 255 characters

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Parameter	Mandatory	Type	Description
origin_domain_slave	No	String	Origin domain name – Standby region Constraints: Huawei Cloud (International) Standby origin server of AP-Singapore: CN-Hong Kong Standby origin server of CN-Hong Kong: AP-Singapore Standby origin server of ME-Riyadh: AP-Singapore Standby origin server of AF-Johannesburg: AP-Singapore
manifest_name	No	String	Name of the index file of the output. Default value: **index** Length: 0–128 characters Character set: letters, digits, hyphens (-), periods (.), and underscores (_). Paths with slashes (/) are not allowed.
slave_url	No	String	Custom streaming URL, including the method, domain name, and path.
manifest_selection	No	**ManifestSelection** object	Flow selection configuration.

Table 5-75 DashPackageItem

Parameter	Mandatory	Type	Description
id	No	String	Unique ID of the package, which is created by the service and returned during query. This parameter is mandatory when endpoints are modified.
url	No	String	A customized streaming URL, including the method, domain name, and path.

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Parameter	Mandatory	Type	Description
stream_selection	No	Array of **StreamSelectionItem** objects	Filters out a stream whose bitrate is in the range of [min, max] from all streams. If bitrate filtering is not required, you do not need to specify this parameter.
segment_duration_seconds	Yes	Integer	Output segment duration of a channel. This parameter is mandatory. Unit: second. Value range: 1 to 10 **NOTE** Changing the segment duration will affect time-shifted viewing and catch-up TV of the recorded content. Exercise caution when performing this operation.
playlist_window_seconds	No	Integer	Total output segment duration of a channel. The value is the output segment duration multiplied by the number of segments. There are at least three returned segments. Unit: second. Value range: 0–86,400 (value of converting 24 hours to seconds)
encryption	No	**Encryption** object	Encryption information.
ads	No	Object	Advertising configuration
ext_args	No	Object	Other additional parameters
request_args	No	**PackageRequestArgs** object	Playback configuration
ad_marker	No	String	Advertisement ID. For DASH, the value is **xml+bin**.
suggested_presentation_delay	No	Integer	Recommended stream delay Unit: second. Value range: 1 to 120
minimum_update_period	No	Integer	Shortest index update period Unit: second. Value range: 1 to 120

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Parameter	Mandatory	Type	Description
min_buffer_time	No	Integer	Minimum buffer time Unit: second. Value range: 1 to 120
enable_access	No	Boolean	Default value: **false** **true**: allowed **false**: not allowed
allow_all_ip_access	No	Boolean	Whether to allow all IP addresses to access. The default value is **false**. **true**: allowed. The **ip_whitelist** configuration does not take effect. **false**: not allowed. The **ip_whitelist** configuration takes effect. Access is allowed only for IP addresses specified in **ip_whitelist**.
ip_whitelist	No	String	This parameter is valid when **allow_all_ip_access** is set to **false**. IP addresses allowed for access. Separate multiple IP addresses with commas (,). The value must be in CIDR format.
cdn_identifier_header	No	**HttpHeader** object	HTTP header CDN authentication header.
origin_domain_master	No	String	Origin domain name – Primary region Same as **CreateOttChannelInfoReq.region** Regular expression: ^([a-zA-Z0-9]([a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?.){2,}[a-zA-Z]{2,16}$ Maximum length: 255 characters

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Parameter	Mandatory	Type	Description
origin_domain_slave	No	String	Origin domain name – Standby region Constraints: Huawei Cloud (International) Standby origin server of AP-Singapore: CN-Hong Kong Standby origin server of CN-Hong Kong: AP-Singapore Standby origin server of ME-Riyadh: AP-Singapore Standby origin server of AF-Johannesburg: AP-Singapore
manifest_name	No	String	Name of the index file of the output. Default value: **index** Length: 0–128 characters Character set: letters, digits, hyphens (-), periods (.), and underscores (_). Paths with slashes (/) are not allowed.
slave_url	No	String	Custom streaming URL, including the method, domain name, and path.
manifest_selection	No	**ManifestSelection** object	Flow selection configuration.

Table 5-76 MssPackageItem

Parameter	Mandatory	Type	Description
id	No	String	Unique ID of the package, which is created by the service and returned during query. This parameter is mandatory when endpoints are modified.
url	No	String	A customized streaming URL, including the method, domain name, and path.

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Parameter	Mandatory	Type	Description
stream_selection	No	Array of **StreamSelectionItem** objects	Filters out a stream whose bitrate is in the range of [min, max] from all streams. If bitrate filtering is not required, you do not need to specify this parameter.
segment_duration_seconds	Yes	Integer	Output segment duration of a channel. This parameter is mandatory. Unit: second. Value range: 1 to 10 **NOTE** Changing the segment duration will affect time-shifted viewing and catch-up TV of the recorded content. Exercise caution when performing this operation.
playlist_window_seconds	No	Integer	Total output segment duration of a channel. The value is the output segment duration multiplied by the number of segments. There are at least three returned segments. Unit: second. Value range: 0–86,400 (value of converting 24 hours to seconds)
encryption	No	**Encryption** object	Encryption information.
ext_args	No	Object	Other additional parameters
delay_segment	No	Integer	Playback delay, in seconds.
request_args	No	**PackageRequestArgs** object	Playback configuration
enable_access	No	Boolean	Default value: **false** **true**: allowed **false**: not allowed

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Parameter	Mandatory	Type	Description
allow_all_ip_access	No	Boolean	Whether to allow all IP addresses to access. The default value is **false**. **true**: allowed. The **ip_whitelist** configuration does not take effect. **false**: not allowed. The **ip_whitelist** configuration takes effect. Access is allowed only for IP addresses specified in **ip_whitelist**.
ip_whitelist	No	String	This parameter is valid when **allow_all_ip_access** is set to **false**. IP addresses allowed for access. Separate multiple IP addresses with commas (,). The value must be in CIDR format.
cdn_identifier_header	No	**HttpHeader** object	HTTP header CDN authentication header.
origin_domain_master	No	String	Origin domain name – Primary region Same as **CreateOttChannelInfoReq.region** Regular expression: ^([a-zA-Z0-9]([a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?.){2,}[a-zA-Z]{2,16}$ Maximum length: 255 characters
origin_domain_slave	No	String	Origin domain name – Standby region Constraints: Huawei Cloud (International) Standby origin server of AP-Singapore: CN-Hong Kong Standby origin server of CN-Hong Kong: AP-Singapore Standby origin server of ME-Riyadh: AP-Singapore Standby origin server of AF-Johannesburg: AP-Singapore

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Parameter	Mandatory	Type	Description
manifest_name	No	String	Name of the index file of the output. Default value: **index** Length: 0–128 characters Character set: letters, digits, hyphens (-), periods (.), and underscores (_). Paths with slashes (/) are not allowed.
slave_url	No	String	Custom streaming URL, including the method, domain name, and path.
manifest_selection	No	**ManifestSelection** object	Flow selection configuration.

Table 5-77 StreamSelectionItem

Parameter	Mandatory	Type	Description
key	No	String	Parameter used for bitrate filtering in a streaming URL.
max_bandwidth	No	Integer	Maximum bitrate, in bit/s. Value range: 0-104,857,600 (100 Mbit/s)
min_bandwidth	No	Integer	Minimum bitrate, in bit/s. Value range: 0-104,857,600 (100 Mbit/s)

Table 5-78 Encryption

Parameter	Mandatory	Type	Description
key_rotation_interval_seconds	No	Integer	Key cache time. If the key remains unchanged, the data is cached for seven days by default. This field is reserved and cannot be configured.
encryption_method	No	String	Encryption mode. This field is reserved and cannot be configured.

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Parameter	Mandatory	Type	Description
level	No	String	The options are as follows: • **content**: One channel corresponds to one key. • **profile**: One bitrate corresponds to one key. Default value: **content**
resource_id	Yes	String	DRM content ID generated by the customer
system_ids	Yes	Array of strings	Enumerated value of **system_id**. Options: **HLS**: FairPlay **DASH**: Widevine, PlayReady **MSS**: PlayReady
url	Yes	String	DRM address for obtaining a key
speke_version	Yes	String	DRM SPEKE version. Currently, only version 1.0 is supported.
request_mode	Yes	String	Request mode. Options: **direct_http**: accessing the DRM using HTTP(S) **functiongraph_proxy**: accessing the DRM using a FunctionGraph proxy
http_headers	No	Array of **HttpHeader** objects	Authentication information to be added to the DRM request header. A maximum of five items can be added. Only the **direct_http** request mode allows configuring **http_headers**.
urn	No	String	The **functiongraph_proxy** request mode requires the URN of FunctionGraph.

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Table 5-79 HttpHeader

Parameter	Mandatory	Type	Description
key	Yes	String	**key** field name in the request header
value	Yes	String	**value** corresponding to the **key** in the request header

Table 5-80 PackageRequestArgs

Parameter	Mandatory	Type	Description
record	No	Array of **RecordRequestArgs** objects	Recording configuration
timeshift	No	Array of **TimeshiftRequestArgs** objects	Time shifting configuration
live	No	Array of **LiveRequestArgs** objects	Livestreaming configuration

Table 5-81 RecordRequestArgs

Parameter	Mandatory	Type	Description
start_time	No	String	Start time
end_time	No	String	End time
format	No	String	Format
unit	No	String	Unit

Table 5-82 TimeshiftRequestArgs

Parameter	Mandatory	Type	Description
back_time	No	String	Time shifting duration field name
unit	No	String	Unit

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Table 5-83 LiveRequestArgs

Parameter	Mandatory	Type	Description
delay	No	String	Delay field
unit	No	String	Unit

Table 5-84 ManifestSelection

Parameter	Mandatory	Type	Description
stream_order	No	String	Stream Sorting Mode. • ORIGINAL: Maintain the original order, follow the sequence of transcoding templates configured in the channel settings. • VIDEO_BITRATE_ASCENDING: Sort by ascending video bitrate. • VIDEO_BITRATE_DESCENDING: Sort by descending video bitrate.
min_video_bandwidth	No	Integer	Minimum video bitrate for filtering. Unit: bit/s; the value must be smaller than max_video_bandwidth.
max_video_bandwidth	No	Integer	Maximum bitrate for video bitrate filtering. Unit: bit/s; the value must be greater than min_video_bandwidth.

Response Parameters

Status code: 200

Table 5-85 Response body parameters

Parameter	Type	Description
result_code	String	Error code.
result_msg	String	Error description.
domain	String	Ingest domain name.

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Parameter	Type	Description
app_name	String	Group name or application name. This parameter is mandatory.
id	String	Unique ID of a channel. This parameter is mandatory.
sources	Array of SourceRsp objects	Ingest URL list. During channel creation, the ingest URL list is returned only when the input stream protocol is **RTMP_PUSH**.

Table 5-86 SourceRsp

Parameter	Type	Description
url	String	RTMP ingest URL.
bitrate	Integer	Bitrate. Unit: bit/s. Value range: (0, 104,857,600] (100 Mbit/s)
width	Integer	Width corresponding to the resolution. Value range: 0–4096 (4K)
height	Integer	Height corresponding to the resolution. Value range: 0–2160 (4K)
enable_snapshot	Boolean	Whether to use the stream for snapshot capturing.

Status code: 400

Table 5-87 Response body parameters

Parameter	Type	Description
result_code	String	Error code.
result_msg	String	Error description.
domain	String	Ingest domain name.
app_name	String	Group name or application name. This parameter is mandatory.
id	String	Unique ID of a channel. This parameter is mandatory.

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Example Requests

```
PUT https://{endpoint}/v1/{project_id}/ott/channels/endpoints

{
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test",
  "endpoints" : [ {
    "hls_package" : [ {
      "url" : "pull.testott.hls.com/ott/test/index.m3u8",
      "stream_selection" : [ {
        "key" : "sss",
        "max_bandwidth" : 1000,
        "min_bandwidth" : 100
      } ],
      "hls_version" : "1",
      "segment_duration_seconds" : 4,
      "playlist_window_seconds" : 3600
    } ],
    "dash_package" : [ {
      "url" : "pull.testott.hls.com/ott/test/index.mpd",
      "stream_selection" : [ {
        "key" : "bitrate=900000-1800000",
        "max_bandwidth" : 1800000,
        "min_bandwidth" : 900000
      } ],
      "segment_duration_seconds" : 4,
      "playlist_window_seconds" : 3600
    } ],
    "mss_package" : [ {
      "url" : "pull.testott.hls.com/ott/channel/manifest",
      "stream_selection" : [ {
        "key" : "bitrate=900000-1800000",
        "max_bandwidth" : 1800000,
        "min_bandwidth" : 900000
      } ],
      "segment_duration_seconds" : 4,
      "playlist_window_seconds" : 3600
    } ]
  } ]
}
```

Example Responses

Status code: 200

Demo Information

```
{
  "result_code" : "LIVE.100000000",
  "result_msg" : "SUCCESS",
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test"
}
```

Status code: 400

Error response

```
{
  "result_code" : "LIVE.100011001",
  "result_msg" : "param check failed",
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : ""
}
```

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Status Codes

Status Code	Description
200	Demo Information
400	Error response

Error Codes

See **Error Codes**.

5.5 Modifying Channel Input Stream Information

Function

Modifies channel input stream information.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:updateChannelInput	Write	-	-	-	-

URI

PUT /v1/{project_id}/ott/channels/input

Table 5-88 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".

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Request Parameters

Table 5-89 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Table 5-90 Request body parameters

Parameter	Mandatory	Type	Description
domain	Yes	String	Ingest domain name of a channel.
app_name	Yes	String	Group name or application name.
id	Yes	String	Unique ID of a channel. This parameter is mandatory.
input	No	**InputStreamInfo** object	Channel output stream information.
encoder_settings_expand	No	**EncoderSettingsExpand** object	Encoding extension

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Table 5-91 InputStreamInfo

Parameter	Mandatory	Type	Description
input_protocol	Yes	String	Channel input protocol • **FLV_PULL** • **RTMP_PUSH** • **HLS_PULL** • **SRT_PULL** • **SRT_PUSH**
sources	No	Array of **SourcesInfo** objects	Information about the primary source stream of a channel. This parameter is optional when the stream input protocol is **RTMP_PUSH** or **SRT_PUSH**. In other cases, this parameter is mandatory.
secondary_sources	No	Array of **SecondarySourcesInfo** objects	Standby input stream array. This parameter is optional. If there is a standby input stream, ensure that the number of channels, codec, and resolution of the primary and standby input streams are the same. If the stream input protocol is **RTMP_PUSH**, you do not need to specify this parameter.
failover_conditions	No	**FailoverConditions** object	(Optional) Configuration provided by the channel supplier to switch between the primary and standby media stream URLs.

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Parameter	Mandatory	Type	Description
max_bandwidth_limit	No	Integer	Maximum bandwidth required when the input protocol is **HLS_PULL**. A streaming URL provided by the user includes the parameter **BANDWIDTH** for audios/videos with different bitrates. • If the maximum bandwidth is specified, Media Live will pull the media stream that has the highest bitrate and a bandwidth lower than the maximum bandwidth from the URL, and push the stream to the origin server. • If the maximum bandwidth is not specified, Media Live will pull the media stream with the largest **BANDWIDTH** value from the URL, and push the stream to the origin server.
ip_port_mode	No	Boolean	When the stream push protocol is **SRT_PUSH** and streams are pushed to the origin server, the encoder does not support the input of **streamid**. In this case, set this parameter to **true**.
ip_whitelist	No	String	IP address whitelist for stream push by customers when the SRT_PUSH type is used
scte35_source	No	String	SCTE-35 signal source of an advertisement. Only **HLS_PULL** channels support this configuration. Currently, this field can only be set to **SEGMENTS**.

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Parameter	Mandatory	Type	Description
ad_triggers	No	Array of strings	Configures an ad trigger. Options: • **Splice insert** • **Provider advertisement** • **Distributor advertisement** • **Provider placement opportunity** • **Distributor placement opportunity**
audio_selectors	No	Array of **InputAudioSelector** objects	Configures an audio selector (a maximum of 8).

Table 5-92 SourcesInfo

Parameter	Mandatory	Type	Description
url	No	String	Channel source stream URL, which is used for external stream pull.
bitrate	No	Integer	Bitrate. This parameter is mandatory when live transcoding is not required. Unit: bit/s. Value range: (0, 104,857,600] (100 Mbit/s)
width	No	Integer	Width corresponding to the resolution. This parameter is optional. Value range: 0–4096 (4K)
height	No	Integer	Height corresponding to the resolution. This parameter is optional. Value range: 0–2160 (4K)
enable_snapshot	No	Boolean	Whether to use the stream for snapshot capturing.
bitrate_for3u8	No	Boolean	Whether to use **bitrate** to fix the bitrate. Default value: **false**
passphrase	No	String	Encryption information when the protocol is **SRT_PUSH**.

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Parameter	Mandatory	Type	Description
backup_urls	No	Array of strings	Standby streaming URL list
stream_id	No	String	Stream ID of the streaming URL in an **SRT_PULL** channel.
latency	No	Integer	Stream pull latency of an **SRT_PULL** channel.
pbkeylen	No	Integer	SRT encryption algorithm 16 = AES-128 24 = AES-192 32 = AES-256

Table 5-93 SecondarySourcesInfo

Parameter	Mandatory	Type	Description
url	No	String	Channel source stream URL, which is used for external stream pull.
bitrate	No	Integer	Bitrate. This parameter is mandatory when live transcoding is not required. Unit: bit/s. Value range: (0, 104,857,600] (100 Mbit/s)
width	No	Integer	Width corresponding to the resolution. This parameter is optional. Value range: 0–4096 (4K)
height	No	Integer	Height corresponding to the resolution. This parameter is optional. Value range: 0–2160 (4K)
bitrate_for3u8	No	Boolean	Whether to use **bitrate** to fix the bitrate. Default value: **false**
passphrase	No	String	Encryption information when the protocol is **SRT_PUSH**
backup_urls	No	Array of strings	Standby streaming URL list
stream_id	No	String	Stream ID of the streaming URL in an **SRT_PULL** channel.

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Parameter	Mandatory	Type	Description
latency	No	Integer	Stream pull latency of an **SRT_PULL** channel.
pbkeylen	No	Integer	SRT encryption algorithm 16 = AES-128 24 = AES-192 32 = AES-256

Table 5-94 FailoverConditions

Parameter	Mandatory	Type	Description
input_loss_threshold_msec	No	Integer	Duration threshold for stopping input streams. When the threshold is reached, the primary/standby switchover is automatically triggered. Unit: millisecond. Value range: 0–3,600,000 (Optional) The default value is **2,000** ms.
input_preference	No	String	Whether the primary ingest URL has the highest priority (**PRIMARY**) or the primary and standby URLs are switched equally (**EQUAL**). In the equal switchover mode, the standby URL is used and will not be automatically switched to the primary URL. (Optional) The default value is **EQUAL**.

Table 5-95 InputAudioSelector

Parameter	Mandatory	Type	Description
name	Yes	String	Name of an audio selector. Enter only letters, digits, hyphens (-), and underscores (_). The name of each selector must be unique within the same channel.

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Parameter	Mandatory	Type	Description
selector_settings	No	**AudioSelectorSettings** object	Configures an audio selector.

Table 5-96 AudioSelectorSettings

Parameter	Mandatory	Type	Description
audio_language_selection	No	**AudioSelectorLangSelection** object	Configures a language selector.
audio_pid_selection	No	**AudioSelectorPidSelection** object	Configures a PID selector.
audio_hls_selection	No	**AudioSelectorHlsSelection** object	Configures an HLS selector.

Table 5-97 AudioSelectorLangSelection

Parameter	Mandatory	Type	Description
language_code	Yes	String	Enter a language code of 2 or 3 lowercase letters.

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Parameter	Mandatory	Type	Description
language_selection_policy	No	String	Language output policy. Options: • **LOOSE**: loose match. For example, if the language code **eng** is selected, an audio stream in English will be preferentially selected. If there is no audio stream in English, the audio stream with the lowest PID will be selected. • **STRICT**: strict match. For example, if the language code **eng** is selected, only an audio stream in English will be selected. If there is no audio stream in English, a muted segment will be automatically added. When this audio selector is used to play the video, the video is muted.

Table 5-98 AudioSelectorPidSelection

Parameter	Mandatory	Type	Description
pid	Yes	Integer	Sets the PID value.

Table 5-99 AudioSelectorHlsSelection

Parameter	Mandatory	Type	Description
name	Yes	String	HLS audio selector name
group_id	Yes	String	HLS audio selector GID

Table 5-100 EncoderSettingsExpand

Parameter	Mandatory	Type	Description
audio_descriptions	No	Array of **audio_descriptions** objects	Description of an audio output setting

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Parameter	Mandatory	Type	Description
video_descriptions	No	**VideoDescriptions** object	Description of the video output configuration.

Table 5-101 audio_descriptions

Parameter	Mandatory	Type	Description
name	Yes	String	Name of an audio output setting. Enter only letters, digits, hyphens (-), and underscores (_). Names of audio output settings in the same channel must be different.
audio_selector_name	Yes	String	Audio selector name
language_code_control	No	String	Language code control. The setting will change only the audio's language displayed externally, not its actual language. Options: • **FOLLOW_INPUT**: If the output audio of the selected audio selector has a language, this language will be used. Otherwise, the language code and stream name specified here will be used. The default value is recommended. • **USE_CONFIGURED**: The language and stream name of the output audio can be customized.
language_code	No	String	Language code, which consists of 2 or 3 lowercase letters.
stream_name	No	String	Stream name

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Table 5-102 VideoDescriptions

Parameter	Mandatory	Type	Description
gop_duration_seconds	No	Integer	Custom GOP duration, in seconds. The value ranges from 0 to 10. The default value is **0**, indicating that the GOP duration of the source stream is used. The value cannot be **7** or **9**. If the value is invalid, the default value is used.

Response Parameters

Status code: 200

Table 5-103 Response body parameters

Parameter	Type	Description
result_code	String	Error code.
result_msg	String	Error description.
domain	String	Ingest domain name.
app_name	String	Group name or application name. This parameter is mandatory.
id	String	Unique ID of a channel. This parameter is mandatory.
sources	Array of **SourceRsp** objects	Ingest URL list. During channel creation, the ingest URL list is returned only when the input stream protocol is **RTMP_PUSH**.

Table 5-104 SourceRsp

Parameter	Type	Description
url	String	RTMP ingest URL.
bitrate	Integer	Bitrate. Unit: bit/s. Value range: (0, 104,857,600] (100 Mbit/s)
width	Integer	Width corresponding to the resolution. Value range: 0–4096 (4K)

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Parameter	Type	Description
height	Integer	Height corresponding to the resolution. Value range: 0–2160 (4K)
enable_snapshot	Boolean	Whether to use the stream for snapshot capturing.

Status code: 400

Table 5-105 Response body parameters

Parameter	Type	Description
result_code	String	Error code.
result_msg	String	Error description.
domain	String	Ingest domain name.
app_name	String	Group name or application name. This parameter is mandatory.
id	String	Unique ID of a channel. This parameter is mandatory.

Example Requests

```
PUT https://{endpoint}/v1/{project_id}/ott/channels/input

{
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test",
  "input" : {
    "input_protocol" : "RTMP_PUSH",
    "sources" : [ {
      "width" : 100,
      "bitrate_for3u8" : false,
      "enable_snapshot" : false,
      "bitrate" : 1024,
      "passphrase" : "",
      "url" : "rtmp://192.168.8.158/ott/adtestdrm?vhost=pull.testott.hls.com",
      "height" : 100
    } ]
  }
}
```

Example Responses

Status code: 200

Demo Information

```
{
  "result_code" : "LIVE.100000000",
  "result_msg" : "SUCCESS",
```

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```
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test"
}
```

Status code: 400

Error response

```
{
  "result_code" : "LIVE.103011019",
  "result_msg" : "The resource to access is not exists",
  "domain" : "push.testott.hls.com",
  "app_name" : "test",
  "id" : "test-abc"
}
```

Status Codes

Status Code	Description
200	Demo Information
400	Error response

Error Codes

See **Error Codes**.

5.6 Modifying Channel Recording Information

Function

Modifies channel recording information.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:updateChannelRecord	Write	-	-	-	-

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URI

PUT /v1/{project_id}/ott/channels/record-settings

Table 5-106 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".

Request Parameters

Table 5-107 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Table 5-108 Request body parameters

Parameter	Mandatory	Type	Description
domain	Yes	String	Ingest domain name of a channel.
app_name	Yes	String	Group name or application name.

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Parameter	Mandatory	Type	Description
id	Yes	String	Unique ID of a channel. This parameter is mandatory.
record_settings	No	record_settings object	Catch-up TV configuration.

Table 5-109 record_settings

Parameter	Mandatory	Type	Description
rollingbuffer_duration	No	Integer	Maximum catch-up TV recording duration. The recording is continuous in this period. This parameter is mandatory. Unit: second. The value **0** indicates that recording is not supported. The maximum recording duration is 14 days.

Response Parameters

Status code: 200

Table 5-110 Response body parameters

Parameter	Type	Description
result_code	String	Error code
result_msg	String	Error message
domain	String	Ingest domain name
app_name	String	Group name or application name. This parameter is mandatory.
id	String	(Mandatory) Unique ID of a channel.

Status code: 400

Table 5-111 Response body parameters

Parameter	Type	Description
result_code	String	Error code.

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Parameter	Type	Description
result_msg	String	Error description.
domain	String	Ingest domain name.
app_name	String	Group name or application name. This parameter is mandatory.
id	String	Unique ID of a channel. This parameter is mandatory.

Example Requests

```
PUT https://{endpoint}/v1/{project_id}/ott/channels/record-settings

{
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test",
  "record_settings" : {
    "rollingbuffer_duration" : 3600
  }
}
```

Example Responses

Status code: 200

Demo Information

```
{
  "result_code" : "LIVE.100000000",
  "result_msg" : "SUCCESS",
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test"
}
```

Status code: 400

Error response

```
{
  "result_code" : "LIVE.103011019",
  "result_msg" : "The resource to access is not exists",
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test2"
}
```

Status Codes

Status Code	Description
200	Demo Information
400	Error response

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Error Codes

See **Error Codes**.

5.7 Modifying General Channel Information

Function

Modifies general channel information.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:updateChannelGeneralInfo	Write	-	-	-	-

URI

PUT /v1/{project_id}/ott/channels/general

Table 5-112 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".

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Request Parameters

Table 5-113 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Table 5-114 Request body parameters

Parameter	Mandatory	Type	Description
domain	Yes	String	Ingest domain name of a channel.
app_name	Yes	String	Group name or application name.
id	Yes	String	Unique ID of a channel. This parameter is mandatory.
name	Yes	String	Channel name.

Response Parameters

Status code: 200

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Table 5-115 Response body parameters

Parameter	Type	Description
result_code	String	Error code.
result_msg	String	Error description.
domain	String	Ingest domain name.
app_name	String	Group name or application name. This parameter is mandatory.
id	String	Unique ID of a channel. This parameter is mandatory.
sources	Array of **SourceRsp** objects	Ingest URL list. During channel creation, the ingest URL list is returned only when the input stream protocol is **RTMP_PUSH**.

Table 5-116 SourceRsp

Parameter	Type	Description
url	String	RTMP ingest URL.
bitrate	Integer	Bitrate. Unit: bit/s. Value range: (0, 104,857,600] (100 Mbit/s)
width	Integer	Width corresponding to the resolution. Value range: 0–4096 (4K)
height	Integer	Height corresponding to the resolution. Value range: 0–2160 (4K)
enable_snapshot	Boolean	Whether to use the stream for snapshot capturing.

Status code: 400

Table 5-117 Response body parameters

Parameter	Type	Description
result_code	String	Error code.
result_msg	String	Error description.
domain	String	Ingest domain name.

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Parameter	Type	Description
app_name	String	Group name or application name. This parameter is mandatory.
id	String	Unique ID of a channel. This parameter is mandatory.

Example Requests

```
PUT https://{endpoint}/v1/{project_id}/ott/channels/general

{
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test",
  "name" : "modify_name"
}
```

Example Responses

Status code: 200

Demo Information

```
{
  "result_code" : "LIVE.100000000",
  "result_msg" : "SUCCESS",
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test"
}
```

Status code: 400

Error response

```
{
  "result_code" : "LIVE.103011019",
  "result_msg" : "The resource to access is not exists",
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test22"
}
```

Status Codes

Status Code	Description
200	Demo Information
400	Error response

Error Codes

See **Error Codes**.

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5.8 Changing the Channel Status

Function

Changes the channel status.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:updateChannelState	Write	-	-	-	-

URI

PUT /v1/{project_id}/ott/channels/state

Table 5-118 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".

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Request Parameters

Table 5-119 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Table 5-120 Request body parameters

Parameter	Mandatory	Type	Description
domain	Yes	String	Ingest domain name of a channel.
app_name	Yes	String	Group name or application name.
id	Yes	String	(Mandatory) Unique ID of a channel.
state	Yes	String	Channel status. • **ON**: After a channel is delivered, functions such as stream pull, transcoding, and recording are automatically enabled. • **OFF**: Only the channel information is saved but the channel is not started.

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Response Parameters

Status code: 200

Table 5-121 Response body parameters

Parameter	Type	Description
result_code	String	Error code.
result_msg	String	Error description.
domain	String	Ingest domain name.
app_name	String	Group name or application name. This parameter is mandatory.
id	String	Unique ID of a channel. This parameter is mandatory.
sources	Array of **SourceRsp** objects	Ingest URL list. During channel creation, the ingest URL list is returned only when the input stream protocol is **RTMP_PUSH**.

Table 5-122 SourceRsp

Parameter	Type	Description
url	String	RTMP ingest URL.
bitrate	Integer	Bitrate. Unit: bit/s. Value range: (0, 104,857,600] (100 Mbit/s)
width	Integer	Width corresponding to the resolution. Value range: 0–4096 (4K)
height	Integer	Height corresponding to the resolution. Value range: 0–2160 (4K)
enable_snapshot	Boolean	Whether to use the stream for snapshot capturing.

Status code: 400

Table 5-123 Response body parameters

Parameter	Type	Description
result_code	String	Error code.

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Parameter	Type	Description
result_msg	String	Error description.
domain	String	Ingest domain name.
app_name	String	Group name or application name. This parameter is mandatory.
id	String	Unique ID of a channel. This parameter is mandatory.

Example Requests

```
PUT https://{endpoint}/v1/{project_id}/ott/channels/state

{
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test",
  "state" : "ON"
}
```

Example Responses

Status code: 200

Demo Information

```
{
  "result_code" : "LIVE.100000000",
  "result_msg" : "SUCCESS",
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test"
}
```

Status code: 400

Error response

```
{
  "result_code" : "LIVE.100011001",
  "result_msg" : "Request parameters is invalid, channel state has been turned OFF",
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test"
}
```

Status Codes

Status Code	Description
200	Demo Information
400	Error response

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Error Codes

See **Error Codes**.

5.9 Modifying Channel Transcoding Template Information

Function

Modifies channel transcoding template information.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:modifyChannelTranscodings	Write	-	-	-	-

URI

PUT /v1/{project_id}/ott/channels/encorder-settings

Table 5-124 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".

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Request Parameters

Table 5-125 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Table 5-126 Request body parameters

Parameter	Mandatory	Type	Description
domain	Yes	String	Ingest domain name of a channel.
app_name	Yes	String	Group name or application name.
id	Yes	String	Unique ID of a channel. This parameter is mandatory.
encoder_settings	No	Array of **encoder_settings** objects	Transcoding template configuration.

Table 5-127 encoder_settings

Parameter	Mandatory	Type	Description
template_id	No	String	Transcoding template ID.

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Response Parameters

Status code: 200

Table 5-128 Response body parameters

Parameter	Type	Description
result_code	String	Error code.
result_msg	String	Error description.
domain	String	Ingest domain name.
app_name	String	Group name or application name. This parameter is mandatory.
id	String	Unique ID of a channel. This parameter is mandatory.
sources	Array of **SourceRsp** objects	Ingest URL list. During channel creation, the ingest URL list is returned only when the input stream protocol is **RTMP_PUSH**.

Table 5-129 SourceRsp

Parameter	Type	Description
url	String	RTMP ingest URL.
bitrate	Integer	Bitrate. Unit: bit/s. Value range: (0, 104,857,600] (100 Mbit/s)
width	Integer	Width corresponding to the resolution. Value range: 0–4096 (4K)
height	Integer	Height corresponding to the resolution. Value range: 0–2160 (4K)
enable_snapshot	Boolean	Whether to use the stream for snapshot capturing.

Status code: 400

Table 5-130 Response body parameters

Parameter	Type	Description
result_code	String	Error code.

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Parameter	Type	Description
result_msg	String	Error description.
domain	String	Ingest domain name.
app_name	String	Group name or application name. This parameter is mandatory.
id	String	Unique ID of a channel. This parameter is mandatory.

Example Requests

```
PUT https://{endpoint}/v1/{project_id}/ott/channels/encorder-settings

{
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test",
  "encoder_settings" : [ {
    "template_id" : "ld"
  } ]
}
```

Example Responses

Status code: 200

Demo Information

```
{
  "result_code" : "LIVE.100000000",
  "result_msg" : "SUCCESS",
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test"
}
```

Status code: 400

Error response

```
{
  "result_code" : "LIVE.103011019",
  "result_msg" : "The resource to access is not exists",
  "domain" : "push.testott.hls.com",
  "app_name" : "ott",
  "id" : "test2"
}
```

Status Codes

Status Code	Description
200	Demo Information
400	Error response

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Error Codes

See **Error Codes**.

5.10 Querying Channel Statistics

Function

Queries channel statistics (input SCTE-35 signal).

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:statistic	List	-	-	-	-

URI

POST /v1/{project_id}/ott/channels/statistic

Table 5-131 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 5-132 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. The value ranges from 1 to 100 and defaults to **10**.

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Parameter	Mandatory	Type	Description
offset	No	Integer	Offset, which is the position where the query starts. The value must be greater than or equal to 0.

Request Parameters

Table 5-133 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Table 5-134 Request body parameters

Parameter	Mandatory	Type	Description
domain	Yes	String	Ingest domain name of a channel
app_name	Yes	String	Group name or application name
id	Yes	String	Channel ID. (Mandatory) Unique ID of a channel.
type	Yes	String	Statistics type. The value can be **scte35**.

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Parameter	Mandatory	Type	Description
scte35	No	SCTE35StatisticReq object	Field for requesting the SCTE-35 signal of a channel
region_type	No	String	Indicates whether the region corresponding to the channel is the primary or standby region. • master: primary region • slave: standby region • all: all regions If the region_type parameter is not specified or this parameter is not available, the primary region is used.

Table 5-135 SCTE35StatisticReq

Parameter	Mandatory	Type	Description
type	Yes	String	Signal type. The value can be **all**, **splice_insert**, or **time_signal**.
start_time	Yes	Long	Start time for querying signals. The value is a Unix time, in seconds.
end_time	Yes	Long	End time for querying signals. The value is a Unix time, in seconds. The end time must be later than the start time.

Response Parameters

Status code: 200

Table 5-136 Response body parameters

Parameter	Type	Description
domain	String	Ingest domain name of a channel
app_name	String	Group name or application name
id	String	Channel ID. (Mandatory) Unique ID of a channel.

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Parameter	Type	Description
type	String	Statistics type. The value can be **scte35**.
scte35	**SCTE35StatisticRsp** object	Response body for obtaining the SCTE-35 signal

Table 5-137 SCTE35StatisticRsp

Parameter	Type	Description
total	Integer	Total number of SCTE-35 signals found
scte35_info	Array of **SCTE35InfoItem** objects	Array of detailed SCTE-35 signals

Table 5-138 SCTE35InfoItem

Parameter	Type	Description
type	String	Signal type. The value can be **splice_insert** or **time_signal**.
event_id	Integer	Event ID of the ad signal. For time signal, the first element in the array is printed.
start_date	Long	Execution time of the ad signal. The value is a Unix time, in seconds. The value is translated into the UTC time on the console.
duration	Integer	Duration of the ad signal, in seconds. If the value is **-1**, the signal duration is not carried and - is displayed on the console.

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Parameter	Type	Description

segmentation_type	String	// Splice Insert. Enter a hyphen (-).
		// Time signal. The value can be **0x30**, **0x31**, **0x32**, **0x33**, **0x34**, **0x35**, **0x36**, or **0x37**.
		// 0x30: ProviderAdvertisementStart
		// 0x31: ProviderAdvertisementEnd
		// 0x32: DistributorAdvertisementStart
		// 0x33: DistributorAdvertisementEnd
		// 0x34: ProviderPlacementOpportunityStart
		// 0x35: ProviderPlacementOpportunityEnd
		// 0x36: DistributorPlacementOpportunityStart
		// 0x37: DistributorPlacementOpportunityEnd

base64_data	String	Base64 value of the raw data of an ad signal
raw_splice	String	All information about an ad signal
region_type	String	Indicates whether the region corresponding to the advertisement signal is the primary region or the secondary region. • master: primary region • slave: secondary region
region	String	A region corresponding to the advertising signal.

Status code: 404

Table 5-139 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

```
POST https://{endpoint}/v1/{project_id}/ott/channels/statistic?limit=50&offset=10

{
```

```
  "domain" : "www.huaweiott.pushdomain.com",
  "app_name" : "live",
  "id" : "channelId",
  "type" : "scte35",
  "region_type" : "master",
  "scte35" : {
    "type" : "all",
    "start_time" : 1741650609,
    "end_time" : 1741658609
  }
}
```

Example Responses

Status code: 200

Query success response

```
{
  "domain" : "www.huaweiott.pushdomain.com",
  "app_name" : "live",
  "id" : "channelId",
  "type" : "scte35",
  "scte35" : {
    "total" : 50,
    "scte35_info" : [ {
      "type" : "Splice Insert",
      "event_id" : 100,
      "start_date" : 1741594376,
      "duration" : 120,
      "region_type" : "master",
      "region" : "me-east-1",
      "segmentation_type" : "Provider advertisement Start",
      "base64_data" : "/DAlAAAAAAAAAP/wFAUAAAABf+/+AGAhYP4AKTLgAAEAAAAAjhdvmA==",
      "raw_splice" : "{\"table_id\":252,\"section_syntax_indicator\":false,\"private_indicator
\":false,\"section_length\":32,\"protocol_version\":0,\"encrypted_packet\":false,\"encryption_algorithm
\":0,\"pts_adjustment\":0,\"cw_index\":0,\"tier\":0,\"splice_command_length\":15,\"splice_command_type
\":\"Splice Insert\",\"splice_command\":{\"splice_event_id\":9,\"splice_event_cancel_indicator
\":false,\"out_of_network_indicator\":false,\"program_splice_flag\":true,\"duration_flag
\":false,\"splice_immediate_flag\":false,\"splice_time\":{\"time_specified_flag\":true,\"pts_time
\":429850800},\"unique_program_id\":0,\"avail_num\":0,\"avails_expected\":0},\"descriptor_loop_length
\":0,\"descriptors\":[],\"crc32\":2510451559}"
    }, {
      "type" : "Splice Insert",
      "event_id" : 101,
      "start_date" : 1741594378,
      "duration" : 120,
      "region_type" : "slave",
      "region" : "ap-southeast-3",
      "segmentation_type" : "Provider advertisement Start",
      "base64_data" : "/DAlAAAAAAAAAP/wFAUAAAABf+/+AGAhYP4AKTLgAAEAAAAAjhdvmA==",
      "raw_splice" : "{\"table_id\":252,\"section_syntax_indicator\":false,\"private_indicator
\":false,\"section_length\":32,\"protocol_version\":0,\"encrypted_packet\":false,\"encryption_algorithm
\":0,\"pts_adjustment\":0,\"cw_index\":0,\"tier\":0,\"splice_command_length\":15,\"splice_command_type
\":\"Splice Insert\",\"splice_command\":{\"splice_event_id\":9,\"splice_event_cancel_indicator
\":false,\"out_of_network_indicator\":false,\"program_splice_flag\":true,\"duration_flag
\":false,\"splice_immediate_flag\":false,\"splice_time\":{\"time_specified_flag\":true,\"pts_time
\":429850800},\"unique_program_id\":0,\"avail_num\":0,\"avails_expected\":0},\"descriptor_loop_length
\":0,\"descriptors\":[],\"crc32\":2510451559}"
    } ]
  }
}
```

Status code: 404

Query failed response

```
{
  "error_code" : "LIVE.103011099",
```

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```
  "error_msg" : "query channel statistic failed"
}
```

Status Codes

Status Code	Description
200	Query success response
404	Query failed response

Error Codes

See **Error Codes**.

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6 New APIs Integrated with Cloud Eye

6.1 Querying Dimension Configurations

Function

Added the API for querying dimension configurations.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:getDimsInfo	List	-	-	-	-

URI

GET /v1/{project_id}/ott/dims-info

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".

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Table 6-2 Query Parameters

Parameter	Mandatory	Type	Description
namespace	Yes	String	Namespace, such as SYS.LIVE, is consistent with the namespace used by the service when reporting metrics.

Request Parameters

Table 6-3 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Response Parameters

Status code: 200

Table 6-4 Response body parameters

Parameter	Type	Description
query	**query** object	Response to a Cloud Eye query

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Table 6-5 query

Parameter	Type	Description
medialive_mpc	**CesDimsItem** object	Media Live transcoding service
pipeline	**CesDimsItem** object	Channel
audio	**CesDimsItem** object	Audio
medialive_cdn	**CesDimsItem** object	Media Live CDN service
medialive_package	**CesDimsItem** object	Media Live packaging service
medialive_connect	**CesDimsItem** object	Media Live service for sending and receiving streams
medialive_tailor	**CesDimsItem** object	Media Live advertising service
region	**CesDimsItem** object	Region of the Live service.

Table 6-6 CesDimsItem

Parameter	Type	Description
params	Array of strings	Query parameter
display	**display** object	Information displayed

Table 6-7 display

Parameter	Type	Description
id	**id** object	Query ID

Table 6-8 id

Parameter	Type	Description
zh-cn	String	Chinese name
en-us	String	English name

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Status code: 400

Table 6-9 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

```
GET https://{endpoint}/v1/{project_id}/ott/dims-info?namespace=SYS.LIVE
```

Example Responses

Status code: 200

Succeeded.

```
{
  "query" : {
    "medialive_mpc" : {
      "params" : [ "id" ],
      "display" : {
        "id" : {
          "zh-cn" : "Channel",
          "en-us" : "Channel"
        }
      }
    },
    "pipeline" : {
      "params" : [ "id" ],
      "display" : {
        "id" : {
          "zh-cn" : "Channel",
          "en-us" : "Pipeline"
        }
      }
    },
    "region" : {
      "params" : [ "id" ],
      "display" : {
        "id" : {
          "zh-cn" : "Region.",
          "en-us" : "Region"
        }
      }
    },
    "audio" : {
      "params" : [ "id" ],
      "display" : {
        "id" : {
          "zh-cn" : "Audio",
          "en-us" : "Audio"
        }
      }
    },
    "medialive_cdn" : {
      "params" : [ "id" ],
      "display" : {
        "id" : {
          "zh-cn" : "Domain name",
          "en-us" : "Domain"
```

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```
      }
    }
  },
  "medialive_package" : {
    "params" : [ "id" ],
    "display" : {
      "id" : {
        "zh-cn" : "Channel",
        "en-us" : "Channel"
      }
    }
  },
  "medialive_connect" : {
    "params" : [ "id" ],
    "display" : {
      "id" : {
        "zh-cn" : "Stream",
        "en-us" : "Flow"
      }
    }
  },
  "medialive_tailor" : {
    "params" : [ "id" ],
    "display" : {
      "id" : {
        "zh-cn" : "Configuration name",
        "en-us" : "Configuration Name"
      }
    }
  }
 }
}
```

Status code: 400

Request parameter verification failed.

```
{
  "error_code" : "LIVE.100011001",
  "error_msg" : "Request parameters is invalid"
}
```

Status Codes

Status Code	Description
200	Succeeded.
400	Request parameter verification failed.

Error Codes

See **Error Codes**.

6.2 Querying Instances

Function

Adding the Instance Query API

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Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:listCesInstances	List	-	-	-	-

URI

POST /v1/{project_id}/ott/instances

Table 6-10 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 6-11 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.

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Parameter	Mandatory	Type	Description
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Table 6-12 Request body parameters

Parameter	Mandatory	Type	Description
namespace	Yes	String	Namespace
query	Yes	Array of **query** objects	Query information
start	No	Integer	Start offset of a query
limit	No	Integer	Query constraint

Table 6-13 query

Parameter	Mandatory	Type	Description
dim_name	Yes	String	Dimension name
id	No	String	Dimension ID

Response Parameters

Status code: 200

Table 6-14 Response body parameters

Parameter	Type	Description
instances	Array of **instances** objects	Instance
total	Integer	Total number

Table 6-15 instances

Parameter	Type	Description
medialive_mpc	**medialive_mpc** object	Media Live transcoding service
pipeline	**pipeline** object	Channel

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Parameter	Type	Description
audio	**audio** object	Audio

Table 6-16 medialive_mpc

Parameter	Type	Description
id	String	Channel ID
name	String	Channel name

Table 6-17 pipeline

Parameter	Type	Description
id	String	pipeline id
name	String	pipeline name

Table 6-18 audio

Parameter	Type	Description
id	String	Channel ID
name	String	Channel name

Status code: 400

Table 6-19 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

- Queries all audio instances in **Pipeline 0** of **cctv1** under the **medialive_mpc** dimension (with five audio track instances output).

```
POST https://{endpoint}/v1/{project_id}/ott/instances

{
  "namespace" : "SYS.LIVE",
  "query" : [ {
```

```
    "dim_name" : "medialive_mpc",
    "id" : "test1112"
   }, {
    "dim_name" : "pipeline"
   }, {
    "dim_name" : "audio"
   } ],
   "start" : 0,
   "limit" : 100
}
```

- Queries all pipeline instances of **cctv1** under the **medialive_mpc** dimension.

```
POST https://{endpoint}/v1/{project_id}/ott/instances

{
  "namespace" : "SYS.LIVE",
  "query" : [ {
    "dim_name" : "medialive_mpc",
    "id" : "cctv1"
   }, {
    "dim_name" : "pipeline"
   } ],
   "start" : 0,
   "limit" : 100
}
```

Example Responses

Status code: 200

```
{
  "instances" : [ {
    "medialive_mpc" : {
      "id" : "test1112",
      "name" : "test1112"
    },
    "pipeline" : {
      "id" : "Pipeline0",
      "name" : "Pipeline0"
    },
    "audio" : {
      "id" : "Audio0",
      "name" : "Audio0"
    }
  }, {
    "medialive_mpc" : {
      "id" : "test1112",
      "name" : "test1112"
    },
    "pipeline" : {
      "id" : "Pipeline0",
      "name" : "Pipeline0"
    },
    "audio" : {
      "id" : "Audio1",
      "name" : "Audio1"
    }
  }, {
    "medialive_mpc" : {
      "id" : "test1112",
      "name" : "test1112"
    },
    "pipeline" : {
      "id" : "Pipeline0",
      "name" : "Pipeline0"
    },
    "audio" : {
      "id" : "Audio2",
      "name" : "Audio2"
```

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```
    }
  }, {
    "medialive_mpc" : {
      "id" : "test1112",
      "name" : "test1112"
    },
    "pipeline" : {
      "id" : "Pipeline0",
      "name" : "Pipeline0"
    },
    "audio" : {
      "id" : "Audio3",
      "name" : "Audio3"
    }
  }, {
    "medialive_mpc" : {
      "id" : "test1112",
      "name" : "test1112"
    },
    "pipeline" : {
      "id" : "Pipeline0",
      "name" : "Pipeline0"
    },
    "audio" : {
      "id" : "Audio4",
      "name" : "Audio4"
    }
  } ],
  "total" : 5
}
```


Status code: 400

Invalid request parameters.


```
{
  "error_code" : "LIVE.100011001",
  "error_msg" : "Request parameters is invalid"
}
```


Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request parameters.

Error Codes

See **Error Codes**.

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7 Flows

7.1 Creating a Flow

Function

Creates a flow.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:createFlow	Write	-	-	-	-

URI

POST /v1/{project_id}/flows

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".

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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. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Table 7-3 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Flow name
region	Yes	String	Region
sources	Yes	Array of **FlowSource** objects	Input information

Table 7-4 FlowSource

Parameter	Mandatory	Type	Description
source_listener_address	No	String	Ingest URL
source_listener_port	No	Integer	Port that pulls streams. **2077** and **2088** are not allowed.
stream_id	No	String	**streamid** of SRT stream pull

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Parameter	Mandatory	Type	Description
min_latency	No	Integer	Minimum latency, in millisecond.
cidr_whitelist	No	Array of strings	CIDR IP whitelist for stream push
description	No	String	Description
protocol	Yes	String	Protocol. The value can be **srt-caller** or **srt-listener**.
name	Yes	String	Input resource name
decryption	No	**FlowSourceDecryption** object	Flow decryption information in StreamConnect.
health_status	No	String	Status of stream push to a third party through SRT. The options are **CONNECTED** (stream push ongoing) and **DISCONNECTED** (stream push interrupted).

Table 7-5 FlowSourceDecryption

Parameter	Mandatory	Type	Description
algorithm	No	String	Encryption algorithm. The value can be **aes128** (AES-128), **aes192** (AES-192), or **aes256** (AES-256).
key_type	Yes	String	Key type. The value can be **speke** (obtaining keys using the SPEKE protocol), **static-key** (static key), or **srt-password** (SRT key). Currently, only **srt-password** is supported.
passphrase	Yes	String	SRT decryption key, which is used by a flow to decrypt SRT streams.

Response Parameters

Status code: 201

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Table 7-6 Response body parameters

Parameter	Type	Description
flow	**FlowDetailRespBody** object	Flow information

Table 7-7 FlowDetailRespBody

Parameter	Type	Description
name	String	Flow name
region	String	Region
sources	Array of **FlowSource** objects	Input information
status	String	Status
flow_id	String	Flow ID
outputs	Array of **FlowOutput** objects	Flow output information

Table 7-8 FlowSource

Parameter	Type	Description
source_listener_address	String	Ingest URL
source_listener_port	Integer	Port that pulls streams. **2077** and **2088** are not allowed.
stream_id	String	**streamid** of SRT stream pull
min_latency	Integer	Minimum latency, in millisecond.
cidr_whitelist	Array of strings	CIDR IP whitelist for stream push
description	String	Description
protocol	String	Protocol. The value can be **srt-caller** or **srt-listener**.
name	String	Input resource name
decryption	**FlowSourceDecryption** object	Flow decryption information in StreamConnect.

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Parameter	Type	Description
health_status	String	Status of stream push to a third party through SRT. The options are **CONNECTED** (stream push ongoing) and **DISCONNECTED** (stream push interrupted).

Table 7-9 FlowSourceDecryption

Parameter	Type	Description
algorithm	String	Encryption algorithm. The value can be **aes128** (AES-128), **aes192** (AES-192), or **aes256** (AES-256).
key_type	String	Key type. The value can be **speke** (obtaining keys using the SPEKE protocol), **static-key** (static key), or **srt-password** (SRT key). Currently, only **srt-password** is supported.
passphrase	String	SRT decryption key, which is used by a flow to decrypt SRT streams.

Table 7-10 FlowOutput

Parameter	Type	Description
name	String	Name
type	String	Type

Status code: 400

Table 7-11 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

```
https://{endpoint}/v1/{project_id}/flows
```

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```
{
  "name" : "test_caller",
  "region" : "cn-north-5",
  "sources" : [ {
    "source_listener_address" : "srt://100.10.10.10",
    "source_listener_port" : 5000,
    "stream_id" : "",
    "min_latency" : 2000,
    "cidr_whitelist" : [ "0.0.0.0/32" ],
    "description" : "test_caller",
    "protocol" : "srt-caller",
    "name" : "gzztest_caller",
    "decryption" : {
      "algorithm" : "aes256",
      "key_type" : "srt-password",
      "passphrase" : "*******"
    }
  } ]
}
```

Example Responses

Status code: 201

Response indicating successful flow creation

```
{
  "flow" : {
    "name" : "test_caller",
    "region" : "cn-north-5",
    "sources" : [ {
      "description" : "test_caller",
      "min_latency" : 2000,
      "source_listener_port" : 5000,
      "source_listener_address" : "srt://100.11.10.10",
      "cidr_whitelist" : [ "0.0.0.0/32", "192.168.0.1/16" ],
      "protocol" : "srt-caller",
      "name" : "test_caller",
      "decryption" : {
        "algorithm" : "aes256",
        "key_type" : "srt-password",
        "passphrase" : "******"
      }
    } ],
    "flow_id" : "fcbc63d1-06d8-47ba-8fd9-cd0096b72f6d",
    "status" : "STANDBY"
  }
}
```

Status code: 400

Response indicating failed flow creation

```
{
  "error_code" : "LIVE.103011018",
  "error_msg" : "The resource to create is already exists"
}
```

Status Codes

Status Code	Description
201	Response indicating successful flow creation

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Status Code	Description
400	Response indicating failed flow creation

Error Codes

See **Error Codes**.

7.2 Querying Flows

Function

Queries flows.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:listFlow	List	-	-	-	-

URI

GET /v1/{project_id}/flows

Table 7-12 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".

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Table 7-13 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. The value ranges from 1 to 100 and defaults to **10**.
offset	No	Integer	Offset, which is the position where the query starts. The value must be greater than or equal to 0.

Request Parameters

Table 7-14 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Response Parameters

Status code: 200

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Table 7-15 Response body parameters

Parameter	Type	Description
total	Integer	Total number
flows	Array of **ListFlowRespItem** objects	Flow list

Table 7-16 ListFlowRespItem

Parameter	Type	Description
name	String	Flow name
region	String	Region
flow_id	String	Flow ID
status	String	Status. The value can be **ACTIVE** (running) or **STANDBY** (not started).
description	String	Description
protocol	String	Protocol. The value can be **srt-caller** or **srt-listener**.

Status code: 400

Table 7-17 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

None

Example Responses

Status code: 200

Response to the request for querying flows

```
{
  "total" : 8,
  "flows" : [ {
    "name" : "test",
```

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```
    "region" : "cn-north-5",
    "flow_id" : "fcbc63d1-06d8-47ba-8fd9-cd0096b72f6d",
    "status" : "STANDBY",
    "description" : "test",
    "protocol" : "srt-caller"
  } ]
}
```


Status code: 400

Response indicating an error


```
{
  "error_code" : "LIVE.100011001",
  "error_msg" : "Request parameters is invalid"
}
```


Status Codes

Status Code	Description
200	Response to the request for querying flows
400	Response indicating an error

Error Codes

See **Error Codes**.

7.3 Deleting a Flow

Function

Deletes a flow.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:deleteFlow	Write	-	-	-	-

URI

DELETE /v1/{project_id}/flows

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Table 7-18 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 7-19 Query Parameters

Parameter	Mandatory	Type	Description
flow_id	Yes	String	Flow ID

Request Parameters

Table 7-20 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Response Parameters

Status code: 200

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Table 7-21 Response body parameters

Parameter	Type	Description
status	String	Status
flow_id	String	Flow ID

Status code: 400

Table 7-22 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
200	Response to the request for deleting a flow
400	Response indicating a failure

Error Codes

See **Error Codes**.

7.4 Querying Flow Details

Function

Queries flow details.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions.

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For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:getFlowDetail	Read	-	-	-	-

URI

GET /v1/{project_id}/flows/detail

Table 7-23 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 7-24 Query Parameters

Parameter	Mandatory	Type	Description
data_display	No	String	Whether to obtain the hidden secret key information.
flow_id	Yes	String	Flow ID

Request Parameters

Table 7-25 Request header parameters

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

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Parameter	Mandatory	Type	Description
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Response Parameters

Status code: 200

Table 7-26 Response body parameters

Parameter	Type	Description
name	String	Flow name
region	String	Region
sources	Array of **FlowSource** objects	Input information
status	String	Status
flow_id	String	Flow ID
outputs	Array of **FlowOutput** objects	Flow output information

Table 7-27 FlowSource

Parameter	Type	Description
source_listener_address	String	Ingest URL
source_listener_port	Integer	Port that pulls streams. **2077** and **2088** are not allowed.
stream_id	String	**streamid** of SRT stream pull
min_latency	Integer	Minimum latency, in millisecond.

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Parameter	Type	Description
cidr_whitelist	Array of strings	CIDR IP whitelist for stream push
description	String	Description
protocol	String	Protocol. The value can be **srt-caller** or **srt-listener**.
name	String	Input resource name
decryption	**FlowSourceDecryption** object	Flow decryption information in StreamConnect.
health_status	String	Status of stream push to a third party through SRT. The options are **CONNECTED** (stream push ongoing) and **DISCONNECTED** (stream push interrupted).

Table 7-28 FlowSourceDecryption

Parameter	Type	Description
algorithm	String	Encryption algorithm. The value can be **aes128** (AES-128), **aes192** (AES-192), or **aes256** (AES-256).
key_type	String	Key type. The value can be **speke** (obtaining keys using the SPEKE protocol), **static-key** (static key), or **srt-password** (SRT key). Currently, only **srt-password** is supported.
passphrase	String	SRT decryption key, which is used by a flow to decrypt SRT streams.

Table 7-29 FlowOutput

Parameter	Type	Description
name	String	Name
type	String	Type

Status code: 400

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Table 7-30 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

None

Example Responses

Status code: 200

Flow details

```
{
  "name" : "ccccccc",
  "region" : "cn-north-5",
  "sources" : [ {
    "description" : "ccccccc",
    "source_listener_port" : 5000,
    "source_listener_address" : "10.10.10.10",
    "protocol" : "srt-caller",
    "name" : "ccccccc",
    "decryption" : {
      "algorithm" : "aes256",
      "key_type" : "srt-password",
      "passphrase" : "******"
    }
  } ],
  "flow_id" : "ec897482-d24b-4d64-aa39-407980902b1d",
  "status" : "ACTIVE"
}
```

Status code: 400

Response indicating an error

```
{
  "error_code" : "LIVE.103011019",
  "error_msg" : "flow_id not exist"
}
```

Status Codes

Status Code	Description
200	Flow details
400	Response indicating an error

Error Codes

See **Error Codes**.

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7.5 Starting a Flow Task

Function

Starts a flow task.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:updateFlowStatusStart	Write	-	-	-	-

URI

PUT /v1/{project_id}/flows/start

Table 7-31 Path Parameters

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

Table 7-32 Query Parameters

Parameter	Mandatory	Type	Description
flow_id	Yes	String	Flow ID

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Request Parameters

Table 7-33 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Response Parameters

Status code: 200

Table 7-34 Response body parameters

Parameter	Type	Description
status	String	Status. The value can be **ACTIVE** (running) or **STANDBY** (not started).
flow_id	String	Flow ID

Status code: 400

Table 7-35 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

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Example Requests

None

Example Responses

Status code: 200

Response indicating a successful flow status change

```
{
  "flow_id" : "ec897482-d24b-4d64-aa39-407980902b1d",
  "status" : "ACTIVE"
}
```

Status code: 400

Response indicating a failure

```
{
  "error_code" : "LIVE.100011001",
  "error_msg" : "flow task is in active status"
}
```

Status Codes

Status Code	Description
200	Response indicating a successful flow status change
400	Response indicating a failure

Error Codes

See **Error Codes**.

7.6 Stopping a Flow Task

Function

Stops a flow task.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

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Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:updateFlowStatusStop	Write	-	-	-	-

URI

PUT /v1/{project_id}/flows/stop

Table 7-36 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".

Table 7-37 Query Parameters

Parameter	Mandatory	Type	Description
flow_id	Yes	String	Flow ID

Request Parameters

Table 7-38 Request header parameters

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

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Parameter	Mandatory	Type	Description
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Response Parameters

Status code: 200

Table 7-39 Response body parameters

Parameter	Type	Description
status	String	Status. The value can be **ACTIVE** (running) or **STANDBY** (not started).
flow_id	String	Flow ID

Status code: 400

Table 7-40 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

None

Example Responses

Status code: 200

Response indicating a successful flow status change

```
{
  "flow_id" : "ec897482-d24b-4d64-aa39-407980902b1d",
  "status" : "STANDBY"
}
```

Status code: 400

Response indicating a failure

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```
{
  "error_code" : "LIVE.100011001",
  "error_msg" : "flow task is in standby status"
}
```

Status Codes

Status Code	Description
200	Response indicating a successful flow status change
400	Response indicating a failure

Error Codes

See **Error Codes**.

7.7 Modifying a Flow Source

Function

Modifies a flow source.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:updateFlowSource	Write	-	-	-	-

URI

PUT /v1/{project_id}/flows/sources

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Table 7-41 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".

Table 7-42 Query Parameters

Parameter	Mandatory	Type	Description
flow_id	Yes	String	Flow ID
source_name	Yes	String	Flow source name

Request Parameters

Table 7-43 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

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Table 7-44 Request body parameters

Parameter	Mandatory	Type	Description
source	Yes	**FlowSource** object	Source stream information

Table 7-45 FlowSource

Parameter	Mandatory	Type	Description
source_listener_address	No	String	Ingest URL
source_listener_port	No	Integer	Port that pulls streams. **2077** and **2088** are not allowed.
stream_id	No	String	**streamid** of SRT stream pull
min_latency	No	Integer	Minimum latency, in millisecond.
cidr_whitelist	No	Array of strings	CIDR IP whitelist for stream push
description	No	String	Description
protocol	Yes	String	Protocol. The value can be **srt-caller** or **srt-listener**.
name	Yes	String	Input resource name
decryption	No	**FlowSourceDecryption** object	Flow decryption information in StreamConnect.
health_status	No	String	Status of stream push to a third party through SRT. The options are **CONNECTED** (stream push ongoing) and **DISCONNECTED** (stream push interrupted).

Table 7-46 FlowSourceDecryption

Parameter	Mandatory	Type	Description
algorithm	No	String	Encryption algorithm. The value can be **aes128** (AES-128), **aes192** (AES-192), or **aes256** (AES-256).

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Parameter	Mandatory	Type	Description
key_type	Yes	String	Key type. The value can be **speke** (obtaining keys using the SPEKE protocol), **static-key** (static key), or **srt-password** (SRT key). Currently, only **srt-password** is supported.
passphrase	Yes	String	SRT decryption key, which is used by a flow to decrypt SRT streams.

Response Parameters

Status code: 200

Table 7-47 Response body parameters

Parameter	Type	Description
flow_id	String	Flow ID
source	**FlowSource** object	Source stream information

Table 7-48 FlowSource

Parameter	Type	Description
source_listener_address	String	Ingest URL
source_listener_port	Integer	Port that pulls streams. **2077** and **2088** are not allowed.
stream_id	String	**streamid** of SRT stream pull
min_latency	Integer	Minimum latency, in millisecond.
cidr_whitelist	Array of strings	CIDR IP whitelist for stream push
description	String	Description
protocol	String	Protocol. The value can be **srt-caller** or **srt-listener**.
name	String	Input resource name
decryption	**FlowSourceDecryption** object	Flow decryption information in StreamConnect.

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Parameter	Type	Description
health_status	String	Status of stream push to a third party through SRT. The options are **CONNECTED** (stream push ongoing) and **DISCONNECTED** (stream push interrupted).

Table 7-49 FlowSourceDecryption

Parameter	Type	Description
algorithm	String	Encryption algorithm. The value can be **aes128** (AES-128), **aes192** (AES-192), or **aes256** (AES-256).
key_type	String	Key type. The value can be **speke** (obtaining keys using the SPEKE protocol), **static-key** (static key), or **srt-password** (SRT key). Currently, only **srt-password** is supported.
passphrase	String	SRT decryption key, which is used by a flow to decrypt SRT streams.

Status code: 400

Table 7-50 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

```
https://{endpoint}/v1/{project_id}/flows/sources?flow_id={flow_id}&source_name={source_name}

{
  "source" : {
    "description" : "test_caller",
    "min_latency" : 2000,
    "source_listener_port" : 5000,
    "source_listener_address" : "srt://100.10.10.10",
    "cidr_whitelist" : [ "0.0.0.0/32" ],
    "protocol" : "srt-caller",
    "name" : "test_caller",
    "decryption" : {
      "algorithm" : "aes256",
      "key_type" : "srt-password",
```

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```
    "passphrase" : "******"
   }
  }
}
```

Example Responses

Status code: 200

Response indicating a successful status change

```
{
  "flow_id" : "ec897482-d24b-4d64-aa39-407980902b1d",
  "source" : {
    "description" : "test",
    "source_listener_port" : 5000,
    "source_listener_address" : "10.10.10.10",
    "protocol" : "srt-caller",
    "name" : "test",
    "decryption" : {
      "algorithm" : "aes256",
      "key_type" : "srt-password",
      "passphrase" : "******"
    }
  }
}
```

Status code: 400

Response indicating a failure

```
{
  "error_code" : "LIVE.103011019",
  "error_msg" : "flow_id not exist"
}
```

Status Codes

Status Code	Description
200	Response indicating a successful status change
400	Response indicating a failure

Error Codes

See **Error Codes**.

7.8 Creating an Output of Pushing Streams to a Third Party Through SRT

Function

Creates an output of pushing streams to a third party through SRT.

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Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:createFlowOutput	Write	-	-	-	-

URI

POST /v1/{project_id}/flows/outputs

Table 7-51 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 7-52 Query Parameters

Parameter	Mandatory	Type	Description
flow_id	Yes	String	Flow ID

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Request Parameters

Table 7-53 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Table 7-54 Request body parameters

Parameter	Mandatory	Type	Description
[items]	Yes	Array of **AddFlowOutputsRequest** objects	Stream output configuration, which refers to the configuration for pushing SRT streams from a media live service to a third party.

Table 7-55 AddFlowOutputsRequest

Parameter	Mandatory	Type	Description
cidr_whitelist	No	Array of strings	IP address whitelist. A maximum of 20 IP address whitelists are supported.
destination	No	String	Ingest URL. The value can be an IP address or domain name. The maximum length is 64 characters.

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Parameter	Mandatory	Type	Description
name	Yes	String	Output name. The value can contain only letters, digits, hyphens (-), and underscores (_), and must start with a letter.
encryption	No	**FlowSourceDecryption** object	Flow decryption information in StreamConnect.
output_status	No	String	Output status. The value can be **ENABLED** or **DISABLED**.
port	No	Integer	Port. If **ssrt-listener** is the listening port, **srt-caller** is the peer port.
protocol	Yes	String	Protocol. The value can be **srt-caller** or **srt-listener**.
stream_id	No	String	If **srt-caller** is used, **streamid** can be set.
description	No	String	Output description
min_latency	No	Integer	Minimum latency, in milliseconds. The value ranges from 10 to 15,000 and defaults to **2,000**.

Table 7-56 FlowSourceDecryption

Parameter	Mandatory	Type	Description
algorithm	No	String	Encryption algorithm. The value can be **aes128** (AES-128), **aes192** (AES-192), or **aes256** (AES-256).
key_type	Yes	String	Key type. The value can be **speke** (obtaining keys using the SPEKE protocol), **static-key** (static key), or **srt-password** (SRT key). Currently, only **srt-password** is supported.
passphrase	Yes	String	SRT decryption key, which is used by a flow to decrypt SRT streams.

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Response Parameters

Status code: 201

Table 7-57 Response body parameters

Parameter	Type	Description
flow_id	String	Flow ID
outputs	Array of **FlowsOutput** objects	All output information

Table 7-58 FlowsOutput

Parameter	Type	Description
cidr_whitelist	Array of strings	IP address whitelist. A maximum of 20 IP address whitelists are supported.
destination	String	Ingest URL. The value can be an IP address or domain name. The maximum length is 64 characters.
name	String	Output name. The value can contain only letters, digits, hyphens (-), and underscores (_), and must start with a letter.
encryption	**FlowSourceDecryption** object	Flow decryption information in StreamConnect.
output_status	String	Output status. The value can be **ENABLED** or **DISABLED**.
listener_address	String	A listening address in srt-listener mode cannot be changed.
port	Integer	Port. If **ssrt-listener** is the listening port, **srt-caller** is the peer port.
protocol	String	Protocol. The value can be **srt-caller** or **srt-listener**.
stream_id	String	If **srt-caller** is used, **streamid** can be set.
description	String	Output description
min_latency	Integer	Minimum latency, in milliseconds. The value ranges from 10 to 15,000 and defaults to **2,000**.

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Parameter	Type	Description
health_status	String	Status of stream push to a third party through SRT. The options are **CONNECTED** (stream push ongoing) and **DISCONNECTED** (stream push interrupted).
type	String	Output type

Table 7-59 FlowSourceDecryption

Parameter	Type	Description
algorithm	String	Encryption algorithm. The value can be **aes128** (AES-128), **aes192** (AES-192), or **aes256** (AES-256).
key_type	String	Key type. The value can be **speke** (obtaining keys using the SPEKE protocol), **static-key** (static key), or **srt-password** (SRT key). Currently, only **srt-password** is supported.
passphrase	String	SRT decryption key, which is used by a flow to decrypt SRT streams.

Status code: 400

Table 7-60 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

```
https://{endpoint}/v1/{project_id}/flows/outputs

[ {
  "name" : "test",
  "protocol" : "srt-caller",
  "destination" : "10.10.10.10",
  "port" : 2000,
  "cidr_whitelist" : [ "0.0.0.0/0" ],
  "encryption" : {
    "algorithm" : "aes256",
    "key_type" : "srt-password",
    "passphrase" : "aaabbbcccd"
```

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```
  },
  "output_status" : "ENABLED",
  "description" : "aaaaa",
  "min_latency" : 1000
} ]
```

Example Responses

Status code: 201

Response to the successful creation of a stream output.

```
{
  "flow_id" : "ec897482-d24b-4d64-aa39-407980902b1d",
  "outputs" : [ {
    "name" : "test",
    "type" : "Standard output",
    "protocol" : "srt-caller",
    "destination" : "10.10.10.10",
    "min_latency" : 1000,
    "port" : 2000,
    "cidr_whitelist" : [ "0.0.0.0/0" ],
    "encryption" : {
      "algorithm" : "aes256",
      "key_type" : "srt-password",
      "passphrase" : "******"
    },
    "health_status" : "DISCONNECTED",
    "output_status" : "ENABLED",
    "description" : "aaaaa"
  } ]
}
```

Status code: 400

Response indicating failed output creation

```
{
  "error_code" : "LIVE.100011001",
  "error_msg" : "outputs[0] name test has been exist"
}
```

Status Codes

Status Code	Description
201	Response to the successful creation of a stream output
400	Response indicating failed output creation

Error Codes

See **Error Codes**.

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7.9 Updating an Output of Pushing Streams to a Third Party Through SRT

Function

Updates an output of pushing streams to a third party through SRT.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:updateFlowOutput	Write	-	-	-	-

URI

PUT /v1/{project_id}/flows/outputs

Table 7-61 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 7-62 Query Parameters

Parameter	Mandatory	Type	Description
flow_id	Yes	String	Flow ID
output_name	Yes	String	Output name

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Request Parameters

Table 7-63 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Table 7-64 Request body parameters

Parameter	Mandatory	Type	Description
cidr_whitelist	No	Array of strings	IP address whitelist. A maximum of 20 IP address whitelists are supported.
destination	No	String	Ingest URL. The value can be an IP address or domain name. The maximum length is 64 characters.
encryption	No	**FlowSourceDecryption** object	Flow decryption information in StreamConnect.
output_status	No	String	Output status. The value can be **ENABLED** or **DISABLED**.
port	No	Integer	Port
stream_id	No	String	If **srt-caller** is used, **streamid** can be set.
description	No	String	Output description

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Parameter	Mandatory	Type	Description
min_latency	No	Integer	Minimum latency, in milliseconds. The value ranges from 10 to 15,000 and defaults to **2,000**.

Table 7-65 FlowSourceDecryption

Parameter	Mandatory	Type	Description
algorithm	No	String	Encryption algorithm. The value can be **aes128** (AES-128), **aes192** (AES-192), or **aes256** (AES-256).
key_type	Yes	String	Key type. The value can be **speke** (obtaining keys using the SPEKE protocol), **static-key** (static key), or **srt-password** (SRT key). Currently, only **srt-password** is supported.
passphrase	Yes	String	SRT decryption key, which is used by a flow to decrypt SRT streams.

Response Parameters

Status code: 200

Table 7-66 Response body parameters

Parameter	Type	Description
cidr_whitelist	Array of strings	IP address whitelist. A maximum of 20 IP address whitelists are supported.
destination	String	Ingest URL. The value can be an IP address or domain name. The maximum length is 64 characters.
name	String	Output name. The value can contain only letters, digits, hyphens (-), and underscores (_), and must start with a letter.
encryption	**FlowSourceDecryption** object	Flow decryption information in StreamConnect.

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Parameter	Type	Description
output_status	String	Output status. The value can be **ENABLED** or **DISABLED**.
listener_address	String	A listening address in srt-listener mode cannot be changed.
port	Integer	Port. If **ssrt-listener** is the listening port, **srt-caller** is the peer port.
protocol	String	Protocol. The value can be **srt-caller** or **srt-listener**.
stream_id	String	If **srt-caller** is used, **streamid** can be set.
description	String	Output description
min_latency	Integer	Minimum latency, in milliseconds. The value ranges from 10 to 15,000 and defaults to **2,000**.
health_status	String	Status of stream push to a third party through SRT. The options are **CONNECTED** (stream push ongoing) and **DISCONNECTED** (stream push interrupted).
type	String	Output type

Table 7-67 FlowSourceDecryption

Parameter	Type	Description
algorithm	String	Encryption algorithm. The value can be **aes128** (AES-128), **aes192** (AES-192), or **aes256** (AES-256).
key_type	String	Key type. The value can be **speke** (obtaining keys using the SPEKE protocol), **static-key** (static key), or **srt-password** (SRT key). Currently, only **srt-password** is supported.
passphrase	String	SRT decryption key, which is used by a flow to decrypt SRT streams.

Status code: 400

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Table 7-68 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

```
https://{endpoint}/v1/{project_id}/flows/outputs?flow_id={flow_id}&output_name={output_name}

{
  "destination" : "10.10.10.10",
  "min_latency" : 1000,
  "port" : 2001,
  "cidr_whitelist" : [ "0.0.0.0/0" ],
  "encryption" : {
    "algorithm" : "aes256",
    "key_type" : "srt-password",
    "passphrase" : "******"
  },
  "output_status" : "ENABLED",
  "description" : "ccccc"
}
```

Example Responses

Status code: 200

Flow forwarding output.

```
{
  "name" : "test",
  "protocol" : "srt-caller",
  "destination" : "10.10.10.10",
  "min_latency" : 1000,
  "port" : 2001,
  "cidr_whitelist" : [ "0.0.0.0/0" ],
  "encryption" : {
    "algorithm" : "aes256",
    "key_type" : "srt-password",
    "passphrase" : "******"
  },
  "health_status" : "DISCONNECTED",
  "output_status" : "ENABLED",
  "description" : "ccccc"
}
```

Status code: 400

Response indicating failed output modification

```
{
  "error_code" : "LIVE.100011001",
  "error_msg" : "output_name test not exist in flow"
}
```

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Status Codes

Status Code	Description
200	Flow forwarding output
400	Response indicating failed output modification

Error Codes

See **Error Codes**.

7.10 Querying Outputs of Pushing Streams to a Third Party Through SRT

Function

Queries outputs of pushing streams to a third party through SRT.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:showFlowOutput	List	-	-	-	-

URI

GET /v1/{project_id}/flows/outputs

Table 7-69 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".

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Table 7-70 Query Parameters

Parameter	Mandatory	Type	Description
data_display	No	String	Whether to obtain the hidden secret key information.
flow_id	Yes	String	Flow ID
output_name	Yes	String	Output name

Request Parameters

Table 7-71 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Response Parameters

Status code: 200

Table 7-72 Response body parameters

Parameter	Type	Description
cidr_whitelist	Array of strings	IP address whitelist. A maximum of 20 IP address whitelists are supported.

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Parameter	Type	Description
destination	String	Ingest URL. The value can be an IP address or domain name. The maximum length is 64 characters.
name	String	Output name. The value can contain only letters, digits, hyphens (-), and underscores (_), and must start with a letter.
encryption	**FlowSourceDecryption** object	Flow decryption information in StreamConnect.
output_status	String	Output status. The value can be **ENABLED** or **DISABLED**.
listener_address	String	A listening address in srt-listener mode cannot be changed.
port	Integer	Port. If **ssrt-listener** is the listening port, **srt-caller** is the peer port.
protocol	String	Protocol. The value can be **srt-caller** or **srt-listener**.
stream_id	String	If **srt-caller** is used, **streamid** can be set.
description	String	Output description
min_latency	Integer	Minimum latency, in milliseconds. The value ranges from 10 to 15,000 and defaults to **2,000**.
health_status	String	Status of stream push to a third party through SRT. The options are **CONNECTED** (stream push ongoing) and **DISCONNECTED** (stream push interrupted).
type	String	Output type

Table 7-73 FlowSourceDecryption

Parameter	Type	Description
algorithm	String	Encryption algorithm. The value can be **aes128** (AES-128), **aes192** (AES-192), or **aes256** (AES-256).

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Parameter	Type	Description
key_type	String	Key type. The value can be **speke** (obtaining keys using the SPEKE protocol), **static-key** (static key), or **srt-password** (SRT key). Currently, only **srt-password** is supported.
passphrase	String	SRT decryption key, which is used by a flow to decrypt SRT streams.

Status code: 400

Table 7-74 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

None

Example Responses

Status code: 200

Flow forwarding output.

```
{
  "name" : "test",
  "type" : "Standard output",
  "protocol" : "srt-caller",
  "destination" : "10.10.10.10",
  "min_latency" : 1000,
  "port" : 2001,
  "cidr_whitelist" : [ "0.0.0.0/0" ],
  "encryption" : {
    "algorithm" : "aes256",
    "key_type" : "srt-password",
    "passphrase" : "******"
  },
  "health_status" : "DISCONNECTED",
  "output_status" : "ENABLED",
  "description" : "ccccc"
}
```

Status code: 400

Response indicating failed output query

```
{
  "error_code" : "LIVE.100011001",
```

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```
  "error_msg" : "output_name test not exist in flow"
}
```

Status Codes

Status Code	Description
200	Flow forwarding output
400	Response indicating failed output query

Error Codes

See **Error Codes**.

7.11 Deleting an Output of Pushing Streams to a Third Party Through SRT

Function

Deletes an output of pushing streams to a third party through SRT.

Authorization Information

Each account root user has all the permissions required to call all APIs, but IAM users must be assigned the following required identity policy-based permissions. For details about the required permissions, see **Permissions Policies and Supported Actions**.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
live:ott:deleteFlowOutput	Write	-	-	-	-

URI

DELETE /v1/{project_id}/flows/outputs

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Table 7-75 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 7-76 Query Parameters

Parameter	Mandatory	Type	Description
flow_id	Yes	String	Flow ID
output_name	Yes	String	Output name

Request Parameters

Table 7-77 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. This parameter is mandatory when token authentication is used. The token can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Authorization	No	String	Authentication information. This parameter is mandatory for AK/SK authentication.
X-Sdk-Date	No	String	Request time. This parameter is mandatory for AK/SK authentication.
X-Project-Id	No	String	Project ID. This parameter is mandatory for AK/SK authentication.

Response Parameters

Status code: 200

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Table 7-78 Response body parameters

Parameter	Type	Description
flow_id	String	Flow ID
output_name	String	Output name

Status code: 400

Table 7-79 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
200	Response to the successful stream output deletion.
400	Response indicating failed output deletion

Error Codes

See **Error Codes**.

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8 Permissions and Supported Actions

8.1 Introduction

You can use Identity and Access Management (IAM) for fine-grained permissions management of your Media Live resources. If your account does not need individual IAM users, you can skip this section.

With IAM, you can control access to specific Huawei Cloud resources. IAM supports role/policy-based authorization and identity policy-based authorization.

The following table describes the differences between these two authorization models.

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Table 8-1 Differences between role/policy-based and identity policy-based authorization

Authorization Model	Core Relationship	Permissions	Authorization Method	Description
Role/Policy **NOTE** Media Live does not support custom policies. It only supports system-defined policies.	User-permission-authorization scope	• System-defined roles • System-defined policies • Custom policies	Assigning roles or policies to principals	To authorize a user, you need to add it to a user group first and then specify the scope of authorization. It is hard to provide fine-grained permissions control using authorization by user groups and a limited number of condition keys. This method is suitable for small- and medium-sized enterprises.
Identity policy	User-policy	• System-defined identity policies • Custom identity policies	• Assigning identity policies to principals • Attaching identity policies to principals	You can authorize a user by attaching an identity policy to it. User-specific authorization and a variety of key conditions allow for more fine-grained permissions control. However, this model can be hard to set up. It requires a certain amount of expertise and is suitable for medium- and large-sized enterprises.

Assume that you want to grant IAM users the permissions needed to create ECSs in CN North-Beijing4 and OBS buckets in CN South-Guangzhou. With role/policy-based authorization, the administrator needs to create two custom policies and assign both to the IAM users. With identity policy-based authorization, the administrator only needs to create one custom identity policy and configure the condition key **g:RequestedRegion** for the policy, and then attach the policy to the users or grant the users the access permissions to the specified regions. Identity policy-based authorization is more flexible than role/policy-based authorization.

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Policies/identity policies and actions in the two authorization models are not interoperable. You are advised to use the identity policy-based authorization model.

If you use IAM users in your account to call an API, the IAM users must be granted the required permissions. The required permissions are determined by the actions supported by the API. Only users with the policies allowing for those actions can call the API successfully.

Assume that an IAM user wants to call an API to create a livestreaming domain name. With policy-based authorization, the IAM user must be granted the permissions allowing for action **live:domain:createDomain**. With policy-based authorization, the IAM user must be granted the permissions allowing for action **live:domain:createDomain**.

8.2 Actions Supported by Identity Policy-based Authorization

IAM provides system-defined identity policies to define typical cloud service permissions. You can also create custom identity policies using the actions supported by cloud services for more refined access control.

In addition to IAM, the **Organizations** service also provides **Service Control Policies (SCPs)** to set access control policies.

SCPs do not actually grant any permissions to an entity. They only set the permissions boundary for the entity. When SCPs are attached to an organizational unit (OU) or a member account, the SCPs do not directly grant permissions to that OU or member account. Instead, the SCPs only determine what permissions are available for that member account or those member accounts under that OU. The granted permissions can be applied only if they are allowed by the SCPs.

To learn more about how IAM is different from Organizations for access control, see **How IAM Is Different from Organizations for Access Control?**.

This section describes the elements used by IAM custom identity policies and Organizations SCPs. The elements include actions, resources, and conditions.

- For details about how to use these elements to edit an IAM custom identity policy, see **Creating a Custom Identity Policy**.
- For details about how to use these elements to edit a custom SCP, see **Creating an SCP**.

Actions

Actions are specific operations that are allowed or denied in an identity policy.

- The Access Level column describes how the action is classified (List, Read, or Write). This classification helps you understand the level of access that an action grants when you use it in an identity policy.
- The Resource Type column indicates whether the action supports resource-level permissions.

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  - You can use a wildcard (*) to indicate all resource types. If this column is empty (-), the action does not support resource-level permissions and you must specify all resources ("*") in your identity policy statements.
  - If this column includes a resource type, you must specify the URN in the Resource element of your identity policy statements.
  - Required resources are marked with asterisks (*) in the table. If you specify a resource in a statement using this action, then it must be of this type.

  For details about the resource types defined by Live, see **Resources**.
- The Condition Key column contains keys that you can specify in the Condition element of an identity policy statement.
  - If the Resource Type column has values for an action, the condition key takes effect only for the listed resource types.
  - If the Resource Type column is empty (-) for an action, the condition key takes effect for all resources that action supports.
  - If the Condition Key column is empty (-) for an action, the action does not support any condition keys.

  For details about the condition keys defined by Live, see **Conditions**.
- The Alias column lists the policy actions that are configured in identity policies. With these actions, you can use APIs for policy-based authorization. For details, see **Policies and Identity Policies**.

The following table lists the actions that you can define in identity policy statements for Live.

Table 8-2 Actions supported by Live

Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
live:ott:createChannel	Grants permission to create channel.	Write	-	-	-
live:ott:listChannel	Grants permission to get channel list.	List	-	-	-
live:ott:deleteChannel	Grants permission to delete channel.	Write	-	-	-

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
live:ott:updateChannelEndpoint	Grants permission to modify channel endpoint.	Write	-	-	-
live:ott:updateChannelInput	Grants permission to modify channel input imformation.	Write	-	-	-
live:ott:updateChannelRecord	Grants permission to modify channel record settings.	Write	-	-	-
live:ott:updateChannelGeneralInfo	Grants permission to modify channel general information.	Write	-	-	-
live:ott:updateChannelState	Grants permission to modify channel state.	Write	-	-	-
live:ott:modifyChannelTranscodings	Grants permission to modify channel transcodings.	Write	-	-	-

Each API of Live usually supports one or more actions. **Table 8-3** lists the supported actions and dependencies.

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Table 8-3 Actions and dependencies supported by Live APIs

API	Action	Dependencies
POST /v1/{project_id}/ott/channels	live:ott:createChannel	-
GET /v1/{project_id}/ott/channels	live:ott:listChannel	-
DELETE /v1/{project_id}/ott/channels	live:ott:deleteChannel	-
PUT /v1/{project_id}/ott/channels/endpoints	live:ott:updateChannelEndpoint	-
PUT /v1/{project_id}/ott/channels/input	live:ott:updateChannelInput	-
PUT /v1/{project_id}/ott/channels/record-settings	live:ott:updateChannelRecord	-
PUT /v1/{project_id}/ott/channels/general	live:ott:updateChannelGeneralInfo	-
PUT /v1/{project_id}/ott/channels/state	live:ott:updateChannelState	-
PUT /v1/{project_id}/ott/channels/encorder-settings	live:ott:modifyChannelTranscodings	-

Resources

Live does not support resource-level authorization. To allow access to Live, use a wildcard (*) in the Resource element of the identity policy, indicating that the identity policy will be applied to all resources.

Conditions

Live does not support service-specific condition keys in identity policies. It can only use global condition keys applicable to all services. For details, see **Global Condition Keys**.

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9 Appendix

9.1 Status Codes

Table 9-1 lists the status codes that may be returned when you call Live APIs.

Table 9-1 Status codes

Status Code	Description
200 OK	The request has succeeded.
201 Created	The request for creating a resource has been fulfilled.
202 Accepted	The request has been accepted for handling, but the handling has not been completed.
204 No Content	The request has been fulfilled, but the HTTP response does not contain a response body.
400 Bad Request	The request is invalid. Do not retry the request before modifying it.
401 Unauthorized	The status code is returned after the client provides the authentication information, indicating that the authentication information is incorrect or invalid.
403 Forbidden	The request has been rejected. The server has received and understood the request but it refused to respond, because the request is set to deny access. Do not retry the request before modifying it.
404 Not Found	The requested resource cannot be found. Do not retry the request before modifying it.
405 Method Not Allowed	The request contains one or more methods not allowed for the resource. Do not retry the request before modifying it.

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Status Code	Description
406 Not Acceptable	The server cannot fulfill the request sent by the client according to its content characteristics.
407 Proxy Authentication Required	This status code is similar to 401, but the client must first authenticate itself with the proxy.
408 Request Timeout	The client failed to send a request to the server within the time limit. The client may repeat the request without modifying it at any time later.
409 Conflict	The request cannot be handled due to a conflict with the status of the resource. This status code indicates that the resource that the client is attempting to create already exists, or that the requested update cannot be fulfilled due to the conflict.
500 Internal Server Error	The server is able to receive but unable to understand the request.
501 Not Implemented	The server does not support the requested function.
502 Bad Gateway	The server that acts as a gateway or proxy received an invalid request from a remote server.
503 Service Unavailable	The requested service is invalid. Do not retry the request before modifying it.
504 Gateway Timeout	A gateway timeout error occurred.

9.2 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**.

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Status Code	Error Codes	Error Message	Description	Solution
400	LIVE.100011001	Invalid request parameter.	Invalid request parameter.	Mandatory parameters are missing, or the parameter value format is incorrect. For details about the error, see the error_detail field in the error description.
400	LIVE.100011004	The protocol is not supported. The API only supports the HTTPS protocol.	The protocol is not supported. The API only supports the HTTPS protocol.	Use the HTTPS protocol.
400	LIVE.100011006	This API is not supported in this version or is in the maintenance state.	This API is not supported in this version or is in the maintenance state.	Try again later or contact customer service.
400	LIVE.100011008	The API is in the maintenance state.	The API is in the maintenance state.	Try again later or submit a service ticket to reach technical support.
400	LIVE.100011009	The requested user does not exist.	The requested user does not exist.	Check whether input information is correct.
400	LIVE.100011011	The method specified in the request is not supported.	The method specified in the request is not supported.	Check whether the HTTP method is correct.
400	LIVE.100011012	Unsupported media type.	Unsupported media type.	Submit a service ticket to reach technical support.
400	LIVE.100011013	You have not completed real-name authentication.	You have not completed real-name authentication.	Complete real-name authentication.

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Status Code	Error Codes	Error Message	Description	Solution
400	LIVE.100011022	LIVE.Record task exist.	The recording task already exists.	After the command for stopping recording is run, run the command for starting recording for the same stream at an interval of more than 10 seconds.
400	LIVE.103011018	The resource already exists.	The resource already exists.	Check whether the requested resource exists.
400	LIVE.103011020	The maximum number of domain names has been reached.	The maximum number of domain names has been reached.	Delete unnecessary domain names and add domain names again. If you have added the maximum number of domain names, but you want to add more, submit a service ticket.
400	LIVE.103011021	Failed to access the database.	Failed to access the database.	Submit a service ticket to reach technical support.
400	LIVE.103011022	This operation is not allowed in the current state.	This operation is not allowed in the current state.	Check the state of the domain name. Only domain names in the Disabled state can be modified or deleted.
400	LIVE.103011024	The ICP number does not exist.	The ICP number does not exist.	Check whether the ICP number is correct.

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Status Code	Error Codes	Error Message	Description	Solution
400	LIVE.103011025	The approved ICP number cannot be modified.	The approved ICP number cannot be modified.	The ICP number cannot be modified after being approved. If you need to change the ICP number, submit a service ticket.
400	LIVE.103011026	The domain name is in the blacklist.	The domain name is in the blacklist.	Use a licensed domain name.
400	LIVE.103011027	The domain name is in the blacklist.	The domain name is in the blacklist.	Use a licensed domain name.
400	LIVE.103011029	The domain name is in gray configuration.	This domain name has grayscale configuration, and the configuration failed to be delivered.	Submit a service ticket to reach technical support.
400	LIVE.103011030	This domain name has customized configuration.	This domain name has customized configuration, and the configuration failed to be delivered.	Submit a service ticket to reach technical support.
400	LIVE.103011033	The number of parallel tasks being executed the quota.	The number of parallel tasks being executed the quota.	Submit a service ticket to request an increase in the quota for the number of parallel tasks, or wait for the currently executing tasks to complete before trying again.

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Status Code	Error Codes	Error Message	Description	Solution
401	LIVE.100011002	Identity authentication failed.	Identity authentication failed.	This problem is generally caused by incorrect signature calculation. For details, see the signature method in the document.
401	LIVE.100011003	You do not have permission to access the API.	You do not have permission to access the API.	Contact the master account administrator to obtain permission to access the API.
401	LIVE.100011014	Your account is not allowed to access the service, because it is frozen, deleted, or has insufficient balance.	Your account is not allowed to access the service, because it is frozen, deleted, or has insufficient balance.	Check whether your account is frozen or suspended due to arrears.
401	LIVE.100011015	Project ID verification failed.	Project ID verification failed.	Check the project ID and request header in the request.
403	LIVE.103011016	Invalid request content.	Invalid request content.	Change to a valid request parameter.
404	LIVE.103011019	The resource does not exist.	The resource does not exist.	Check whether the requested resource exists or whether your account information is correct.
500	LIVE.100011000	Internal communication error.	Internal communication error.	Submit a service ticket to reach technical support.
500	LIVE.100011005	Internal server error.	Internal server error.	Try again later or contact customer service.

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Status Code	Error Codes	Error Message	Description	Solution
500	LIVE.100011007	The number of concurrent API requests exceeds the upper limit.	The number of concurrent API requests exceeds the upper limit.	Submit a service ticket to reach technical support.
500	LIVE.103011017	Failed to synchronize data to CDN.	Failed to synchronize data to CDN.	Check whether the domain name has been registered and ICP number is valid. If its ICP number is still invalid, submit a service ticket to reach technical support.
500	LIVE.103011023	Failed to synchronize the domain name to GSLB.	Failed to synchronize the domain name to GSLB.	Submit a service ticket to reach technical support.
500	LIVE.103011028	Failed to synchronize the domain name to DNS.	Failed to synchronize the domain name to DNS.	Submit a service ticket to reach technical support.

9.3 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:

- **From the console**
- **By calling an API**

Obtaining a Project ID from the Console

Step 1 Log in to the **console**.

Step 2 Hover over the username in the upper right corner and select **My Credentials** from the dropdown.

On the **API Credentials** page, view project IDs in the project list. You can obtain the region of the domain name by referring to **Obtaining the Region to Which a Domain Name Belongs**.

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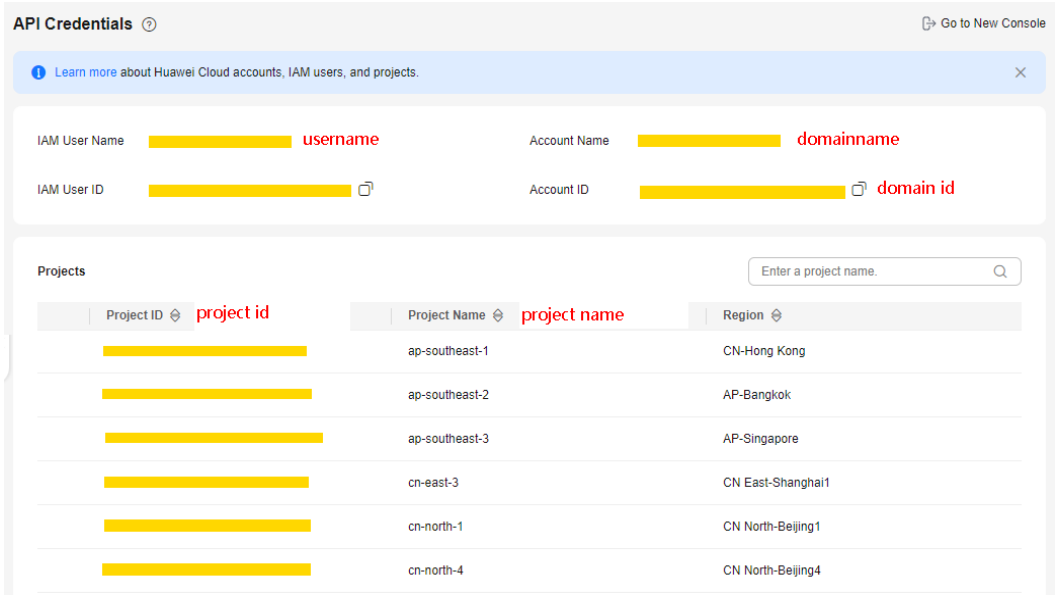
Figure 9-1 Obtaining a project ID



----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"
    }
}
```

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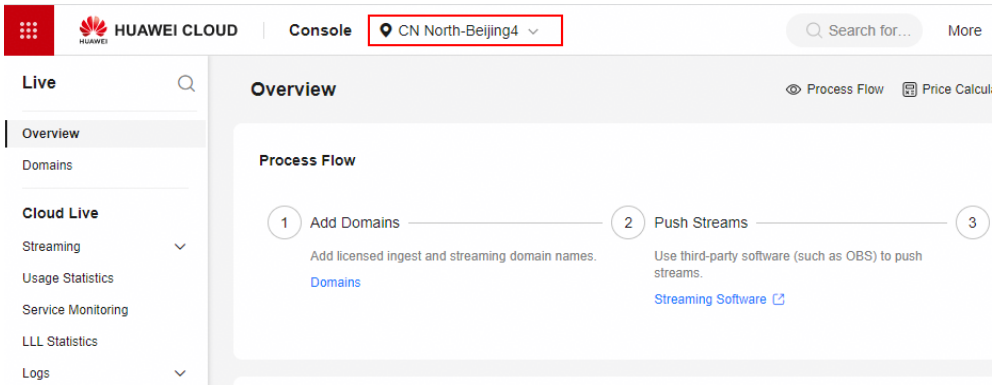
Obtaining the Region to Which a Domain Name Belongs

Log in to the **Live console** and determine the region to which the domain name belongs based on the following conditions.

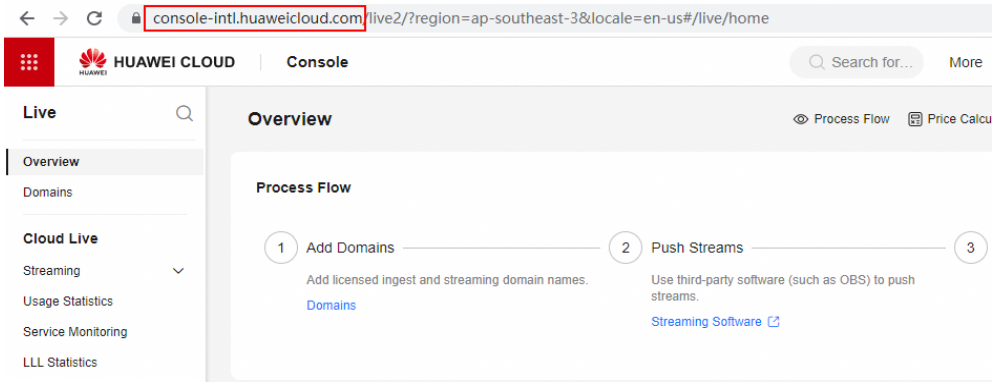
- If you are an existing user, the region to which the domain name belongs is displayed in the upper left corner of the Live console, as shown in **Figure 9-2**.

Figure 9-2 Live console



- If the region information is not displayed in the upper left corner when you access the Live console, as shown in **Figure 9-3**. In this case, you only need to determine whether you are accessing the Chinese mainland website or the international website of Huawei Cloud.
  - Huawei Cloud Chinese mainland website: the domain name in the Live console URL is **console.huaweicloud.com**, and the region is **CN North-Beijing 4**.
  - Huawei Cloud international website: If the domain name in the URL of the Live console is **console-intl.huaweicloud.com**, the region is **AP-Singapore**.

Figure 9-3 Live console



9.4 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:

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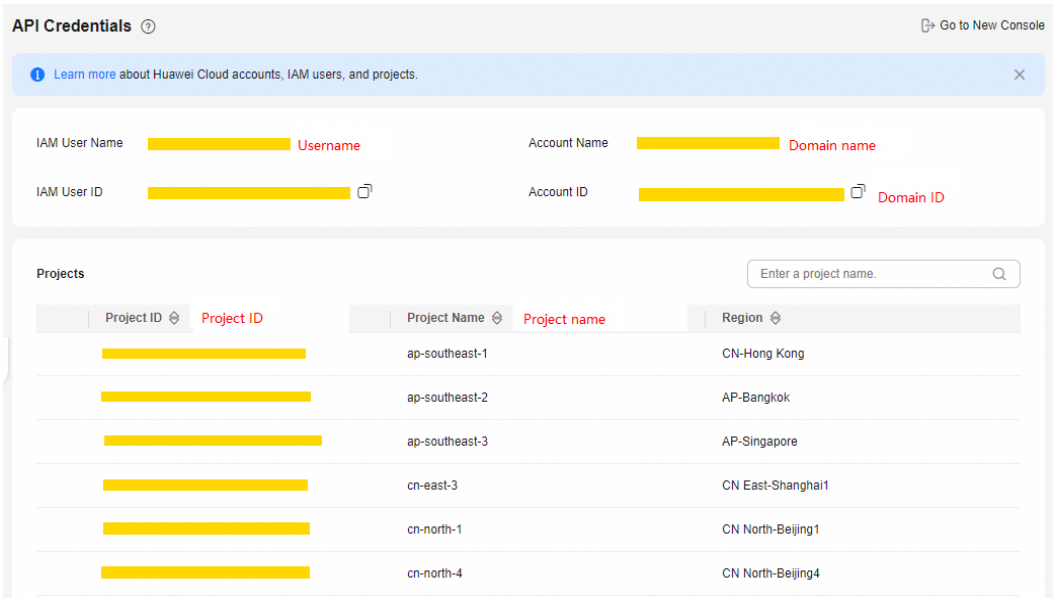
Step 1 Log in to the **console**.

Step 2 Hover over the username in the upper right corner and select **My Credentials** from the dropdown.

On the **API Credentials** page, obtain the account ID.

Figure 9-4 Obtaining an account ID



----End

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10 Change History

Table 10-1 Change history

Released On	Description
2025-10-16	This issue is the fourth official release. Changes: Added the StreamConnect APIs.
2025-08-28	This issue is the third official release. Changes: Added the APIs for integration with Cloud Eye.
2025-06-10	This issue is the second official release. Changes: Added the OTT channel management API for querying channel statistics.
2023-12-30	This issue is the first official release.

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