

Data Ingestion Service

API Reference

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1 Before You Start

1.1 Overview

Welcome to *Data Ingestion Service API Reference*. Data Ingestion Service (DIS) provides efficient collection, transmission, and distribution capabilities for real-time IoT and Internet data, supports multiple IoT protocols, and provides various APIs to help you quickly build real-time data applications.

This document describes how to use application programming interfaces (APIs) to perform operations on DIS, such as uploading or downloading data. For details about all supported operations, see [API Overview](#).

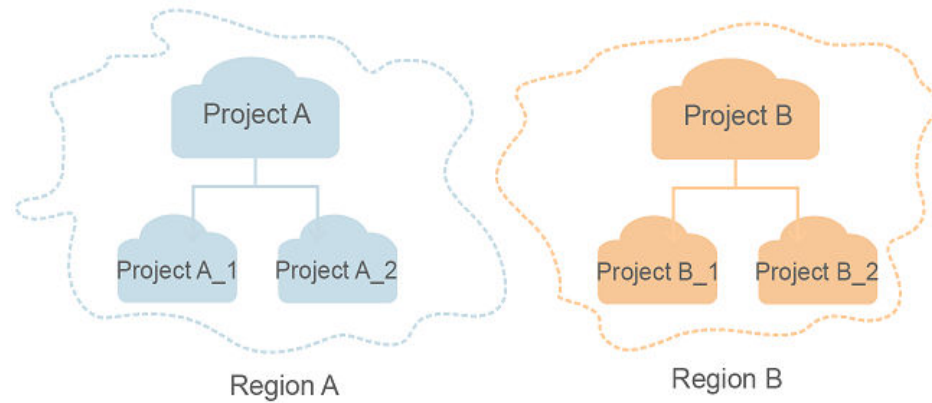
If you plan to access DIS through an API, ensure that you are familiar with DIS concepts. For details, see [Service Overview](#).

1.2 Concepts

- Account
An account is created upon successful registration with HUAWEI CLOUD. 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. The account is a payment entity and 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 accounta domain to use cloud services. Each IAM user has its own identity credentials (password and access keys).
The account, username, and password will be required for API authentication.
- Project
Projects group and isolate resources (including compute, storage, and network resources) across physical regions. A default project is provided for each region, and subprojects can be created under each default project. Users can be granted permissions to access all resources in a specific project. For more refined access control, create subprojects under a project and create resources

in the subprojects. Users can then be assigned permissions to access only specific resources in the subprojects.

Figure 1-1 Project isolating model



- **Checkpoint**
When an application consumes data, the latest SN of the consumed data is recorded as a checkpoint. When the data is reconsumed, the consumption can be continued based on this checkpoint.
- **Application**
Multiple applications can consume data in the same stream. The consumed data in the stream by each application is recorded by checkpoints generated for each application.

2 API Overview

DIS provides self-developed APIs that comply with RESTful API design specifications.

You can use DIS functions listed in [API Description](#) by calling these APIs.

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 [obtaining a user token](#) as an example to demonstrate how to call an API. The obtained token can then be used to authenticate the calling of other APIs.

Request URI

A request URI is in the following format:

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

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

Table 3-1 URI parameter description

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

For example, to obtain an IAM token in the **CN Hong Kong** region, obtain the endpoint of IAM (**iam.southeast-1.myhuaweicloud.com**) for this region and the **resource-path (/v3/auth/tokens)** in the URI of the API used to **obtain a user token**. Then, construct the URI as follows:

```
https://iam.southeast-1.myhuaweicloud.com/v3/auth/tokens
```

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 used to **obtain a user token**, the request method is **POST**, and the request is as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens
```

Request Header

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

Table 3-3 lists common request headers.

Table 3-3 Common request headers

Parameter	Description	Mandatory	Example
Host	Specifies the server domain name and port number of the resources being requested. The value can be obtained from the URL of the service API. The value is in the format of <i>Hostname:Port number</i> . If the port number is not specified, the default port is used. The default port number for HTTPS is 443.	No This field is mandatory for AK/SK authentication.	code.test.com or code.test.com:443
Content-Type	Specifies the request body MIME type. Its default value is application/json . 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	e9993fc787d94b6c886cb aa340f9c0f4

Parameter	Description	Mandatory	Example
X-Auth-Token	Specifies the user token. It is a response to the API used to obtain a user token . This API is the only one that does not require authentication. After the request is processed, the value of X-Subject-Token in the header is the token value.	No This field is mandatory for token authentication.	The following is part of an example token: MIIPAgYJKoZIhvcNAQc-Co...ggg1BBIINPXsidG9rZ

NOTE

In addition to supporting token-based authentication, APIs also support authentication using access key ID/secret access key (AK/SK). During AK/SK-based authentication, an SDK is used to sign the request, and the **Authorization** (signature authentication) and **X-Sdk-Date** (time when the request is sent) header fields are automatically added to the request.

For more information, see "AK/SK-based Authentication" in [Authentication](#).

The API used to [obtain a user token](#) does not require authentication. Therefore, only the **Content-Type** field needs to be added to requests for calling the API. An example of such requests is as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens
Content-Type: application/json
```

(Optional) Request Body

This part is optional. The body of a request is often sent in a structured format as specified in the **Content-Type** header field, such as JSON or XML. The request body transfers content except the request header.

The request body varies between APIs. Some APIs do not require the request body, such as the APIs requested using the GET and DELETE methods.

In the case of the API used to [obtain a user token](#), the request parameters and parameter description can be obtained from the API request. The following provides an example request with a body included. Replace *username*, *domainname*, ******* (login password), and *xxxxxxxxxxxxxxxxxxxx* (project ID) with the actual values. To learn how to obtain a project ID, see [Obtaining a Project ID](#).

 NOTE

The **scope** parameter specifies where a token takes effect. In the following example, the token takes effect only for the resources in a specified project. You can set **scope** to an account or a project under an account. In the following example, the token takes effect only for the resources in a specified project. For more information about this API, see [obtaining a user token](#).

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokensContent-Type: application/json
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username",
          "password": "*****#",
          "domain": {
            "name": "domainname"
          }
        }
      }
    },
    "scope": {
      "project": {
        "name": "xxxxxxxxxxxxxxxxxxxxxx"
      }
    }
  }
}
```

If all data required for the API request is available, you can send the request to call the API through [curl](#), [Postman](#), or coding. In the response to the API used to obtain a user token, **x-subject-token** is the desired user token. This token can then be used to authenticate the calling of other APIs.

3.2 Authentication

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

- Token-based authentication: Requests are authenticated using a token.
- AK/SK-based authentication: Requests are authenticated by encrypting the request body using an AK/SK pair.

 NOTE

An IAM user can pass the authentication and access DataArts Studio through an API or SDK only if **Programmatic access** is selected for **Access Type** during the creation of the IAM user.

Token-based Authentication

A token specifies temporary permissions in a computer system. During API authentication using a token, the token is added to a request to get permissions for calling the API.

 NOTE

- The validity period of a token is 24 hours. When using a token for authentication, cache it to prevent frequently calling the IAM API used to obtain a user token.
- Ensure that the token is valid when you use it. Using a token that will soon expire may cause API calling failures.

When calling the API to **obtain a user token**, you must set **auth.scope** in the request body to **project**.

```
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username",
          "password": "*****",
          "domain": {
            "name": "domainname"
          }
        }
      }
    },
    "scope": {
      "project": {
        "id": "xxxxxxxxxxxxxxxxxxxxx"
      }
    }
  }
}
```

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, the API used to query a connection list. For example, if the token is **ABCDEFGH....**, **X-Auth-Token: ABCDEFJ....** can be added to a request as follows:

```
GET https://iam.ap-southeast-1.myhuaweicloud.com/v1/{project_id}/connections
Content-Type: application/json
X-Auth-Token: ABCDEFG....
```

AK/SK-based Authentication

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

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

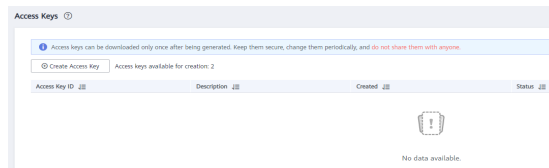
CAUTION

- AK/SK-based authentication supports API requests with a body not larger than 12 MB. For API requests with a larger body, use token-based authentication.
- APIG checks the time format and compares the time with the time when APIG receives the request. If the time difference exceeds 15 minutes, APIG will reject the request. The local time on the client must be synchronized with the clock server to avoid a large offset in the value of the **X-Sdk-Date** request header.
- You can use the AK/SK in a permanent or temporary access key. The **X-Security-Token** field must be configured if the AK/SK in a temporary access key is used, and the field value is **security_token** of the temporary access key.

To obtain an access key, perform the following steps:

1. Log in to the management console, move the cursor to the username in the upper right corner, and select **My Credentials** from the drop-down list.
2. On the **My Credentials** page, choose **Access Keys**, and click **Create Access Key**. See [Figure 3-1](#).

Figure 3-1 Clicking Create Access Key



3. Click **OK** and save the access key file as prompted. The access key file will be saved to your browser's configured download location. Open the **credentials.csv** file to view **Access Key Id** and **Secret Access Key**.

NOTE

- Only two access keys can be added for each user.
- To ensure access key security, the access key is automatically downloaded only when it is generated for the first time and cannot be obtained from the management console later. Keep them properly.

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

NOTICE

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

3.3 Response

Status Code

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

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

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

Response Header

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

[Figure 3-2](#) shows the response header fields for the API used to [obtain a user token](#). The **x-subject-token** header field is the desired user token. This token can then be used to authenticate the calling of other APIs.

Figure 3-2 Header fields of the response to the request for obtaining a user token

```
connection → keep-alive
content-type → application/json
date → Tue, 12 Feb 2019 06:52:13 GMT
server → Web Server
strict-transport-security → max-age=31536000; includeSubdomains;
transfer-encoding → chunked
via → proxy A
x-content-type-options → nosniff
x-download-options → noopen
x-frame-options → SAMEORIGIN
x-iam-trace-id → 218d45ab-d674-4995-af3a-2d0255ba41b5
x-subject-token → MIIVXQYJKoZIhvcNAQcCoIIYJCCEoCAQExDTALBglghkgBZQMEAgEwgharBgkqhkiG9w0BBwGgghacBIIWmHsidG9rZW4iOnsiZXhwaXJlc19hdCI6IjIwMTktMTNUMC
fj3KJ5YgKnpVNRbW2eZ5eb78SZOkqjACgklqO1wi4JlGzrpd18LGXK5tdfq4lqHCYb8P4NaY0NYejcAgz/VeFYtLWT1GSO0zxKZmlQHJQ82HBqHdglZO9fuEbL5dMhdavj+33wEI
xHRCE9I87o+k9-
j+CMZSEB7bUGd5Uj6eRASXl1jipPEGA270g1FruooL6jqglFkNPQuFSOU8+uSsttVwRtNfsC+qTp22Rkd5MCqFGQ8LcuUxC3a+9CMBnOintWW7oeRUVhVpxk8pxiX1wTEboX-
RzT6MUUpvGw-oPNFYdECKnoH3HRozv0vN--n5d6Nbxg==
x-xss-protection → 1; mode=block;
```

(Optional) Response Body

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

The following is part of the response body for the API used to [obtain a user token](#).

```
{
  "token": {
```

```
"expires_at": "2019-02-13T06:52:13.855000Z",
"methods": [
  "password"
],
"catalog": [
  {
    "endpoints": [
      {
        "region_id": "*****",
.....
```

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 format of message is error",
  "error_code": "AS.0001"
}
```

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

4 Application Example

Scenarios

DIS provides efficient collection, transmission, and distribution capabilities for real-time data and provides a variety of APIs to help you quickly build real-time data applications.

The following describes how to create a DIS stream by calling the [Before You Start](#) API. For details, see [Calling APIs](#).

NOTE

The token obtained on IAM is valid for only 24 hours. If you want to use one token for authentication, you can cache it to avoid frequent calling.

Involved APIs

If you use a token for authentication, you must obtain the token and add **X-Auth-Token** to the request header of the API request.

- API for obtaining a token from IAM
- API for creating a DIS stream

Prerequisites

You have planned the region where DIS is located and determined the endpoint for calling an API based on the region.

An endpoint is the **request address** for calling an API. Endpoints vary depending on services and regions. You can obtain endpoints of the service from [Endpoints](#).

Creating a Stream

The following is an example of creating a stream with the simplest configuration.

1. Obtain the token by following the instructions in [Token-based Authentication](#).
2. Send **POST https://Endpoint of DIS/v2/{project_id}/streams**.
3. Add **X-Auth-Token** to the request header.

4. Specify the following parameters in the request body:

```
{
  "stream_name": "dis-DLpR",
  "partition_count": 1,
  "stream_type": "COMMON",
  "data_duration": 24
}
```

- **stream_name** indicates the stream name, which can be customized, for example, **newstream**.
- **partition_count** indicates the number of partitions. A partition is the base throughput unit of a DIS stream. You can specify the number of partitions based on your service throughput requirements.
- **stream_type** indicates the stream type. **COMMON** indicates a common partition. A single partition supports a maximum of 1 MB/s for data writing and a maximum of 2 MB/s for data reading.
- **data_duration** indicates the lifecycle of a stream, that is, the duration for storing data in the stream partition.

If the request is successful, 201 Created is returned.

If the request fails, an error code and error information are returned. For details, see [Error Codes](#).

Creating a Stream That Supports Auto Scaling

You can also create a stream that supports auto scaling. The number of partitions can be automatically increased or decreased based on the stream traffic. The following is an example configuration:

1. Obtain the token by following the instructions provided in [Token-based Authentication](#).
2. Send **POST** https://Endpoint of DIS/v2/{project_id}/streams.
3. Add **X-Auth-Token** to the request header.
4. Specify the following parameters in the request body:

```
{
  "stream_name": "dis-DLpR",
  "partition_count": 1,
  "stream_type": "COMMON",
  "data_duration": 24,
  "auto_scale_enabled": true,
  "auto_scale_min_partition_count": 2,
  "auto_scale_max_partition_count": 10
}
```

In this example, a stream that supports auto scaling is created. The number of partitions to scale ranges from 2 to 10. If the stream has 10 partitions, auto scaling-out will not be triggered.

- **auto_scale_enabled** specifies whether to enable auto scaling. The value **true** indicates that auto scaling is enabled.
- **auto_scale_min_partition_count** indicates the minimum number of partitions allowed when auto scale-in is enabled. In this example, as there are two partitions, automatic scale-in will not be triggered.
- **auto_scale_max_partition_count** indicates the maximum number of partitions allowed when auto scale-out is enabled. In this example, as there are 10 partitions, automatic scale-out will not be triggered.

If the request is successful, 201 Created is returned.

If the request fails, an error code and error information are returned. For details, see [Error Codes](#).

Creating a Stream with Data Schemas

You can also configure a schema for the stream. When using DIS to dump data to other services, you can map data based on the schema configured for the stream. The following is an example configuration:

1. Obtain the token by following the instructions provided in [Token-based Authentication](#).
2. Send **POST** `https://Endpoint of DIS/v2/{project_id}/streams`.
3. Add **X-Auth-Token** to the request header.
4. Specify the following parameters in the request body:

```
{
  "stream_name": "dis-DLpR",
  "partition_count": 1,
  "stream_type": "COMMON",
  "data_duration": 24
  "auto_scale_enabled": true,
  "auto_scale_min_partition_count": 1,
  "auto_scale_max_partition_count": 10
  "data_type": "BLOG",
}
```

In this example, a stream whose source data type is JSON and that contains the key1 and key2 attributes is created.

- **data_type** indicates the type of source data. The value **JSON** indicates that the data format in the partition is JSON.
- **data_schema** indicates the source data schema, which describes the source data structures in JSON and CSV formats using the Avro Schema syntax.

If the request is successful, 201 Created is returned.

If the request fails, an error code and error information are returned. For details, see [Error Codes](#).

5 API Description

5.1 Stream Management

5.1.1 Creating a Stream

Function

This API is used to create a stream.

- When creating a stream, specify a stream type (common or advanced) and the number of partitions.
- A maximum of 10 advanced stream partitions and 50 common stream partitions can be created for an account by default. You can submit a work order to increase the quota.

Calling Method

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

URI

POST /v2/{project_id}/streams

Table 5-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID

Request Parameters

Table 5-2 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It 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.

Table 5-3 Request body parameters

Parameter	Mandatory	Type	Description
stream_name	Yes	String	Stream name. The stream name can contain 1 to 64 characters, including letters, digits, underscores (_), and hyphens (-).
partition_count	Yes	Integer	Number of partitions. Partitions are the base throughput unit of the DIS stream.
stream_type	No	String	Stream type. • COMMON: a common stream with a bandwidth of 1 Mbit/s • ADVANCED: an advanced stream with a bandwidth of 5 Mbit/s

Parameter	Mandatory	Type	Description
data_type	No	String	Source data type. • BLOB: a collection of binary data stored as a single entity in a database management system • JSON: an open-standard file format that uses human-readable text to transmit data objects consisting of attribute-value pairs and array data types • CSV: a simple text format for storing tabular data in a plain text file. Commas are used as delimiters. Default value: BLOB
data_duration	No	Integer	Data retention period. Value range: 24–72 Unit: hour If this parameter is left unspecified, the default value will be used.
auto_scale_enabled	No	Boolean	Whether to enable auto scaling. • true: Auto scaling is enabled. • false: Auto scaling is disabled. By default, auto scaling is disabled.
auto_scale_min_partition_count	No	Long	Minimum number of partitions for automatic scale-down when auto scaling is enabled.
auto_scale_max_partition_count	No	Integer	Maximum number of partitions for automatic scale-up when auto scaling is enabled.
data_schema	No	String	Source data structure that defines JSON and CSV formats. It is described in the syntax of the Avro schema.

Parameter	Mandatory	Type	Description
csv_properties	No	CSVProperties object	Attributes of data in CSV format, such as delimiter
compression_format	No	String	Data compression type. Currently, the following compression types are supported: • snappy • gzip • zip By default, data is not compressed.
tags	No	Array of Tag objects	List of stream tags
sys_tags	No	Array of SysTag objects	Stream enterprise projects

Table 5-4 CSVProperties

Parameter	Mandatory	Type	Description
delimiter	No	String	Data separator

Table 5-5 Tag

Parameter	Mandatory	Type	Description
key	No	String	Tag key. • The value cannot be empty and must be a string of 1 to 36 characters. • Must be unique for each resource. -- Character set: A-Z, a-z, 0-9, '-', '_', and Unicode characters (\u4E00-\u9FFF).

Parameter	Mandatory	Type	Description
value	No	String	Value. • It can contain a maximum of 43 characters. • It can contain uppercase and lowercase letters, digits, periods (.), hyphens (-), underscores (_), and Unicode characters (\u4E00-\u9FFF). • It can only contain digits, letters, hyphens (-), and underscores (_).

Table 5-6 SysTag

Parameter	Mandatory	Type	Description
key	No	String	Tag key. • It cannot be left blank. • Its value must be _sys_enterprise_project_id.
value	No	String	Value. The value is the enterprise project ID, which needs to be obtained on the enterprise management page. • It is a 36-digit UUID.

Response Parameters

Status code: 201

Created

None

Example Requests

Creating a Stream

```
POST https://{Endpoint}/v2/{project_id}/streams
{
  "stream_name": "newstream",
  "partition_count": 3,
  "data_duration": 24
}
```


Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Creating a Stream

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class CreateStreamSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        DisClient client = DisClient.newBuilder()
            .withCredential(auth)
            .withRegion(DisRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateStreamRequest request = new CreateStreamRequest();
        CreateStreamReq body = new CreateStreamReq();
        body.withDataDuration(24);
        body.withPartitionCount(3);
        body.withStreamName("newstream");
        request.withBody(body);
        try {
            CreateStreamResponse response = client.createStream(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Creating a Stream

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = DisClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DisRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateStreamRequest()
        request.body = CreateStreamReq(
            data_duration=24,
            partition_count=3,
            stream_name="newstream"
        )
        response = client.create_stream(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Creating a Stream

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"
```

```
auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := dis.NewDisClient(
    dis.DisClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CreateStreamRequest{
    dataDurationCreateStreamReq:= int32(24)
    request.Body = &model.CreateStreamReq{
        DataDuration: &dataDurationCreateStreamReq,
        PartitionCount: int32(3),
        StreamName: "newstream",
    }
    response, err := client.CreateStream(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
201	Created

Error Codes

See [Error Codes](#).

5.1.2 Querying Streams

Function

This API is used to query all the streams created by the current tenant.

During query, you need to specify the stream from which the stream list is returned and the maximum number of streams returned in a single request.

Calling Method

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

URI

GET /v2/{project_id}/streams

Table 5-7 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID

Table 5-8 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	The value ranges from 1 to 500. The maximum number of DIS streams to list in a single API call.
start_stream_name	No	String	Name of the DIS stream to start the stream list with. The returned stream list does not contain this DIS stream name.If pagination query is required, this parameter is not transferred when you query data on the first page. If the value of has_more_streams is true , the query is performed on the next page. The value of start_stream_name is the name of the last stream in the query result of the first page.

Request Parameters

Table 5-9 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It 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.

Response Parameters

Status code: 200

Table 5-10 Response body parameters

Parameter	Type	Description
total_number	Long	Total number of all the DIS streams created by the current tenant
stream_names	Array of strings	List of the streams meeting the current requests
has_more_streams	Boolean	Whether there are more matching DIS streams • true: The disk will be deleted. • false: The disk will not be deleted.
stream_info_list	Array of StreamInfo objects	Stream details

Table 5-11 StreamInfo

Parameter	Type	Description
stream_name	String	Stream name
create_time	Long	Time when the stream is created. The value is a 13-bit timestamp.
retention_period	Integer	Period for storing data in units of hours
status	String	Current status of the stream. • CREATING • RUNNING • TERMINATING • TERMINATED
stream_type	String	Stream type • COMMON: a common stream with a bandwidth of 1 Mbit/s • ADVANCED: an advanced stream with a bandwidth of 5 Mbit/s

Parameter	Type	Description
data_type	String	Source data type. • BLOB: a collection of binary data stored as a single entity in a database management system • JSON: an open-standard file format that uses human-readable text to transmit data objects consisting of attribute-value pairs and array data types • CSV: a simple text format for storing tabular data in a plain text file. Commas are used as delimiters. Default value: BLOB
partition_count	Integer	Number of partitions. Partitions are the base throughput unit of the DIS stream.
auto_scale_enabled	Boolean	Whether to enable auto scaling. • true: Auto scaling is enabled. • false: Auto scaling is disabled. By default, auto scaling is disabled.
auto_scale_min_partition_count	Integer	Minimum number of partitions for automatic scale-down when auto scaling is enabled
auto_scale_max_partition_count	Integer	Maximum number of partitions for automatic scale-up when auto scaling is enabled
tags	Array of Tag objects	List of stream tags
sys_tags	Array of SysTag objects	Stream enterprise projects

Table 5-12 Tag

Parameter	Type	Description
key	String	Tag key. • The value cannot be empty and must be a string of 1 to 36 characters. • Must be unique for each resource. - - Character set: A-Z, a-z, 0-9, '-', '_', and Unicode characters (\u4E00-\u9FFF).

Parameter	Type	Description
value	String	Value. - It can contain a maximum of 43 characters. - It can contain uppercase and lowercase letters, digits, periods (.), hyphens (-), underscores (_), and Unicode characters (\u4E00-\u9FFF). - It can only contain digits, letters, hyphens (-), and underscores (_).

Table 5-13 SysTag

Parameter	Type	Description
key	String	Tag key. - It cannot be left blank. - Its value must be _sys_enterprise_project_id.
value	String	Value. The value is the enterprise project ID, which needs to be obtained on the enterprise management page. It is a 36-digit UUID.

Example Requests

Querying Streams

```
GET https://{Endpoint}/v2/{project_id}/streams
```

Example Responses

Status code: 200

Normal response

```
{
  "total_number" : 1,
  "stream_names" : [ "newstream" ],
  "stream_info_list" : [ {
    "stream_id" : "8QM3Nt9YTLOWtUVYJhO",
    "stream_name" : "newstream",
    "create_time" : 1593569685875,
    "retention_period" : 24,
    "status" : "RUNNING",
    "stream_type" : "COMMON",
    "data_type" : "BLOB",
    "partition_count" : 1,
```

```
"tags" : [ ],
"auto_scale_enabled" : false,
"auto_scale_min_partition_count" : 0,
"auto_scale_max_partition_count" : 0
} ],
"has_more_streams" : false
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class ListStreamsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        DisClient client = DisClient.newBuilder()
            .withCredential(auth)
            .withRegion(DisRegion.valueOf("<YOUR_REGION>"))
            .build();
        ListStreamsRequest request = new ListStreamsRequest();
        try {
            ListStreamsResponse response = client.listStreams(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```


Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = DisClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DisRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListStreamsRequest()
        response = client.list_streams(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := dis.NewDisClient(
        dis.DisClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
```

```
Build())

request := &model.ListStreamsRequest{}
response, err := client.ListStreams(request)
if err == nil {
    fmt.Printf("%v\n", response)
} else {
    fmt.Println(err)
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Normal response

Error Codes

See [Error Codes](#).

5.1.3 Deleting a Stream

Function

This API is used to delete a specified stream.

Calling Method

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

URI

DELETE /v2/{project_id}/streams/{stream_name}

Table 5-14 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
stream_name	Yes	String	Name of the stream to be deleted

Request Parameters

Table 5-15 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It 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.

Response Parameters

Status code: 204

Normal response

None

Example Requests

Deleting a Stream

```
DELETE https://{Endpoint}/v2/{project_id}/streams/{stream_name}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class DeleteStreamSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    }
}
```

```
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

DisClient client = DisClient.newBuilder()
    .withCredential(auth)
    .withRegion(DisRegion.valueOf("<YOUR REGION>"))
    .build();
DeleteStreamRequest request = new DeleteStreamRequest();
request.withStreamName("{stream_name}");
try {
    DeleteStreamResponse response = client.deleteStream(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = DisClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DisRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteStreamRequest()
        request.stream_name = "{stream_name}"
        response = client.delete_stream(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := dis.NewDisClient(
        dis.DisClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteStreamRequest{}
    request.StreamName = "{stream_name}"
    response, err := client.DeleteStream(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	Normal response

Error Codes

See [Error Codes](#).

5.1.4 Querying Details of a Stream

Function

This API is used to query details about a specified stream.

Calling Method

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

URI

GET /v2/{project_id}/streams/{stream_name}

Table 5-16 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
stream_name	Yes	String	Name of the stream to be queried

Table 5-17 Query Parameters

Parameter	Mandatory	Type	Description
start_partition_id	No	String	Name of the partition to start the partition list with. The returned partition list does not contain this partition. The value of start_partition_id must be in shardId-0000000xxx format, where xxx indicates the ID of the stream partition to be queried.
limit_partitions	No	Integer	Max. number of partitions to list in a single API call.

Request Parameters

Table 5-18 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It 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.

Response Parameters

Status code: 200**Table 5-19** Response body parameters

Parameter	Type	Description
stream_name	String	Stream name
create_time	Long	Time when the stream is created. The value is a 13-bit timestamp.
last_modified_time	Long	Time when a stream is the most recently modified. The value is a 13-bit timestamp.
status	String	Current status of the stream. • CREATING • RUNNING • TERMINATING • TERMINATED
stream_type	String	Stream type • COMMON: a common stream with a bandwidth of 1 Mbit/s • ADVANCED: an advanced stream with a bandwidth of 5 Mbit/s
partitions	Array of PartitionResult objects	Partition list of the stream
has_more_partitions	Boolean	Whether there are more matching partitions. • true: yes • false: no

Parameter	Type	Description
retention_period	Integer	Period for storing data in units of hours
stream_id	String	Unique ID of the stream
data_type	String	Source data type. • BLOB: a collection of binary data stored as a single entity in a database management system • JSON: an open-standard file format that uses human-readable text to transmit data objects consisting of attribute-value pairs and array data types • CSV: a simple text format for storing tabular data in a plain text file. Commas are used as delimiters. Default value: BLOB
data_schema	String	Source data structure that defines JSON and CSV formats. It is described in the syntax of the Avro schema. For details about Avro, go to http://avro.apache.org/docs/current/#schemas .
compression_format	String	Data compression type. Currently, the following compression types are supported: • snappy • gzip • zip By default, data is not compressed.
csv_properties	CSVProperties object	Attributes of data in CSV format, such as delimiter
writable_partition_count	Integer	Total number of writable partitions (including partitions in ACTIVE state only)
readable_partition_count	Integer	Total number of readable partitions (including partitions in ACTIVE and DELETED state).
update_partition_counts	Array of UpdatePartition-Count objects	List of scaling operation records
tags	Array of Tag objects	List of stream tags

Parameter	Type	Description
sys_tags	Array of SysTag objects	Enterprise project of a stream
auto_scale_enabled	Boolean	Whether to enable auto scaling. • true: Auto scaling is enabled. • false: Auto scaling is disabled. By default, auto scaling is disabled.
auto_scale_min_partition_count	Integer	Minimum number of partitions for automatic scale-down when auto scaling is enabled.
auto_scale_max_partition_count	Integer	Maximum number of partitions for automatic scale-up when auto scaling is enabled.

Table 5-20 PartitionResult

Parameter	Type	Description
status	String	Current status of the partition • CREATING • ACTIVE • DELETED • EXPIRED
partition_id	String	Unique identifier of the partition
hash_range	String	Possible value range of the hash key used by the partition
sequence_number_range	String	Sequence number range of the partition
parent_partitions	String	Parent partition

Table 5-21 CSVProperties

Parameter	Type	Description
delimiter	String	Data separator

Table 5-22 UpdatePartitionCount

Parameter	Type	Description
create_timestamp	Long	Scaling execution timestamp, which is a 13-digit timestamp.
src_partition_count	Integer	Number of partitions before scaling
target_partition_count	Integer	Number of partitions after scaling
result_code	Integer	Response code of the scaling operation
result_msg	Integer	Response to the scaling operation
auto_scale	Boolean	Whether the scaling operation is automatic • true: auto scaling • false: manual scaling

Table 5-23 Tag

Parameter	Type	Description
key	String	Tag key. • The value cannot be empty and must be a string of 1 to 36 characters. • Must be unique for each resource. - - Character set: A-Z, a-z, 0-9, '-', '_', and Unicode characters (\u4E00-\u9FFF).
value	String	Value. • It can contain a maximum of 43 characters. • It can contain uppercase and lowercase letters, digits, periods (.), hyphens (-), underscores (_), and Unicode characters (\u4E00-\u9FFF). • It can only contain digits, letters, hyphens (-), and underscores (_).

Table 5-24 SysTag

Parameter	Type	Description
key	String	Tag key. - It cannot be left blank. - Its value must be _sys_enterprise_project_id.
value	String	Value. The value is the enterprise project ID, which needs to be obtained on the enterprise management page. It is a 36-digit UUID.

Example Requests

Querying Details of a Stream

```
GET https://{Endpoint}/v2/{project_id}/streams/{stream_name}
```

Example Responses

Status code: 200

Normal response

```
{
  "stream_id": "8QM3Nt9YTLOWtUVYJhO",
  "stream_name": "newstream",
  "create_time": 1593569685875,
  "last_modified_time": 1599050091026,
  "retention_period": 24,
  "status": "RUNNING",
  "stream_type": "COMMON",
  "data_type": "BLOB",
  "writable_partition_count": 1,
  "readable_partition_count": 1,
  "tags": [],
  "auto_scale_enabled": false,
  "auto_scale_min_partition_count": 0,
  "auto_scale_max_partition_count": 0,
  "partitions": [ {
    "status": "ACTIVE",
    "partition_id": "shardId-0000000000",
    "hash_range": "[0 : 9223372036854775807]",
    "sequence_number_range": "[289911 : 289927]"
  } ],
  "has_more_partitions": false
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

```
package com.huaweicloud.sdk.test;
```

```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class ShowStreamSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        DisClient client = DisClient.newBuilder()
            .withCredential(auth)
            .withRegion(DisRegion.valueOf("<YOUR_REGION>"))
            .build();
        ShowStreamRequest request = new ShowStreamRequest();
        request.withStreamName("{stream_name}");
        try {
            ShowStreamResponse response = client.showStream(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"
```

```
credentials = BasicCredentials(ak, sk, projectId)

client = DisClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(DisRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = ShowStreamRequest()
    request.stream_name = "{stream_name}"
    response = client.show_stream(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := dis.NewDisClient(
        dis.DisClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowStreamRequest{}
    request.StreamName = "{stream_name}"
    response, err := client.ShowStream(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Normal response

Error Codes

See [Error Codes](#).

5.1.5 Changing Partition Quantity

Function

This API is used to change the number of partitions in a specific stream.

Calling Method

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

URI

PUT /v2/{project_id}/streams/{stream_name}

Table 5-25 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
stream_name	Yes	String	Name of the stream whose partition quantity needs to be changed

Request Parameters

Table 5-26 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It 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.

Table 5-27 Request body parameters

Parameter	Mandatory	Type	Description
stream_name	Yes	String	Name of the stream whose partition quantity needs to be changed
target_partition_count	Yes	Integer	Number of the target partitions. The value is an integer greater than 0. If the value is greater than the number of current partitions, scaling-up is required. If the value is less than the number of current partitions, scale-down is required. Notes: Each stream can be scaled up and down a total of five times within one hour. After the stream is successfully scaled up or down, it cannot be scaled up or down again within the next one hour.

Response Parameters

Status code: 200

Normal response

None

Example Requests

Changing Partition Quantity

```
PUT https://{Endpoint}/v2/{project_id}/streams/{stream_name}
{
  "stream_name": "newstream",
  "target_partition_count": 5
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Changing Partition Quantity

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class UpdatePartitionCountSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        DisClient client = DisClient.newBuilder()
            .withCredential(auth)
            .withRegion(DisRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdatePartitionCountRequest request = new UpdatePartitionCountRequest();
        request.withStreamName("{stream_name}");
        UpdatePartitionCountReq body = new UpdatePartitionCountReq();
        body.withTargetPartitionCount(5);
        body.withStreamName("newstream");
        request.withBody(body);
        try {
            UpdatePartitionCountResponse response = client.updatePartitionCount(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Changing Partition Quantity

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
```



```
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = DisClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DisRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdatePartitionCountRequest()
        request.stream_name = "{stream_name}"
        request.body = UpdatePartitionCountReq(
            target_partition_count=5,
            stream_name="newstream"
        )
        response = client.update_partition_count(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Changing Partition Quantity

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := dis.NewDisClient(
        dis.DisClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
```

```
WithCredential(auth).
Build())

request := &model.UpdatePartitionCountRequest{}
request.StreamName = "{stream_name}"
request.Body = &model.UpdatePartitionCountReq{
    TargetPartitionCount: int32(5),
    StreamName: "newstream",
}
response, err := client.UpdatePartitionCount(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Normal response

Error Codes

See [Error Codes](#).

5.1.6 Querying the Scaling Logs of the Current Stream Partition

Function

This API is used to query the scaling logs of the current stream partition.

Calling Method

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

URI

GET /v2/{project_id}/streams/{stream_name}/update_partition_counts

Table 5-28 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID. For how to obtain it, see Obtaining a Project ID . Constraints N/A Range The value can contain 1 to 64 characters. Only letters and digits are allowed. Default Value N/A
stream_name	Yes	String	Definition Name of the stream whose scaling logs are to be queried. Constraints N/A Range N/A Default Value N/A

Request Parameters

Table 5-29 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. You can obtain it by calling the IAM API for obtaining a user token. The user token is the value of X-Subject-Token in the response header. For details, see Token-based Authentication . Constraints N/A Range The value can contain 1 to 32,768 characters. Default Value N/A

Table 5-30 Request body parameters

Parameter	Mandatory	Type	Description
create_timestamp	No	Long	Definition Scaling execution timestamp, which is a 13-digit timestamp Constraints N/A Range N/A Default Value N/A
src_partition_count	No	Integer	Definition Number of partitions before scaling Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
target_partition_count	No	Integer	Definition Number of partitions after scaling Constraints N/A Range N/A Default Value N/A
result_code	No	Integer	Definition Response code of the scaling operation result Constraints N/A Range 1: successful 0: failed Default Value N/A
auto_scale	No	Boolean	Definition Whether the scaling operation is automatic Constraints N/A Range • true: auto scaling • false: manual scaling Default Value N/A

Response Parameters

Status code: 200

Normal response

None

Example Requests

Query the scaling logs of the current stream partition.

```
GET https://{Endpoint}/v2/{project_id}/streams/{stream_name}/update_partition_counts

{
  "auto_scale" : false,
  "create_timestamp" : 1756386086180,
  "result_code" : 1,
  "src_partition_count" : 2,
  "target_partition_count" : 1
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Normal response

Error Codes

See [Error Codes](#).

5.1.7 Updating Stream Information

Function

This API is used to update the information about a specified stream.

Calling Method

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

URI

PUT /v3/{project_id}/streams/{stream_name}

Table 5-31 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
stream_name	Yes	String	Name of the stream whose partition quantity needs to be changed

Request Parameters

Table 5-32 Request body parameters

Parameter	Mandatory	Type	Description
stream_name	Yes	String	Name of the stream to be updated
data_duration	No	Integer	Data retention period. Value range: 24–72 Unit: hour If this parameter is left unspecified, the default value will be used.
data_type	No	String	Source data type. • BLOB: a collection of binary data stored as a single entity in a database management system • JSON: an open-standard file format that uses human-readable text to transmit data objects consisting of attribute-value pairs and array data types • CSV: a simple text format for storing tabular data in a plain text file. Commas are used as delimiters. Default value: BLOB
data_schema	No	String	Source data structure that defines JSON and CSV formats. It is described in the syntax of the Avro schema.

Response Parameters

Status code: 204

Normal response

None

Example Requests

- Updating the Stream Lifecycle

```
PUT https://{Endpoint}/v3/{project_id}/streams/{stream_name}
```

```
{
  "stream_name" : "stz_test",
  "data_duration" : 48
}
```

- Updating the Stream Type

PUT https://{Endpoint}/v3/{project_id}/streams/{stream_name}

```
{
  "stream_name" : "stz_test",
  "data_type" : "JSON"
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

- Updating the Stream Lifecycle

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class UpdateStreamSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        DisClient client = DisClient.newBuilder()
            .withCredential(auth)
            .withRegion(DisRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateStreamRequest request = new UpdateStreamRequest();
        request.withStreamName("{stream_name}");
        UpdateStreamReq body = new UpdateStreamReq();
        body.withDataDuration(48);
        body.withStreamName("stz_test");
        request.withBody(body);
        try {
            UpdateStreamResponse response = client.updateStream(request);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```



```
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
```

- **Updating the Stream Type**

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class UpdateStreamSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        DisClient client = DisClient.newBuilder()
            .withCredential(auth)
            .withRegion(DisRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateStreamRequest request = new UpdateStreamRequest();
        request.withStreamName("{stream_name}");
        UpdateStreamReq body = new UpdateStreamReq();
        body.withDataType(UpdateStreamReq.DataTypeEnum.fromValue("JSON"));
        body.withStreamName("stz_test");
        request.withBody(body);
        try {
            UpdateStreamResponse response = client.updateStream(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

```
}  
}
```

Python

- Updating the Stream Lifecycle

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import BasicCredentials  
from huaweicloudsdkdis.v2.region.dis_region import DisRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkdis.v2 import *  
  
if __name__ == "__main__":  
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
    # environment variables and decrypted during use to ensure security.  
    # In this example, AK and SK are stored in environment variables for authentication. Before  
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local  
    # environment  
    ak = os.environ["CLOUD_SDK_AK"]  
    sk = os.environ["CLOUD_SDK_SK"]  
    projectId = "{project_id}"  
  
    credentials = BasicCredentials(ak, sk, projectId)  
  
    client = DisClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(DisRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = UpdateStreamRequest()  
        request.stream_name = "{stream_name}"  
        request.body = UpdateStreamReq(  
            data_duration=48,  
            stream_name="stz_test"  
        )  
        response = client.update_stream(request)  
        print(response)  
    except exceptions.ClientRequestException as e:  
        print(e.status_code)  
        print(e.request_id)  
        print(e.error_code)  
        print(e.error_msg)
```

- Updating the Stream Type

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import BasicCredentials  
from huaweicloudsdkdis.v2.region.dis_region import DisRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkdis.v2 import *  
  
if __name__ == "__main__":  
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
    # environment variables and decrypted during use to ensure security.  
    # In this example, AK and SK are stored in environment variables for authentication. Before  
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local  
    # environment  
    ak = os.environ["CLOUD_SDK_AK"]  
    sk = os.environ["CLOUD_SDK_SK"]  
    projectId = "{project_id}"  
  
    credentials = BasicCredentials(ak, sk, projectId)
```

```
client = DisClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(DisRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = UpdateStreamRequest()
    request.stream_name = "{stream_name}"
    request.body = UpdateStreamReq(
        data_type="JSON",
        stream_name="stz_test"
    )
    response = client.update_stream(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

- Updating the Stream Lifecycle

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := dis.NewDisClient(
        dis.DisClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateStreamRequest{
        request.StreamName = "{stream_name}"
        dataDurationUpdateStreamReq:= int32(48)
        request.Body = &model.UpdateStreamReq{
            DataDuration: &dataDurationUpdateStreamReq,
            StreamName: "stz_test",
        }
    }
    response, err := client.UpdateStream(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- ```
}
}
```
- **Updating the Stream Type**  

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before
 // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
 // environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build()
)

 request := &model.UpdateStreamRequest{
 request.StreamName = "{stream_name}"
 dataTypeUpdateStreamReq:= model.GetUpdateStreamReqDataTypeEnum().JSON
 request.Body = &model.UpdateStreamReq{
 DataType: &dataTypeUpdateStreamReq,
 StreamName: "stz_test",
 }
 }
 response, err := client.UpdateStream(request)
 if err == nil {
 fmt.Printf("%+v\n", response)
 } else {
 fmt.Println(err)
 }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 204         | Normal response |

## Error Codes

See [Error Codes](#).

# 5.1.8 Obtaining the Quota of a Tenant

## Function

This API is used to obtain the quota of a tenant.

## Calling Method

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

## URI

GET /v1/{project\_id}/quotas

Table 5-33 Path Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                                                                                       |
|------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | <b>Definition</b><br>Project ID. For how to obtain it, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 64 characters. Only letters and digits are allowed.<br><b>Default Value</b><br>N/A |

## Request Parameters

**Table 5-34** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | <b>Definition</b><br>User token. You can obtain it by calling the IAM API for obtaining a user token. The user token is the value of <b>X-Subject-Token</b> in the response header. For details, see <a href="#">Token-based Authentication</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 32,768 characters.<br><b>Default Value</b><br>N/A |

## Response Parameters

Status code: 200

**Table 5-35** Response body parameters

| Parameter | Type                                             | Description                                                                                                   |
|-----------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| quota     | Array of <a href="#">ResourcesResult</a> objects | <b>Definition</b><br>Quota<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |

**Table 5-36** ResourcesResult

| Parameter | Type                                              | Description                                                                                                                                                   |
|-----------|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| resources | Array                                             | <b>Definition</b><br>Resource details<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                      |
| items     | <a href="#">ResourcesdescriptionResult</a> object | <b>Definition</b><br>Resource details list Resource type, quota, and usage<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |

**Table 5-37** ResourcesdescriptionResult

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                         |
|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| type      | String | <b>Definition</b><br>Resource type<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>common_partition</b>: common partition</li><li>• <b>advanced_partition</b>: advanced partition</li><li>• <b>app</b>: app partition</li></ul> <b>Default Value</b><br>N/A |

| Parameter | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| quota     | Integer | <b>Definition</b><br>Total quota of the current resource type<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>The default total quota of common partitions is <b>50</b> , that of advanced partitions is <b>10</b> , and that of app partitions is <b>100</b> .                                                                                                                                                     |
| used      | Integer | <b>Definition</b><br>Used quota of the current resource type<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value cannot be greater than the total quota of the corresponding resource type. The value for a common partition cannot be greater than <b>50</b> , the value for an advanced partition cannot be greater than <b>10</b> , and the value for an app partition cannot be greater than <b>100</b> .<br><b>Default Value</b><br>N/A |

## Example Requests

Obtain the quota of a tenant.

```
GET https://{Endpoint}/v1/{tenantId}/quotas
```

## Example Responses

**Status code: 200**

Normal response

```
{
 "quotas" : {
 "resource" : {
 "type" : "common_partition",
 "quota" : 50,
 "used" : 10
 }
 }
}
```



```
}
}
}
```

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.1.9 Submitting a Cloud Service Package Order

### Function

This API is used to submit a cloud service package order.

### Calling Method

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

### URI

POST /v2/orders/{order\_id}

**Table 5-38** Path Parameters

| Parameter | Mandatory | Type   | Description |
|-----------|-----------|--------|-------------|
| order_id  | Yes       | String | Order ID    |

## Request Parameters

**Table 5-39** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | <b>Definition</b><br>User token. You can obtain it by calling the IAM API for obtaining a user token. The user token is the value of <b>X-Subject-Token</b> in the response header. For details, see <a href="#">Token-based Authentication</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 32,768 characters.<br><b>Default Value</b><br>N/A |

**Table 5-40** Request body parameters

| Parameter     | Mandatory | Type                                                       | Description                                                                                                                                    |
|---------------|-----------|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| cloudServices | No        | Array of <a href="#">cloudServicesRequestEntry</a> objects | <b>Definition</b><br>Cloud service resource package details<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |
| purchaseMode  | No        | Int                                                        | <b>Definition</b><br>Purchase mode<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>1                            |

| Parameter | Mandatory | Type   | Description                                                                                                                                                           |
|-----------|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| tenantId  | No        | String | <b>Definition</b><br>Tenant ID, which is the same as the value of <b>projectId</b><br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |

**Table 5-41** cloudServicesRequestEntry

| Parameter    | Mandatory | Type | Description                                                                                                                                              |
|--------------|-----------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| chargingMode | No        | Int  | <b>Definition</b><br>Billing mode. The prepaid mode is used by default.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>0 |
| paymentMode  | No        | Int  | <b>Definition</b><br>Payment method<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>0                                     |

| Parameter        | Mandatory | Type                                                 | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------|-----------|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| periodNum        | No        | Int                                                  | <b>Definition</b><br>Subscription duration. The subscription duration can be 1 to 9 months or 1 to 3 years (only integer months or years). This parameter is used together with <b>periodType</b> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>When <b>periodType</b> is set to <b>2</b> , the value of this parameter can be an integer from 1 to 9.<br>When <b>periodType</b> is set to <b>3</b> , the value of this parameter can be an integer from 1 to 3.<br><b>Default Value</b><br>1 |
| periodType       | No        | Int                                                  | <b>Definition</b><br>Subscription duration type, which can be monthly or yearly. Value <b>2</b> indicates monthly, and value <b>3</b> indicates yearly.<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>2</b>: monthly</li><li>• <b>3</b>: yearly</li></ul> <b>Default Value</b><br>2                                                                                                                                                                     |
| cloudServiceForm | No        | Array of <b>cloudServiceFormRequestEntry</b> objects | <b>Definition</b><br>Resource package type information, including the cloud service type, project ID, and order ID<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                                                                                                                                                                                                                                                                             |

| Parameter        | Mandatory | Type    | Description                                                                                                                                                                                                                  |
|------------------|-----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| isAutoRenew      | No        | Boolean | <b>Definition</b><br>Whether automatic renewal is enabled<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>• 0: no</li><li>• 1: yes</li></ul> <b>Default Value</b><br>0                    |
| isTrial          | No        | Boolean | <b>Definition</b><br>Whether the current subscription is in the trial period<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>• 0: no</li><li>• 1: yes</li></ul> <b>Default Value</b><br>0 |
| cloudServiceType | No        | String  | <b>Definition</b><br>Cloud service type<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>hws.service.type.dis                                                                                  |

| Parameter    | Mandatory | Type                                                      | Description                                                                                                                                                                                          |
|--------------|-----------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| productInfos | No        | Array of <a href="#">productInfosRequestEntry</a> objects | <b>Definition</b><br>Product information, including the cloud service type, product ID, and resource package name<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |

**Table 5-42** cloudServiceFormRequestEntry

| Parameter        | Mandatory | Type   | Description                                                                                                                                                                                                                                                       |
|------------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| cloudservicetype | No        | String | <b>Definition</b><br>Cloud service type<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>hws.service.type.dis                                                                                                                       |
| projectid        | No        | String | <b>Definition</b><br>Project ID. For how to obtain it, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 64 characters. Only letters and digits are allowed.<br><b>Default Value</b><br>N/A |

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                              |
|-----------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| orderid   | No        | String | <b>Definition</b><br>Order ID. Each order has a unique ID.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 64 characters. Only letters and digits are allowed.<br><b>Default Value</b><br>N/A |

**Table 5-43** productInfosRequestEntry

| Parameter        | Mandatory | Type   | Description                                                                                                                                                              |
|------------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| productId        | No        | String | <b>Definition</b><br>ID of the product to be purchased. Each product has a unique ID.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |
| resourceSpecCode | No        | String | <b>Definition</b><br>Name of the resource package<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>dis.general.partition.duration.p<br>kg  |

| Parameter    | Mandatory | Type   | Description                                                                                                                            |
|--------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------|
| resourceType | No        | String | <b>Definition</b><br>Resource type<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>hws.service.type.dis |

Response Parameters

Status code: 200

Success

None

Example Requests

```
POST https://{Endpoint}/v2/orders/{order_id}

{
 "cloudServices": {
 "avalibleZoneId": "",
 "chargingMode": 0,
 "cloudServiceEndpoint": "",
 "cloudServiceForm": {
 "projectId": "5d5916d21xxx46efbe7c2e93bd1xxxce",
 "orderId": "CS25110715xxx86MU",
 "cloudServiceType": "hws.service.type.dis"
 },
 "cloudServiceType": "hws.service.type.dis",
 "isAutoRenew": 0,
 "isTrial": 0,
 "paymentMode": 0,
 "periodNum": 1,
 "periodType": 2,
 "productInfos": {
 "cloudServiceType": "hws.service.type.dis",
 "productId": "00301-261175-0--0",
 "resourceSpecCode": "dis.general.partition.duration.pkg",
 "resourceType": "hws.resource.type.dis"
 },
 "regionId": "cn-north-x",
 "subscriptionNum": 1
 },
 "discountId": "",
 "purchaseMode": 1,
 "tenantId": "5d5916d21xxx46efbe7c2e93bd1xxxce"
}
```

Example Responses

None



## Status Codes

| Status Code | Description |
|-------------|-------------|
| 200         | Success     |

## Error Codes

See [Error Codes](#).

## 5.1.10 Updating Auto Scaling Information of a Stream

### Function

This API is used to update the auto scaling information of a stream.

### Calling Method

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

### URI

PUT /v2/{project\_id}/streams/{stream\_name}/update

**Table 5-44** Path Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                                                                                       |
|------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | <b>Definition</b><br>Project ID. For how to obtain it, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 64 characters. Only letters and digits are allowed.<br><b>Default Value</b><br>N/A |

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                |
|-------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| stream_name | Yes       | String | <b>Definition</b><br>Name of the stream whose auto scaling information is to be updated<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |

## Request Parameters

**Table 5-45** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | <b>Definition</b><br>User token. You can obtain it by calling the IAM API for obtaining a user token. The user token is the value of <b>X-Subject-Token</b> in the response header. For details, see <a href="#">Token-based Authentication</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 32,768 characters.<br><b>Default Value</b><br>N/A |

**Table 5-46** Request body parameters

| Parameter                      | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| auto_scale_enabled             | No        | Boolean | <b>Definition</b><br>Whether to enable auto scaling<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>true</b>: Auto scaling is enabled.</li><li>• <b>false</b>: Auto scaling is disabled.</li></ul> <b>Default Value</b><br>false                                                                                                              |
| auto_scale_min_partition_count | No        | Long    | <b>Definition</b><br>Minimum number of partitions that can be automatically removed when auto scaling is enabled<br><b>Constraints</b><br>The minimum number of partitions that can be automatically removed cannot be greater than the maximum number of partitions that can be automatically added and cannot be less than 1.<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |
| auto_scale_max_partition_count | No        | Integer | <b>Definition</b><br>Maximum number of partitions that can be automatically added when auto scaling is enabled.<br><b>Constraints</b><br>The value cannot be less than 1.<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                                                                                                                                       |

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                  |
|-------------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| update_type | No        | String | <b>Definition</b><br>Update type. The value is fixed at <b>AUTO_SCALE</b> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>AUTO_SCALE<br><b>Default Value</b><br>AUTO_SCALE |

## Response Parameters

**Status code: 200**

Success

None

## Example Requests

Update the auto scaling information of a stream.

```
PUT https://{Endpoint}/v2/{project_id}/streams/{stream_name}/update
{
 "auto_scale_enabled" : true,
 "auto_scale_max_partition_count" : 1,
 "auto_scale_min_partition_count" : 1,
 "update_type" : "AUTO_SCALE"
}
```

## Example Responses

None

## Status Codes

| Status Code | Description |
|-------------|-------------|
| 200         | Success     |

## Error Codes

See [Error Codes](#).

## 5.1.11 Adding Permission Policies

### Function

This API is used to add permission policies to a specified stream.

### Calling Method

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

### URI

POST /v2/{project\_id}/streams/{stream\_name}/policies

**Table 5-47** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                          |
|-------------|-----------|--------|----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID                                                           |
| stream_name | Yes       | String | Name of the stream for which you want to add an authorization policy |

### Request Parameters

**Table 5-48** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

**Table 5-49** Request body parameters

| Parameter | Mandatory | Type   | Description             |
|-----------|-----------|--------|-------------------------|
| stream_id | Yes       | String | Unique ID of the stream |

| Parameter      | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                  |
|----------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| principal_name | Yes       | String | Authorized user.<br>If the permission is granted to a specified tenant, the format is <b>domainName.*</b> . If the permission is granted to a specified sub-user of a tenant, the format is <b>domainName.userName</b> .<br>You can add multiple accounts and separate them by commas (,), for example, <b>domainName1.userName1,domainName2.userName2</b> . |
| action_type    | Yes       | String | Action type. <ul style="list-style-type: none"><li>• <b>putRecords</b>: uploading data</li><li>• <b>getRecords</b>: downloading data</li><li>• <b>getStreamInfo</b>: obtaining stream details</li></ul>                                                                                                                                                      |
| effect         | No        | String | Authorization impact type.<br>The default value is deny.<br>- accept: The authorization operation is allowed. <ul style="list-style-type: none"><li>• <b>deny</b>: The authorization operation is denied.</li></ul>                                                                                                                                          |

## Response Parameters

Status code: 200

Normal response

None

## Example Requests

- Adding Permission Policies for Tenants

POST https://{Endpoint}/v2/{project\_id}/streams/{stream\_name}/policies

```
{
 "stream_id" : "CiFdELMr0401K9GGZlp",
 "principal_name" : "domainname1",
 "action_type" : "putRecords",
 "effect" : "accept"
}
```

- Adding Permission Policies for Sub-users

POST https://{Endpoint}/v2/{project\_id}/streams/{stream\_name}/policies

```
{
 "stream_id" : "CiFdELMr0401K9GGZlp",
 "principal_name" : "domainname1.username1",
 "action_type" : "putRecords",
 "effect" : "accept"
}
```

## Example Responses

None

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.1.12 Querying Permission Policies

### Function

This API is used to query permission policies of a specified stream.

### Calling Method

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

### URI

GET /v2/{project\_id}/streams/{stream\_name}/policies

**Table 5-50** Path Parameters

| Parameter   | Mandatory | Type   | Description |
|-------------|-----------|--------|-------------|
| project_id  | Yes       | String | Project ID  |
| stream_name | Yes       | String | Stream name |

## Request Parameters

**Table 5-51** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

## Response Parameters

**Status code: 200**

**Table 5-52** Response body parameters

| Parameter | Type                                  | Description                               |
|-----------|---------------------------------------|-------------------------------------------|
| stream_id | String                                | Unique ID of the stream                   |
| rules     | Array of <b>PrincipalRule</b> objects | List of authorization information records |

**Table 5-53** PrincipalRule

| Parameter      | Type   | Description                                                                                                                                                                                                                             |
|----------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| principal      | String | ID of the authorized user                                                                                                                                                                                                               |
| principal_name | String | Name of the authorized user.If the permission is granted to all sub-users of a tenant, the format is <b>domainName.*</b> . If the permission is granted to a specified sub-user of a tenant, the format is <b>domainName.userName</b> . |
| action_type    | String | Authorization operation type. <ul style="list-style-type: none"><li>• <b>putRecords</b>: uploading data</li><li>• <b>getRecords</b>: downloading data</li></ul>                                                                         |
| effect         | String | Authorization impact type. <ul style="list-style-type: none"><li>• <b>accept</b>: The authorization operation is allowed.</li></ul>                                                                                                     |



## Example Requests

### Querying Permission Policies

```
GET https://{Endpoint}/v2/{project_id}/streams/{stream_name}/policies
```

## Example Responses

### Status code: 200

#### Normal response

```
{
 "streamId" : "CiFdELMr0401K9GGZlp",
 "rules" : [{
 "action_type" : "putRecords",
 "principal" : "3b3f237122574xxxxb74482ae11005ba.*",
 "principal_name" : "anotherusername",
 "effect" : "accept"
 }]
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class ListPoliciesSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
 ListPoliciesRequest request = new ListPoliciesRequest();
 request.withStreamName("{stream_name}");
 try {
 ListPoliciesResponse response = client.listPolicies(request);
 System.out.println(response.toString());
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 }
 }
}
```

```
 } catch (ConnectionException e) {
 e.printStackTrace();
 } catch (RequestTimeoutException e) {
 e.printStackTrace();
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
 }
}
```

## Python

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 # variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak = os.environ["CLOUD_SDK_AK"]
 sk = os.environ["CLOUD_SDK_SK"]
 projectId = "{project_id}"

 credentials = BasicCredentials(ak, sk, projectId)

 client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

 try:
 request = ListPoliciesRequest()
 request.stream_name = "{stream_name}"
 response = client.list_policies(request)
 print(response)
 except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 // variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
```

```
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

request := &model.ListPoliciesRequest{}
request.StreamName = "{stream_name}"
response, err := client.ListPolicies(request)
if err == nil {
 fmt.Printf("%+v\n", response)
} else {
 fmt.Println(err)
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.1.13 Deleting a Permission Rule of a Resource

### Function

This API is used to delete a permission rule of a resource.

### Calling Method

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

### URI

DELETE /v2/{project\_id}/streams/{stream\_name}/policies

Table 5-54 Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                              |
|-------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Definition</b><br>Project ID. For how to obtain it, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 64 characters. Only letters and digits are allowed.<br><b>Default Value</b><br>N/A                                                                                        |
| stream_name | Yes       | String | <b>Definition</b><br>Stream name. The system generates a name prefixed with "dis-" followed by four random characters or digits. Example: <b>dis-HvB1</b> . You can also customize a name.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 64 characters. Only letters and digits are allowed.<br><b>Default Value</b><br>N/A |

## Request Parameters

**Table 5-55** Request header parameters

| Parameter    | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|-----------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | AnyType | <b>Definition</b><br>User token. You can obtain it by calling the IAM API for obtaining a user token. The user token is the value of <b>X-Subject-Token</b> in the response header. For details, see <a href="#">Token-based Authentication</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 32,768 characters.<br><b>Default Value</b><br>N/A |

**Table 5-56** Request body parameters

| Parameter | Mandatory | Type   | Description                                                                                                                     |
|-----------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------|
| stream_id | Yes       | String | <b>Definition</b><br>Unique ID of the stream<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |

| Parameter      | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| principal_name | Yes       | String | <b>Definition</b><br>Authorized user. If the permission is granted to a specified tenant, the format is <b>domainName.*</b> . If the permission is granted to a specified sub-user of a tenant, the format is <b>domainName.userName</b> . Multiple accounts can be added and separated by commas (,), for example, <b>domainName1.userName1,domainName2.userName2</b> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |
| action_type    | Yes       | String | <b>Definition</b><br>Authorization operation type<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>putRecords</b>: uploading data</li><li>• <b>getRecords</b>: downloading data</li><li>• <b>getStreamInfo</b>: obtaining stream details</li></ul> <b>Default Value</b><br>N/A                                                                                                                                       |
| effect         | No        | String | <b>Definition</b><br>Authorization impact type. The default value is <b>accept</b> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                                                                                                                                                                                                                                                                     |

## Response Parameters

**Status code: 200**

Normal response

None

## Example Requests

Delete a permission rule of a resource.

```
DELETE https://{Endpoint}/v2/{project_id}/streams/{stream_name}/policies
{
 "action_type": "putRecords",
 "effect": "accept",
 "principal_name": "domainname1",
 "stream_id": "CiFdELMr0401K9GGZlp"
}
```

## Example Responses

None

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.1.14 Adding v3 Permission Policies

### Function

This API is used to add v3 permission policies to a specified stream.

### Calling Method

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

### URI

POST /v3/{project\_id}/streams/{streamName}/policies

**Table 5-57** Path Parameters

| Parameter  | Mandatory | Type   | Description                                          |
|------------|-----------|--------|------------------------------------------------------|
| project_id | Yes       | String | Project ID                                           |
| streamName | Yes       | String | Name of the stream to which you want to add policies |

## Request Parameters

**Table 5-58** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

**Table 5-59** Request body parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                           |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| stream_id    | Yes       | String | Unique ID of the stream                                                                                                                                                                                                                                                                                                               |
| principal_id | Yes       | String | Authorized user.<br>If the permission is granted to a specified tenant, the format is <i>domainId</i> . If the permission is granted to a specified sub-user of a tenant, the format is <i>domainId of the sub-user</i> .<br>You can add multiple accounts and separate them by commas (,), for example, <i>domainId1,domainId2</i> . |
| action_type  | Yes       | String | Authorization operation type.<br>- putRecords: Upload data.<br>- getRecords: Download data.<br>• getStreamInfo: stream details.                                                                                                                                                                                                       |
| effect       | No        | String | Authorization impact type<br>• <b>accept</b> : The authorization operation is allowed.                                                                                                                                                                                                                                                |



## Response Parameters

**Status code: 200**

The operation is successful.

None

## Example Requests

- Add permission policies for a tenant.

POST https://{Endpoint}/v3/{project\_id}/streams/{streamName}/policies

```
{
 "stream_id" : "CiFdELMr0401K9GGZlp",
 "principal_id" : "domainid1",
 "action_type" : "putRecords",
 "effect" : "accept"
}
```

- Add permission policies for a sub-user.

POST https://{Endpoint}/v3/{project\_id}/streams/{streamName}/policies

```
{
 "stream_id" : "CiFdELMr0401K9GGZlp",
 "principal_id" : "domainid1",
 "action_type" : "putRecords",
 "effect" : "accept"
}
```

## Example Responses

None

## Status Codes

| Status Code | Description                  |
|-------------|------------------------------|
| 200         | The operation is successful. |

## Error Codes

See [Error Codes](#).

# 5.2 App Management

## 5.2.1 Creating a Consumption App

### Function

This API is used to create a consumption app.

## Calling Method

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

## URI

POST /v2/{project\_id}/apps

**Table 5-60** Path Parameters

| Parameter  | Mandatory | Type   | Description |
|------------|-----------|--------|-------------|
| project_id | Yes       | String | Project ID  |

## Request Parameters

**Table 5-61** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                        |
|--------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

**Table 5-62** Request body parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                                               |
|-----------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| app_name  | Yes       | String | Name of the consumer application to be created.<br>The application name contains 1 to 200 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed. |

## Response Parameters

**Status code: 201**

Normal response

None

## Example Requests

### Creating a Consumption App

```
POST https://{Endpoint}/v2/{project_id}/apps
{
 "app_name" : "newapp"
}
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Creating a Consumption App

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class CreateAppSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();

 CreateAppRequest request = new CreateAppRequest();
 CreateAppReq body = new CreateAppReq();
 body.withAppName("newapp");
 request.withBody(body);
 try {
 CreateAppResponse response = client.createApp(request);
 System.out.println(response.toString());
 } catch (ConnectionException e) {
 e.printStackTrace();
 } catch (RequestTimeoutException e) {
 e.printStackTrace();
 }
 }
}
```

```
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
 }
}
}
```

## Python

### Creating a Consumption App

```
coding: utf-8
```

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *
```

```
if __name__ == "__main__":
```

```
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 variables and decrypted during use to ensure security.
```

```
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
```

```
 ak = os.environ["CLOUD_SDK_AK"]
 sk = os.environ["CLOUD_SDK_SK"]
 projectId = "{project_id}"
```

```
 credentials = BasicCredentials(ak, sk, projectId)
```

```
 client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()
```

```
 try:
```

```
 request = CreateAppRequest()
 request.body = CreateAppReq(
 app_name="newapp"
)
 response = client.create_app(request)
 print(response)
```

```
 except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

### Creating a Consumption App

```
package main
```

```
import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)
```

```
func main() {
```

```
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
```

```
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

request := &model.CreateAppRequest{}
request.Body = &model.CreateAppReq{
 AppName: "newapp",
}
response, err := client.CreateApp(request)
if err == nil {
 fmt.Printf("%+v\n", response)
} else {
 fmt.Println(err)
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 201         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.2.2 Querying Apps

### Function

This API is used to query apps.

### Calling Method

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

## URI

GET /v2/{project\_id}/apps

**Table 5-63** Path Parameters

| Parameter  | Mandatory | Type   | Description |
|------------|-----------|--------|-------------|
| project_id | Yes       | String | Project ID  |

**Table 5-64** Query Parameters

| Parameter      | Mandatory | Type    | Description                                                                                   |
|----------------|-----------|---------|-----------------------------------------------------------------------------------------------|
| limit          | No        | Integer | Maximum number of apps returned in a single request. The value ranges from 1 to 200.          |
| start_app_name | No        | String  | Name of the app to start the list with. The returned app list does not contain this app name. |
| stream_name    | No        | String  | Name of the stream whose apps will be returned                                                |

## Request Parameters

**Table 5-65** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                        |
|--------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

## Response Parameters

Status code: 200

**Table 5-66** Response body parameters

| Parameter    | Type                                               | Description                                                                                                                                          |
|--------------|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| has_more_app | Boolean                                            | Whether there are more matching consumer applications. <ul style="list-style-type: none"><li>• <b>true</b>: yes</li><li>• <b>false</b>: no</li></ul> |
| apps         | Array of <a href="#">DescribeAppResult</a> objects | AppEntry list that meets the current request.                                                                                                        |
| total_number | Integer                                            | Total number of apps that meet criteria                                                                                                              |

**Table 5-67** DescribeAppResult

| Parameter                      | Type             | Description                                   |
|--------------------------------|------------------|-----------------------------------------------|
| app_name                       | String           | Name of the app                               |
| app_id                         | String           | Unique identifier of the app                  |
| create_time                    | Long             | Time when the app is created, in milliseconds |
| commit_checkpoint_stream_names | Array of strings | List of associated streams                    |

## Example Requests

Querying Apps

```
GET https://{Endpoint}/v2/{project_id}/apps
```

## Example Responses

**Status code: 200**

Normal response

```
{
 "total_number" : 1,
 "apps" : [{
 "app_id" : "bd6lPpvglflQPMpi9M",
 "app_name" : "newstream",
 "create_time" : 1593569685875
 }],
 "has_more_app" : true
}
```

## SDK Sample Code

The SDK sample code is as follows.

## Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class ListAppSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
 ListAppRequest request = new ListAppRequest();
 try {
 ListAppResponse response = client.listApp(request);
 System.out.println(response.toString());
 } catch (ConnectionException e) {
 e.printStackTrace();
 } catch (RequestTimeoutException e) {
 e.printStackTrace();
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrMsg());
 }
 }
}
```

## Python

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 # variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
```



```
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

try:
 request = ListAppRequest()
 response = client.list_app(request)
 print(response)
except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 // variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

 request := &model.ListAppRequest{}
 response, err := client.ListApp(request)
 if err == nil {
 fmt.Printf("%+v\n", response)
 } else {
 fmt.Println(err)
 }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description           |
|-------------|-----------------------|
| 200         | Normal response       |
| 400         | Invalid Parameters    |
| 404         | Application not found |
| 500         | Internal Server Error |

## Error Codes

See [Error Codes](#).

## 5.2.3 Deleting an App

### Function

This API is used to delete an app.

### Calling Method

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

### URI

DELETE /v2/{project\_id}/apps/{app\_name}

**Table 5-68** Path Parameters

| Parameter  | Mandatory | Type   | Description                   |
|------------|-----------|--------|-------------------------------|
| project_id | Yes       | String | Project ID                    |
| app_name   | Yes       | String | Name of the app to be deleted |

## Request Parameters

**Table 5-69** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                            |
|--------------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token<br><br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

## Response Parameters

**Status code: 204**

Normal response

None

## Example Requests

Deleting an App

```
DELETE https://{Endpoint}/v2/{project_id}/apps/{app_name}
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class DeleteAppSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 }
}
```

```
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
DeleteAppRequest request = new DeleteAppRequest();
request.withAppName("{app_name}");
try {
 DeleteAppResponse response = client.deleteApp(request);
 System.out.println(response.toString());
} catch (ConnectionException e) {
 e.printStackTrace();
} catch (RequestTimeoutException e) {
 e.printStackTrace();
} catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
}
}
```

## Python

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 # variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak = os.environ["CLOUD_SDK_AK"]
 sk = os.environ["CLOUD_SDK_SK"]
 projectId = "{project_id}"

 credentials = BasicCredentials(ak, sk, projectId)

 client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

 try:
 request = DeleteAppRequest()
 request.app_name = "{app_name}"
 response = client.delete_app(request)
 print(response)
 except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 // variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

 request := &model.DeleteAppRequest{}
 request.AppName = "{app_name}"
 response, err := client.DeleteApp(request)
 if err == nil {
 fmt.Printf("%+v\n", response)
 } else {
 fmt.Println(err)
 }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 204         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.2.4 Querying App Details

### Function

This API is used to query app details.

### Calling Method

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

### URI

GET /v2/{project\_id}/apps/{app\_name}

**Table 5-70** Path Parameters

| Parameter  | Mandatory | Type   | Description                   |
|------------|-----------|--------|-------------------------------|
| project_id | Yes       | String | Project ID                    |
| app_name   | Yes       | String | Name of the app to be queried |

### Request Parameters

**Table 5-71** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                        |
|--------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

### Response Parameters

Status code: 200

**Table 5-72** Response body parameters

| Parameter | Type   | Description                  |
|-----------|--------|------------------------------|
| app_name  | String | Name of the app              |
| app_id    | String | Unique identifier of the app |

| Parameter                      | Type             | Description                                   |
|--------------------------------|------------------|-----------------------------------------------|
| create_time                    | Long             | Time when the app is created, in milliseconds |
| commit_checkpoint_stream_names | Array of strings | List of associated streams                    |

## Example Requests

### Querying App Details

```
GET https://{Endpoint}/v2/{project_id}/apps/{app_name}
```

## Example Responses

### Status code: 200

#### Normal response

```
{
 "app_id" : "bd6IPpvgilflQPMpi9M",
 "app_name" : "newstream",
 "create_time" : 1593569685875,
 "commit_checkpoint_stream_names" : ["newstream"]
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class ShowAppSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);
```

```
DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
ShowAppRequest request = new ShowAppRequest();
request.withAppName("{app_name}");
try {
 ShowAppResponse response = client.showApp(request);
 System.out.println(response.toString());
} catch (ConnectionException e) {
 e.printStackTrace();
} catch (RequestTimeoutException e) {
 e.printStackTrace();
} catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
}
}
```

## Python

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 # variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak = os.environ["CLOUD_SDK_AK"]
 sk = os.environ["CLOUD_SDK_SK"]
 projectId = "{project_id}"

 credentials = BasicCredentials(ak, sk, projectId)

 client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

 try:
 request = ShowAppRequest()
 request.app_name = "{app_name}"
 response = client.show_app(request)
 print(response)
 except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
```



```
dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 // variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

 request := &model.ShowAppRequest{}
 request.AppName = "{app_name}"
 response, err := client.ShowApp(request)
 if err == nil {
 fmt.Printf("%+v\n", response)
 } else {
 fmt.Println(err)
 }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.2.5 Querying App Consumption Status

### Function

This API is used to query the consumption status of an app.

## Calling Method

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

## URI

GET /v2/{project\_id}/apps/{app\_name}/streams/{stream\_name}

**Table 5-73** Path Parameters

| Parameter   | Mandatory | Type   | Description                      |
|-------------|-----------|--------|----------------------------------|
| project_id  | Yes       | String | Project ID                       |
| app_name    | Yes       | String | Name of the app to be queried    |
| stream_name | Yes       | String | Name of the stream to be queried |

**Table 5-74** Query Parameters

| Parameter          | Mandatory | Type    | Description                                                                                                                                  |
|--------------------|-----------|---------|----------------------------------------------------------------------------------------------------------------------------------------------|
| limit              | No        | Integer | Max. number of partitions to list in a single API call. The minimum value is 1 and the maximum value is 1,000. The default value is 100.     |
| start_partition_id | No        | String  | Name of the partition to start the partition list with. The returned partition list does not contain this partition.                         |
| checkpoint_type    | Yes       | String  | Type of the checkpoint. <ul style="list-style-type: none"><li>• <b>LAST_READ</b>: Only sequence numbers are recorded in databases.</li></ul> |

## Request Parameters

**Table 5-75** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

## Response Parameters

**Status code: 200****Table 5-76** Response body parameters

| Parameter                  | Type                                                      | Description                                                                                                                                          |
|----------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| has_more                   | Boolean                                                   | Whether there are more matching consumer applications. <ul style="list-style-type: none"><li>• <b>true</b>: yes</li><li>• <b>false</b>: no</li></ul> |
| stream_name                | String                                                    | Name of the stream to be queried                                                                                                                     |
| app_name                   | String                                                    | Name of the consumer application to be queried                                                                                                       |
| partition_consuming_states | Array of <a href="#">PartitionConsumingStates</a> objects | Consumption status of the current partition                                                                                                          |

**Table 5-77** PartitionConsumingStates

| Parameter    | Type   | Description                                                                                                                                                                                                                                                                                                  |
|--------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| partition_id | String | Partition identifier of the stream. Two partition ID formats are available: <b>shardId-0000000000-0</b> For example, if a stream has three partitions, the partition IDs are <b>0</b> , <b>1</b> , and <b>2</b> , or <b>shardId-0000000000</b> , <b>shardId-0000000001</b> , and <b>shardId-0000000002</b> . |

| Parameter       | Type   | Description                                                                                                                                                                 |
|-----------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| sequence_number | String | Sequence number to be submitted, which is used to record the consumption checkpoint of the stream. Ensure that the sequence number is within the valid range.               |
| latest_offset   | Long   | Latest index position                                                                                                                                                       |
| earliest_offset | Long   | Earliest index position                                                                                                                                                     |
| checkpoint_type | String | Type of the checkpoint. <ul style="list-style-type: none"><li>• <b>LAST_READ</b>: Only sequence numbers are recorded in databases.</li></ul>                                |
| status          | String | Current status of the partition <ul style="list-style-type: none"><li>• <b>CREATING</b></li><li>• <b>ACTIVE</b></li><li>• <b>DELETED</b></li><li>• <b>EXPIRED</b></li></ul> |

## Example Requests

Querying App Consumption Status

```
GET https://{Endpoint}/v2/{project_id}/apps/{app_name}/streams/{stream_name}
```

## Example Responses

**Status code: 200**

Normal response

```
{
 "has_more" : false,
 "stream_name" : "disMonitorTest",
 "app_name" : "4aSiZ",
 "partition_consuming_states" : [{
 "partition_id" : 0,
 "sequence_number" : -1,
 "latest_offset" : 1658297359,
 "earliest_offset" : 1653120573,
 "checkpoint_type" : "LAST_READ",
 "status" : "ACTIVE"
 }]
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;
```

```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class ShowConsumerStateSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR_REGION>"))
 .build();

 ShowConsumerStateRequest request = new ShowConsumerStateRequest();
 request.withAppName("{app_name}");
 request.withStreamName("{stream_name}");
 try {
 ShowConsumerStateResponse response = client.showConsumerState(request);
 System.out.println(response.toString());
 } catch (ConnectionException e) {
 e.printStackTrace();
 } catch (RequestTimeoutException e) {
 e.printStackTrace();
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
 }
 }
}
```

## Python

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 # variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak = os.environ["CLOUD_SDK_AK"]
 sk = os.environ["CLOUD_SDK_SK"]
```

```
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

try:
 request = ShowConsumerStateRequest()
 request.app_name = "{app_name}"
 request.stream_name = "{stream_name}"
 response = client.show_consumer_state(request)
 print(response)
except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 // variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

 request := &model.ShowConsumerStateRequest{}
 request.AppName = "{app_name}"
 request.StreamName = "{stream_name}"
 response, err := client.ShowConsumerState(request)
 if err == nil {
 fmt.Printf("%+v\n", response)
 } else {
 fmt.Println(err)
 }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

# 5.3 Checkpoint Management

## 5.3.1 Submitting Checkpoints

### Function

This API is used to submit checkpoints.

### Calling Method

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

### URI

POST /v2/{project\_id}/checkpoints

**Table 5-78** Path Parameters

| Parameter  | Mandatory | Type   | Description |
|------------|-----------|--------|-------------|
| project_id | Yes       | String | Project ID  |

## Request Parameters

**Table 5-79** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                            |
|--------------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token<br><br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

**Table 5-80** Request body parameters

| Parameter       | Mandatory | Type   | Description                                                                                                                                                                                                                                                                   |
|-----------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| app_name        | Yes       | String | Name of the app, which is the unique identifier of a user data consumption program.                                                                                                                                                                                           |
| checkpoint_type | Yes       | String | Type of the checkpoint. <ul style="list-style-type: none"><li>• <b>LAST_READ</b>: Only sequence numbers are recorded in databases.</li></ul>                                                                                                                                  |
| stream_name     | Yes       | String | Name of the stream                                                                                                                                                                                                                                                            |
| partition_id    | Yes       | String | Partition identifier of the stream. Two partition ID formats are available:-<br>shardId-0000000000- 0<br>For example, if a stream has three partitions, the partition IDs are <b>0, 1, and 2</b> , or <b>shardId-0000000000, shardId-0000000001, and shardId-0000000002</b> . |
| sequence_number | Yes       | String | Sequence number to be submitted, which is used to record the consumption checkpoint of the stream. Ensure that the sequence number is within the valid range.                                                                                                                 |
| metadata        | No        | String | Metadata information of the consumer application.<br><br>The metadata information can contain a maximum of 1,000 characters.                                                                                                                                                  |



## Response Parameters

**Status code: 201**

Normal response

None

## Example Requests

Submitting Checkpoints

```
POST https://{Endpoint}/v2/{project_id}/checkpoints
{
 "stream_name" : "newstream",
 "app_name" : "newapp",
 "partition_id" : "0",
 "sequence_number" : "2",
 "checkpoint_type" : "LAST_READ"
}
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

### Java

Submitting Checkpoints

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class CommitCheckpointSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
```

```
.withSk(sk);

DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
CommitCheckpointRequest request = new CommitCheckpointRequest();
CommitCheckpointReq body = new CommitCheckpointReq();
body.withSequenceNumber("2");
body.withPartitionId("0");
body.withStreamName("newstream");
body.withCheckpointType(CommitCheckpointReq.CheckpointTypeEnum.fromValue("LAST_READ"));
body.withAppName("newapp");
request.withBody(body);
try {
 CommitCheckpointResponse response = client.commitCheckpoint(request);
 System.out.println(response.toString());
} catch (ConnectionException e) {
 e.printStackTrace();
} catch (RequestTimeoutException e) {
 e.printStackTrace();
} catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
}
}
```

## Python

### Submitting Checkpoints

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 # variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak = os.environ["CLOUD_SDK_AK"]
 sk = os.environ["CLOUD_SDK_SK"]
 projectId = "{project_id}"

 credentials = BasicCredentials(ak, sk, projectId)

 client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

 try:
 request = CommitCheckpointRequest()
 request.body = CommitCheckpointReq(
 sequence_number="2",
 partition_id="0",
 stream_name="newstream",
 checkpoint_type="LAST_READ",
 app_name="newapp"
)
```

```
response = client.commit_checkpoint(request)
print(response)
except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

### Submitting Checkpoints

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 // variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

 request := &model.CommitCheckpointRequest{}
 request.Body = &model.CommitCheckpointReq{
 SequenceNumber: "2",
 PartitionId: "0",
 StreamName: "newstream",
 CheckpointType: model.GetCommitCheckpointReqCheckpointTypeEnum().LAST_READ,
 AppName: "newapp",
 }
 response, err := client.CommitCheckpoint(request)
 if err == nil {
 fmt.Printf("%v\n", response)
 } else {
 fmt.Println(err)
 }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 201         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.3.2 Querying Checkpoint Details

### Function

This API is used to query checkpoint details.

### Calling Method

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

### URI

GET /v2/{project\_id}/checkpoints

**Table 5-81** Path Parameters

| Parameter  | Mandatory | Type   | Description |
|------------|-----------|--------|-------------|
| project_id | Yes       | String | Project ID  |

**Table 5-82** Query Parameters

| Parameter   | Mandatory | Type   | Description                                        |
|-------------|-----------|--------|----------------------------------------------------|
| stream_name | Yes       | String | Name of the stream to which the checkpoint belongs |

| Parameter       | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                               |
|-----------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| partition_id    | Yes       | String | Identifier of the stream partition to which the checkpoint belongs. Two partition ID formats are available:-<br>shardId-0000000000- 0For example, if a stream has three partitions, the partition IDs are <b>0</b> , <b>1</b> , and <b>2</b> , or <b>shardId-0000000000</b> , <b>shardId-0000000001</b> , and <b>shardId-0000000002</b> . |
| app_name        | Yes       | String | Name of the app associated with the checkpoint                                                                                                                                                                                                                                                                                            |
| checkpoint_type | Yes       | String | Type of the checkpoint. <ul style="list-style-type: none"><li>• <b>LAST_READ</b>: Only sequence numbers are recorded in databases.</li></ul>                                                                                                                                                                                              |

## Request Parameters

**Table 5-83** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

## Response Parameters

**Status code: 200**

**Table 5-84** Response body parameters

| Parameter       | Type   | Description                                                             |
|-----------------|--------|-------------------------------------------------------------------------|
| sequence_number | String | Sequence number used to record the consumption checkpoint of the stream |
| metadata        | String | Metadata information of the consumer application                        |

## Example Requests

### Querying Checkpoint Details

```
GET https://{Endpoint}/v2/{project_id}/checkpoints
```

## Example Responses

### Status code: 200

Normal response

```
{
 "sequence_number" : "newstram",
 "metadata" : ""
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class ShowCheckpointSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
 ShowCheckpointRequest request = new ShowCheckpointRequest();
 try {
 ShowCheckpointResponse response = client.showCheckpoint(request);
 System.out.println(response.toString());
 } catch (ConnectionException e) {
 e.printStackTrace();
 } catch (RequestTimeoutException e) {
 e.printStackTrace();
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 }
 }
}
```

```
 System.out.println(e.getStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
 }
}
}
```

## Python

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 # variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak = os.environ["CLOUD_SDK_AK"]
 sk = os.environ["CLOUD_SDK_SK"]
 projectId = "{project_id}"

 credentials = BasicCredentials(ak, sk, projectId)

 client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

 try:
 request = ShowCheckpointRequest()
 response = client.show_checkpoint(request)
 print(response)
 except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 // variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
```

```
WithSk(sk).
WithProjectId(projectId).
Build()

client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

request := &model.ShowCheckpointRequest{}
response, err := client.ShowCheckpoint(request)
if err == nil {
 fmt.Printf("%+v\n", response)
} else {
 fmt.Println(err)
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.3.3 Deleting a Checkpoint

### Function

This API is used to delete a checkpoint.

### Calling Method

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

### URI

DELETE /v2/{project\_id}/checkpoints

**Table 5-85** Path Parameters

| Parameter  | Mandatory | Type   | Description |
|------------|-----------|--------|-------------|
| project_id | Yes       | String | Project ID  |



**Table 5-86** Query Parameters

| Parameter       | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                  |
|-----------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| stream_name     | Yes       | String | Name of the stream to which the checkpoint belongs                                                                                                                                                                                                                                                                                           |
| app_name        | Yes       | String | Name of the application associated with the checkpoint.                                                                                                                                                                                                                                                                                      |
| checkpoint_type | Yes       | String | Type of the checkpoint. <ul style="list-style-type: none"><li>• <b>LAST_READ</b>: Only sequence numbers are recorded in databases.</li></ul>                                                                                                                                                                                                 |
| partition_id    | No        | String | Identifier of the stream partition to which the checkpoint belongs. Two partition ID formats are available:-<br>shardId-0000000000-0 For example, if a stream has three partitions, the partition IDs are <b>0</b> , <b>1</b> , and <b>2</b> , or<br><b>shardId-0000000000</b> , <b>shardId-0000000001</b> , and <b>shardId-0000000002</b> . |

## Request Parameters

**Table 5-87** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

## Response Parameters

**Status code: 204**

Normal response

None

## Example Requests

Deleting a Checkpoint

```
DELETE https://{Endpoint}/v2/{project_id}/checkpoints
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class DeleteCheckpointSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
 DeleteCheckpointRequest request = new DeleteCheckpointRequest();
 try {
 DeleteCheckpointResponse response = client.deleteCheckpoint(request);
 System.out.println(response.toString());
 } catch (ConnectionException e) {
 e.printStackTrace();
 } catch (RequestTimeoutException e) {
 e.printStackTrace();
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
 }
 }
}
```

## Python

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 # variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak = os.environ["CLOUD_SDK_AK"]
 sk = os.environ["CLOUD_SDK_SK"]
 projectId = "{project_id}"

 credentials = BasicCredentials(ak, sk, projectId)

 client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

 try:
 request = DeleteCheckpointRequest()
 response = client.delete_checkpoint(request)
 print(response)
 except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 // variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
```

```
Build()

request := &model.DeleteCheckpointRequest{}
response, err := client.DeleteCheckpoint(request)
if err == nil {
 fmt.Printf("%v\n", response)
} else {
 fmt.Println(err)
}
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 204         | Normal response |

## Error Codes

See [Error Codes](#).

# 5.4 Data Management

## 5.4.1 Uploading Data

### Function

This API is used to upload data to DIS streams.

### Calling Method

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

### URI

POST /v2/{project\_id}/records

**Table 5-88** Path Parameters

| Parameter  | Mandatory | Type   | Description |
|------------|-----------|--------|-------------|
| project_id | Yes       | String | Project ID  |

## Request Parameters

**Table 5-89** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

**Table 5-90** Request body parameters

| Parameter   | Mandatory | Type                                           | Description                                                                                                                                                                                                                                       |
|-------------|-----------|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| stream_name | Yes       | String                                         | Name of the stream                                                                                                                                                                                                                                |
| stream_id   | No        | String                                         | Unique ID of the stream.<br>If no stream is found based on stream_name and stream_id is not empty, stream_id is used to search for the stream.<br>Note:<br>This parameter is mandatory when you upload data to a stream that has been authorized. |
| records     | Yes       | Array of <b>PutRecordsRequestEntry</b> objects | List of records to be uploaded                                                                                                                                                                                                                    |

**Table 5-91** PutRecordsRequestEntry

| Parameter         | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                           |
|-------------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| data              | Yes       | String | Data to be uploaded.<br>The uploaded data is the serialized binary data (character string encoded using Base64).<br>For example, if the character string data needs to be uploaded, the character string after Base64 encoding is <b>ZGF0YQ==</b> .                                                   |
| explicit_hash_key | No        | String | Hash value of the data to be written to the partition. The hash value overwrites the hash value of <b>partition_key</b> .<br>Value range: 0 to long.max                                                                                                                                               |
| partition_id      | No        | String | Partition identifier of the stream.Two partition ID formats are available:- shardId-0000000000- 0For example, if a stream has three partitions, the partition IDs are <b>0</b> , <b>1</b> , and <b>2</b> , or <b>shardId-0000000000</b> , <b>shardId-0000000001</b> , and <b>shardId-0000000002</b> . |
| partition_key     | No        | String | Partition to which data is written to.Note:If <b>partition_id</b> is transferred, it is preferentially used. If it is not transferred, <b>partition_key</b> is used.                                                                                                                                  |

## Response Parameters

**Status code: 200**

**Table 5-92** Response body parameters

| Parameter           | Type    | Description                                                                                                                           |
|---------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------|
| failed_record_count | Integer | Number of data records that fail to be uploaded. If some data records fail to be uploaded, the value of this field is greater than 0. |

| Parameter | Type                                          | Description                                                                                                                        |
|-----------|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| records   | Array of <b>PutRecordsResultEntry</b> objects | List of uploaded data records. Note: The caller must parse this field to check whether all data records are successfully uploaded. |

### Table 5-93 PutRecordsResultEntry

| Parameter       | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| partition_id    | String | ID of the DIS stream partition where the uploaded data is stored. This field is unavailable if the upload fails.                                                                                                                                                                                                                                                                                                                                                             |
| sequence_number | String | Sequence number of a data record uploaded to the DIS stream. The sequence number is the unique identifier of the record. DIS automatically allocates a sequence number when the data producer calls the PutRecords operation to add data to the DIS stream. The sequence number of the same partition key usually changes with time. A longer interval between PutRecords requests results in a larger sequence number. Note: This field is unavailable if the upload fails. |
| error_code      | String | Error code. Note: This field is unavailable if data is successfully uploaded. Otherwise, there is a value for this field.                                                                                                                                                                                                                                                                                                                                                    |
| error_message   | String | Error message. Note: This field is unavailable if data is successfully uploaded. Otherwise, there is a value for this field.                                                                                                                                                                                                                                                                                                                                                 |

## Example Requests

## Uploading Data

```
POST https://{Endpoint}/v2/{project_id}/records
{
 "stream_name": "newstream",
 "records": [{
 "data": "MTExMTExMTExMTExMTExMTExMTExMTExMTExMTE="
 }]
}
```

## Example Responses

### Status code: 200

Note: If the response status code is 200, all data may be successfully uploaded, or some data may fail to be uploaded. To determine whether all data is successfully uploaded, parse the response body.

In the example, some data fails to be uploaded.

```
{
 "failed_record_count" : 1,
 "records" : [{
 "partition_id" : "shardId-0000000000",
 "sequence_number" : 17
 }, {
 "error_code" : "DIS.xxxx",
 "error_message" : "Exceeded traffic control limit"
 }]
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Uploading Data

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class SendRecordsSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
 SendRecordsRequest request = new SendRecordsRequest();
 PutRecordsRequest body = new PutRecordsRequest();
```



```
List<PutRecordsRequestEntry> listbodyRecords = new ArrayList<>();
listbodyRecords.add(
 new PutRecordsRequestEntry()
 .withData("MTExMTExMTExMTExMTExMTExMTExMTExMTExMTE=")
);
body.withRecords(listbodyRecords);
body.withStreamName("newstream");
request.withBody(body);
try {
 SendRecordsResponse response = client.sendRecords(request);
 System.out.println(response.toString());
} catch (ConnectionException e) {
 e.printStackTrace();
} catch (RequestTimeoutException e) {
 e.printStackTrace();
} catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
}
}
```

## Python

### Uploading Data

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 # variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak = os.environ["CLOUD_SDK_AK"]
 sk = os.environ["CLOUD_SDK_SK"]
 projectId = "{project_id}"

 credentials = BasicCredentials(ak, sk, projectId)

 client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

 try:
 request = SendRecordsRequest()
 listRecordsbody = [
 PutRecordsRequestEntry(
 data="MTExMTExMTExMTExMTExMTExMTExMTExMTExMTE="
)
]
 request.body = PutRecordsRequest(
 records=listRecordsbody,
 stream_name="newstream"
)
 response = client.send_records(request)
 print(response)
 except exceptions.ClientRequestException as e:
 print(e.status_code)
```

```
print(e.request_id)
print(e.error_code)
print(e.error_msg)
```

**Go**

## Uploading Data

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

 request := &model.SendRecordsRequest{}
 var listRecordsbody = []model.PutRecordsRequestEntry{
 {
 Data: "MTExMTExMTExMTExMTExMTExMTExMTExMTExMTExMTE=",
 },
 }
 request.Body = &model.PutRecordsRequest{
 Records: listRecordsbody,
 StreamName: "newstream",
 }
 response, err := client.SendRecords(request)
 if err == nil {
 fmt.Printf("%+v\n", response)
 } else {
 fmt.Println(err)
 }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description                                                                                                                                                                                                                                                    |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 200         | Note: If the response status code is 200, all data may be successfully uploaded, or some data may fail to be uploaded. To determine whether all data is successfully uploaded, parse the response body.<br><br>In the example, some data fails to be uploaded. |

## Error Codes

See [Error Codes](#).

## 5.4.2 Downloading Data

### Function

This API is used to download data from DIS streams.

### Calling Method

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

### URI

GET /v2/{project\_id}/records

**Table 5-94** Path Parameters

| Parameter  | Mandatory | Type   | Description |
|------------|-----------|--------|-------------|
| project_id | Yes       | String | Project ID  |

**Table 5-95** Query Parameters

| Parameter        | Mandatory | Type   | Description                                                                                                                                                                  |
|------------------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| partition-cursor | Yes       | String | Data cursor, which needs to be obtained through the API for obtaining data cursors.<br>Value: 1 to 512 characters.<br>Note:<br>The validity period of a cursor is 5 minutes. |

| Parameter       | Mandatory | Type    | Description                                                                                                                                                                           |
|-----------------|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| max_fetch_bytes | No        | Integer | Maximum number of bytes that can be obtained for each request.<br><br>Note:<br>If the value is less than the size of a single record in the partition, the record cannot be obtained. |

## Request Parameters

Table 5-96 Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                             |
|--------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br><br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

## Response Parameters

Status code: 200

Table 5-97 Response body parameters

| Parameter             | Type                                    | Description                                                                  |
|-----------------------|-----------------------------------------|------------------------------------------------------------------------------|
| records               | Array of <a href="#">Record</a> objects | List of downloaded records                                                   |
| next_partition_cursor | String                                  | Next iterator.<br><br>Note:<br>The validity period of a cursor is 5 minutes. |

**Table 5-98** Record

| Parameter       | Type   | Description                                                                                                                                                                                                                                                                                                    |
|-----------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| partition_key   | String | Partition key set when data is being uploaded. Note: If <b>partition_key</b> is transferred when data is uploaded, <b>partition_key</b> is returned when data is downloaded. If <b>partition_id</b> instead of <b>partition_key</b> is transferred when data is uploaded, no <b>partition_key</b> is returned. |
| sequence_number | String | Sequence number of the data record                                                                                                                                                                                                                                                                             |
| data            | String | Downloaded data<br>The downloaded data is the serialized binary data (Base64-encoded character string).<br>For example, the data returned by the data download API is "ZGF0YQ==", which is "data" after Base64 decoding.                                                                                       |
| timestamp       | Long   | Timestamp when the record is written to DIS                                                                                                                                                                                                                                                                    |
| timestamp_type  | String | Timestamp type <ul style="list-style-type: none"><li>• <b>CreateTime</b>: creation time.</li></ul>                                                                                                                                                                                                             |

## Example Requests

### Downloading Data

```
GET https://{Endpoint}/v2/{project_id}/records
```

## Example Responses

### Status code: 200

#### Normal response

```
{
 "records": [{
 "partition_key": "0",
 "sequence_number": "485",
 "data": "MTExMTExMTExMTExMTExMTExMTExMTExMTExMTEx",
 "timestamp": 1527577402541,
 "timestamp_type": "CreateTime"
 }],
 "next_partition_cursor":
 "eyJpdGVyR2VuVGltZSI6MTQ5MDk1MDE1Nzc0NywiU3RyZWVtTmFtZSI6IjY2MCIsIlNoYXJkSWQzOiIiwliwiU2hhcmRldGVyYXRvclR5cGUzOiIjBVF9TRVFRVU5DRV9OVU1CRVilLCJTdGFydGluZ1NlcXVlbmNlTnVtYmVyljoiMjliLCJ1aW1U3RhbXAiOiJ8B9"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class ConsumeRecordsSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
 ConsumeRecordsRequest request = new ConsumeRecordsRequest();
 try {
 ConsumeRecordsResponse response = client.consumeRecords(request);
 System.out.println(response.toString());
 } catch (ConnectionException e) {
 e.printStackTrace();
 } catch (RequestTimeoutException e) {
 e.printStackTrace();
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
 }
 }
}
```

### Python

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
```

```
The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

try:
 request = ConsumeRecordsRequest()
 response = client.consume_records(request)
 print(response)
except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

 request := &model.ConsumeRecordsRequest{}
 response, err := client.ConsumeRecords(request)
 if err == nil {
 fmt.Printf("%+v\n", response)
 } else {
 fmt.Println(err)
 }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.4.3 Obtaining Data Cursors

### Function

This API is used to obtain data cursors.

### Calling Method

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

### URI

GET /v2/{project\_id}/cursors

**Table 5-99** Path Parameters

| Parameter  | Mandatory | Type   | Description |
|------------|-----------|--------|-------------|
| project_id | Yes       | String | Project ID  |

**Table 5-100** Query Parameters

| Parameter   | Mandatory | Type   | Description        |
|-------------|-----------|--------|--------------------|
| stream-name | Yes       | String | Name of the stream |



| Parameter    | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| partition-id | Yes       | String | Partition identifier of the stream. Two partition ID formats are available:-<br>shardId-0000000000-0 For example, if a stream has three partitions, the partition IDs are <b>0</b> , <b>1</b> , and <b>2</b> , or <b>shardId-0000000000</b> , <b>shardId-0000000001</b> , and <b>shardId-0000000002</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| cursor-type  | No        | String | Cursor type.-<br><b>AT_SEQUENCE_NUMBER</b> : Data is read from the position denoted by a specific sequence number (that is defined by <b>starting-sequence-number</b> ). This type is the default cursor type.-<br><b>AFTER_SEQUENCE_NUMBER</b> : Data is read right after the position denoted by a specific sequence number (that is defined by <b>starting-sequence-number</b> ).-<br><b>TRIM_HORIZON</b> : Data is read from the earliest valid record stored in the partition. For example, a tenant used a DIS stream to upload three pieces of data A1, A2, and A3. Assuming that A1 expires but A2 and A3 are still valid after a period of time, if the tenant specifies <b>TRIM_HORIZON</b> for downloading data, only A2 and A3 can be downloaded.-<br><b>LATEST</b> : Data is read just after the most recent record in the partition. This setting ensures that you always read the most recent data in the partition.-<br><b>AT_TIMESTAMP</b> : Data is read from the position denoted by a specific timestamp. |

| Parameter                | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| starting-sequence-number | No        | String | Sequence number. A sequence number is the unique identifier of each record. DIS automatically allocates a sequence number when the data producer calls the PutRecords operation to add data to the DIS stream. The sequence number of the same partition key usually changes with time. A longer interval between PutRecords requests results in a larger sequence number. The sequence number is closely related to cursor types <b>AT_SEQUENCE_NUMBER</b> and <b>AFTER_SEQUENCE_NUMBER</b> . The two parameters determine the location of the data to be accessed. Value range: 0 to 9223372036854775807 |
| timestamp                | No        | Long   | Timestamp when the data record starts to be read, which is closely related to cursor type <b>AT_TIMESTAMP</b> . The two parameters determine the position of the data to be read.<br><br>Note:<br>This timestamp is accurate to milliseconds.                                                                                                                                                                                                                                                                                                                                                              |

## Request Parameters

**Table 5-101** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

## Response Parameters

**Status code: 200**

### Table 5-102 Response body parameters

| Parameter        | Type   | Description                                                                                          |
|------------------|--------|------------------------------------------------------------------------------------------------------|
| partition_cursor | String | Data cursor<br>Value: 1 to 512 characters.<br>Note:<br>The validity period of a cursor is 5 minutes. |

## Example Requests

## Obtaining Data Cursors

GET https://{Endpoint}/v2/{project\_id}/cursors

## Example Responses

**Status code: 200**

Normal response

```
{
 "partition_cursor" :
 "eyJnZXRJdGVyYXRvcmlBhcmFtclp7InN0cmVhbS1uYW1lloianpjliwicGFydGl0aW9uLWlkljoiMCIslmN1cnNvci10eXBlljoiQVRfU0VRVUVOQ0VftIVNQkVSIiwic3RhcnRpbmctc2VxdWVuY2UtbnVtYmVyljoiMTAifSwiZiZ2VzZXJhdGVUaW1lc3RhbmXAiOjE1MDYxNTk1NjM0MDV9"
```

## SDK Sample Code

The SDK sample code is as follows.

# Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class ShowCursorSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
```

this example, set environment variables CLOUD\_SDK\_AK and CLOUD\_SDK\_SK in the local environment

```
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
ShowCursorRequest request = new ShowCursorRequest();
try {
 ShowCursorResponse response = client.showCursor(request);
 System.out.println(response.toString());
} catch (ConnectionException e) {
 e.printStackTrace();
} catch (RequestTimeoutException e) {
 e.printStackTrace();
} catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
}
}
```

## Python

# coding: utf-8

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 # variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak = os.getenv("CLOUD_SDK_AK")
 sk = os.getenv("CLOUD_SDK_SK")
 projectId = "{project_id}"

 credentials = BasicCredentials(ak, sk, projectId)

 client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

 try:
 request = ShowCursorRequest()
 response = client.show_cursor(request)
 print(response)
 except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 // variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

 request := &model.ShowCursorRequest{}
 response, err := client.ShowCursor(request)
 if err == nil {
 fmt.Printf("%+v\n", response)
 } else {
 fmt.Println(err)
 }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

# 5.5 Dump Task Management

## 5.5.1 Adding OBS Dump Tasks

### Function

This API is used to add OBS dump tasks.

### Calling Method

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

### URI

POST /v2/{project\_id}/streams/{stream\_name}/transfer-tasks

**Table 5-103** Path Parameters

| Parameter   | Mandatory | Type   | Description        |
|-------------|-----------|--------|--------------------|
| project_id  | Yes       | String | Project ID         |
| stream_name | Yes       | String | Name of the stream |

### Request Parameters

**Table 5-104** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

**Table 5-105** Request body parameters

| Parameter                  | Mandatory | Type                                                   | Description                                                                                                                                                    |
|----------------------------|-----------|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| destination_type           | No        | String                                                 | Type of the dumping task. <ul style="list-style-type: none"><li>OBS: Dump data to OBS.</li><li>If this parameter is not set, OBS is used by default.</li></ul> |
| obs_destination_descriptor | No        | <a href="#">OBSDestinationDescriptorRequest</a> object | Parameter list of OBS to which data in the DIS stream will be dumped                                                                                           |

**Table 5-106** OBSDestinationDescriptorRequest

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| task_name   | Yes       | String | <b>Definition</b><br>Name of the dump task<br><b>Constraints</b><br>N/A<br><b>Range</b><br>It can contain 1 to 64 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.<br><b>Default Value</b><br>N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| agency_name | No        | String | <b>Definition</b><br>Name of the agency created in IAM. DIS uses an agency to access your specified resources. If agencies are available, you can use an IAM API to obtain the available agencies. If dump tasks are used on the console or through API calls, the system displays a message indicating that an agency named <b>dis_admin_agency</b> will be automatically created.<br><b>Constraints</b><br>Agency parameter settings: <ul style="list-style-type: none"><li>• <b>Agency Type: Cloud service</b></li><li>• <b>Cloud Service: DIS</b></li><li>• <b>Validity Period: Unlimited</b></li><li>• Set <b>Policy to Tenant Administrator</b> on the OBS project in the <b>Global service</b> region.</li></ul> <b>Range</b><br>Name of the agency to be created. The value of this parameter is 1 to 64 characters long and cannot be left unspecified.<br><b>Default Value</b><br>N/A |

| Parameter             | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                 |
|-----------------------|-----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| deliver_time_interval | Yes       | Integer | <b>Definition</b><br>User-defined interval (s) at which data is imported into OBS. If no data is pushed during the current interval, no dump file package will be generated.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value is an integer ranging from 30 to 900.<br><b>Default Value</b><br>N/A |
| deliver_size_interval | No        | Integer | <b>Definition</b><br>Dump file size (MB). A dump is triggered when the size of the local cache reaches the threshold.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value is an integer ranging from 1 to 300.<br><b>Default Value</b><br>N/A                                                         |



| Parameter         | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| consumer_strategy | No        | String | <b>Definition</b><br>Offset<br><b>Constraints</b><br>When modifying a dump task, ensure that the offset is the same as that set when the dump task was created. For example, if the maximum offset was set during dump task creation, the maximum offset must be used during dump task modification.<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>LATEST</b>: maximum offset, indicating that the latest data will be extracted.</li><li>• <b>TRIM_HORIZON</b>: minimum offset, indicating that the earliest data will be extracted.</li></ul> <b>Default Value</b><br>N/A |
| file_prefix       | No        | String | <b>Definition</b><br>Custom OBS directory for storing stream files. It is empty by default.<br><b>Constraints</b><br>Different directory levels are separated by forward slashes (/).<br><b>Range</b><br>The value can contain a maximum of 50 characters, including letters, digits, underscores (_), and slashes (/).<br><b>Default Value</b><br>Empty                                                                                                                                                                                                                                 |

| Parameter            | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| partition_for<br>mat | No        | String | <p><b>Definition</b></p> <p>Directory structure of the object file written into OBS. The directory structure is in the format of yyyy/MM/dd/HH/mm (time at which the dumping task was created). After the data is dumped successfully, the storage directory structure is <b>obs_bucket_path/file_prefix/partition_format</b>. For example, if the dump task was created at 14:49 on November 10, 2017, then the directory structure is <b>2017 &gt; 11 &gt; 10 &gt; 14 &gt; 49</b>.</p> <p><b>Constraints</b></p> <p>N/A</p> <p><b>Range</b></p> <ul style="list-style-type: none"><li>• N/A: If this field is left unspecified, the time directory format will not be used.</li><li>• <b>yyyy</b>: year.</li><li>• <b>yyyy/MM</b>: year and month</li><li>• <b>yyyy/MM/dd</b>: year, month, and day</li><li>• <b>yyyy/MM/dd/HH</b>: year, month, day, and hour</li><li>• <b>yyyy/MM/dd/HH/mm</b>: year, month, day, hour, and minute.</li></ul> <p><b>Default Value</b></p> <p>N/A</p> |

| Parameter             | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| obs_bucket_path       | Yes       | String | <b>Definition</b><br>Name of the OBS bucket used to store the stream data.<br><b>Constraints</b><br>It consists of lowercase letters, digits, hyphens (-), underscores (_), and periods (.).<br><b>Range</b> The value contains 3 to 63 characters, including lowercase letters, digits, hyphens (-), underscores (_), and periods (.).<br><b>Default Value</b><br>N/A                                                   |
| destination_file_type | No        | String | <b>Definition</b><br>Dump file format<br><b>Constraints</b><br>The <b>csv</b> and <b>parquet</b> formats can be selected only when <b>Source Data Type</b> is set to <b>JSON</b> and <b>Dump Destination</b> is set to <b>OBS</b> .<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>text</b>: This is the default value.</li><li>• <b>csv</b></li><li>• <b>parquet</b></li></ul> <b>Default Value</b><br>Text |

| Parameter         | Mandatory | Type                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------|-----------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| processing_schema | No        | ProcessingSchema object | <b>Definition</b><br>Dump time directory generated based on the timestamp of the source data and the configured <b>partition_format</b> . Directory structure of the object file written into OBS. The directory structure is in the format of yyyy/MM/dd/HH/mm.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                                                                                                                       |
| record_delimiter  | No        | String                  | <b>Definition</b><br>Delimiter for the dump file, which is used to separate the user data that is written into the dump file.<br><b>Constraints</b><br>It consists of lowercase letters, digits, hyphens (-), underscores (_), and periods (.).<br><b>Range</b> <ul style="list-style-type: none"><li>• ,: comma, which is the default value</li><li>• ;: semicolon</li><li>•  : vertical bar</li><li>• \n: newline character</li><li>• NULL: null</li></ul> <b>Default Value</b><br>"\n" |

Table 5-107 ProcessingSchema

| Parameter        | Mandatory | Type   | Description                                                                                                                                                                                                                                                                 |
|------------------|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| timestamp_name   | Yes       | String | <b>Definition</b><br>Attribute name of the source data timestamp<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                                                                                                         |
| timestamp_type   | Yes       | String | <b>Definition</b><br>Type of the source data timestamp.<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>String</b>: string type</li><li>• <b>Timestamp</b>: 13-bit timestamp of the long type</li></ul> <b>Default Value</b><br>N/A |
| timestamp_format | No        | String | <b>Definition</b><br>OBS directory generated based on the timestamp format. This parameter is mandatory when the timestamp type of the source data is <b>String</b> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                    |

Response Parameters

Status code: 201

Normal response

None

## Example Requests

- Adding OBS Dump Tasks

POST https://{Endpoint}/v2/{project\_id}/streams/{stream\_name}/transfer-tasks

```
{
 "destination_type": "OBS",
 "obs_destination_descriptor": {
 "task_name": "newtask",
 "consumer_strategy": "LATEST",
 "agency_name": "dis_admin_agency",
 "destination_file_type": "text",
 "obs_bucket_path": "obsbucket",
 "file_prefix": "",
 "partition_format": "yyyy/MM/dd/HH/mm",
 "record_delimiter": "|",
 "deliver_time_interval": 30
 }
}
```

- Adding OBS Dump Tasks (The dump file format is Parquet.)

POST https://{Endpoint}/v2/{project\_id}/streams/{stream\_name}/transfer-tasks

```
{
 "destination_type": "OBS",
 "obs_destination_descriptor": {
 "task_name": "newtask",
 "consumer_strategy": "LATEST",
 "agency_name": "dis_admin_agency",
 "destination_file_type": "parquet",
 "obs_bucket_path": "obsbucket",
 "file_prefix": "",
 "partition_format": "yyyy/MM/dd/HH/mm",
 "record_delimiter": "|",
 "deliver_time_interval": 30
 }
}
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

### Java

- Adding OBS Dump Tasks

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class CreateObsTransferTaskSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
```

security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.

// In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD\_SDK\_AK and CLOUD\_SDK\_SK in the local environment

```
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
CreateObsTransferTaskRequest request = new CreateObsTransferTaskRequest();
request.withStreamName("{stream_name}");
CreateTransferTaskReq body = new CreateTransferTaskReq();
OBSDestinationDescriptorRequest obsDestinationDescriptorbody = new
OBSDestinationDescriptorRequest();
obsDestinationDescriptorbody.withTaskName("newtask")
 .withObsBucketPath("obsbucket")
 .withAgencyName("dis_admin_agency")
 .withDestinationFileType(OBSDestinationDescriptorRequest.DestinationFileTypeEnum.fromValue("text"));
obsDestinationDescriptorbody.withRecordDelimiter("|")
 .withDeliverTimeInterval(30)
 .withFilePrefix("")
 .withPartitionFormat(OBSDestinationDescriptorRequest.PartitionFormatEnum.fromValue("yyyy/MM/dd/HH/mm"));
body.withConsumerStrategy(OBSDestinationDescriptorRequest.ConsumerStrategyEnum.fromValue("LATEST"));
body.withObsDestinationDescriptor(obsDestinationDescriptorbody);
body.withDestinationType(CreateTransferTaskReq.DestinationTypeEnum.fromValue("OBS"));
request.withBody(body);
try {
 CreateObsTransferTaskResponse response = client.createObsTransferTask(request);
 System.out.println(response.toString());
} catch (ConnectionException e) {
 e.printStackTrace();
} catch (RequestTimeoutException e) {
 e.printStackTrace();
} catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
}
}
```

- Adding OBS Dump Tasks (The dump file format is Parquet.)

```
package com.huaweicloud.sdk.test;
```

```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;
```

```
public class CreateObsTransferTaskSolution {
```

```
public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before
 // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
 // environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
 CreateObsTransferTaskRequest request = new CreateObsTransferTaskRequest();
 request.withStreamName("{stream_name}");
 CreateTransferTaskReq body = new CreateTransferTaskReq();
 OBSDestinationDescriptorRequest obsDestinationDescriptorbody = new
 OBSDestinationDescriptorRequest();
 obsDestinationDescriptorbody.withTaskName("newtask")
 .withObsBucketPath("obsbucket")
 .withAgencyName("dis_admin_agency")
 .withDestinationFileType(OBSDestinationDescriptorRequest.DestinationFileTypeEnum.fromValue(
 e("parquet")))
 .withRecordDelimiter("|")
 .withDeliverTimeInterval(30)
 .withFilePrefix("")
 .withPartitionFormat(OBSDestinationDescriptorRequest.PartitionFormatEnum.fromValue("yyyy
 /MM/dd/HH/mm"))
 .withConsumerStrategy(OBSDestinationDescriptorRequest.ConsumerStrategyEnum.fromValue(
 "LATEST"));
 body.withObsDestinationDescriptor(obsDestinationDescriptorbody);
 body.withDestinationType(CreateTransferTaskReq.DestinationTypeEnum.fromValue("OBS"));
 request.withBody(body);
 try {
 CreateObsTransferTaskResponse response = client.createObsTransferTask(request);
 System.out.println(response.toString());
 } catch (ConnectionException e) {
 e.printStackTrace();
 } catch (RequestTimeoutException e) {
 e.printStackTrace();
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrMsg());
 }
}
```

## Python

- Adding OBS Dump Tasks

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
```



```
The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
In this example, AK and SK are stored in environment variables for authentication. Before
running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
environment
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

try:
 request = CreateObsTransferTaskRequest()
 request.stream_name = "{stream_name}"
 obsDestinationDescriptorbody = OBSDestinationDescriptorRequest(
 task_name="newtask",
 obs_bucket_path="obsbucket",
 agency_name="dis_admin_agency",
 destination_file_type="text",
 record_delimiter="|",
 deliver_time_interval=30,
 file_prefix="",
 partition_format="yyyy/MM/dd/HH/mm",
 consumer_strategy="LATEST"
)
 request.body = CreateTransferTaskReq(
 obs_destination_descriptor=obsDestinationDescriptorbody,
 destination_type="OBS"
)
 response = client.create_obs_transfer_task(request)
 print(response)
except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

- Adding OBS Dump Tasks (The dump file format is Parquet.)

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 environment variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before
 running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
 environment
 ak = os.environ["CLOUD_SDK_AK"]
 sk = os.environ["CLOUD_SDK_SK"]
 projectId = "{project_id}"

 credentials = BasicCredentials(ak, sk, projectId)

 client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()
```

```
try:
 request = CreateObsTransferTaskRequest()
 request.stream_name = "{stream_name}"
 obsDestinationDescriptorbody = OBSDestinationDescriptorRequest(
 task_name="newtask",
 obs_bucket_path="obsbucket",
 agency_name="dis_admin_agency",
 destination_file_type="parquet",
 record_delimiter="|",
 deliver_time_interval=30,
 file_prefix="",
 partition_format="yyyy/MM/dd/HH/mm",
 consumer_strategy="LATEST"
)
 request.body = CreateTransferTaskReq(
 obs_destination_descriptor=obsDestinationDescriptorbody,
 destination_type="OBS"
)
 response = client.create_obs_transfer_task(request)
 print(response)
except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

- Adding OBS Dump Tasks

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before
 // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
 // environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

 request := &model.CreateObsTransferTaskRequest{
 request.StreamName = "{stream_name}"
 destinationFileTypeObsDestinationDescriptor:=
 model.GetObsDestinationDescriptorRequestDestinationFileTypeEnum().TEXT
 recordDelimiterObsDestinationDescriptor:= "|"
 filePrefixObsDestinationDescriptor:= ""
 partitionFormatObsDestinationDescriptor:=
```

```
model.GetObsDestinationDescriptorRequestPartitionFormatEnum().YYYY_MM_DD_HH_MM
consumerStrategyObsDestinationDescriptor:=
model.GetObsDestinationDescriptorRequestConsumerStrategyEnum().LATEST
obsDestinationDescriptorbody := &model.ObsDestinationDescriptorRequest{
 TaskName: "newtask",
 ObsBucketPath: "obsbucket",
 AgencyName: "dis_admin_agency",
 DestinationFileType: &destinationFileTypeObsDestinationDescriptor,
 RecordDelimiter: &recordDelimiterObsDestinationDescriptor,
 DeliverTimeInterval: int32(30),
 FilePrefix: &filePrefixObsDestinationDescriptor,
 PartitionFormat: &partitionFormatObsDestinationDescriptor,
 ConsumerStrategy: &consumerStrategyObsDestinationDescriptor,
}
request.Body = &model.CreateTransferTaskReq{
 ObsDestinationDescriptor: obsDestinationDescriptorbody,
 DestinationType: model.GetCreateTransferTaskReqDestinationTypeEnum().OBS,
}
response, err := client.CreateObsTransferTask(request)
if err == nil {
 fmt.Printf("%+v\n", response)
} else {
 fmt.Println(err)
}
}
```

- Adding OBS Dump Tasks (The dump file format is Parquet.)

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before
 // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
 // environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

 request := &model.CreateObsTransferTaskRequest{}
 request.StreamName = "{stream_name}"
 destinationFileTypeObsDestinationDescriptor:=
model.GetObsDestinationDescriptorRequestDestinationFileTypeEnum().PARQUET
recordDelimiterObsDestinationDescriptor:= "|"
filePrefixObsDestinationDescriptor:= ""
partitionFormatObsDestinationDescriptor:=
model.GetObsDestinationDescriptorRequestPartitionFormatEnum().YYYY_MM_DD_HH_MM
consumerStrategyObsDestinationDescriptor:=
model.GetObsDestinationDescriptorRequestConsumerStrategyEnum().LATEST
```

```
obsDestinationDescriptorbody := &model.ObsDestinationDescriptorRequest{
 TaskName: "newtask",
 ObsBucketPath: "obsbucket",
 AgencyName: "dis_admin_agency",
 DestinationFileType: &destinationFileTypeObsDestinationDescriptor,
 RecordDelimiter: &recordDelimiterObsDestinationDescriptor,
 DeliverTimeInterval: int32(30),
 FilePrefix: &filePrefixObsDestinationDescriptor,
 PartitionFormat: &partitionFormatObsDestinationDescriptor,
 ConsumerStrategy: &consumerStrategyObsDestinationDescriptor,
}
request.Body = &model.CreateTransferTaskReq{
 ObsDestinationDescriptor: obsDestinationDescriptorbody,
 DestinationType: model.GetCreateTransferTaskReqDestinationTypeEnum().OBS,
}
response, err := client.CreateObsTransferTask(request)
if err == nil {
 fmt.Printf("%+v\n", response)
} else {
 fmt.Println(err)
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 201         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.5.2 Querying Dump Tasks

### Function

This API is used to query dump tasks.

### Calling Method

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

### URI

GET /v2/{project\_id}/streams/{stream\_name}/transfer-tasks

**Table 5-108** Path Parameters

| Parameter   | Mandatory | Type    | Description                             |
|-------------|-----------|---------|-----------------------------------------|
| project_id  | Yes       | String  | Project ID                              |
| stream_name | Yes       | String  | Name of the stream to be queried        |
| limit       | No        | Integer | The value of limit ranges from 1 to 10. |

## Request Parameters

**Table 5-109** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

## Response Parameters

**Status code: 200**

**Table 5-110** Response body parameters

| Parameter    | Type                                          | Description                                      |
|--------------|-----------------------------------------------|--------------------------------------------------|
| total_number | Integer                                       | Total number of dump tasks                       |
| quota        | Integer                                       | Maximum number of dump tasks that can be created |
| tasks        | Array of <a href="#">TransferTask</a> objects | List of dump tasks                               |

**Table 5-111** TransferTask

| Parameter | Type   | Description           |
|-----------|--------|-----------------------|
| task_name | String | Name of the dump task |

| Parameter                | Type   | Description                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| state                    | String | Dump task status. <ul style="list-style-type: none"><li>• <b>ERROR</b>: An error occurs.</li><li>• <b>STARTING</b>: The task is starting.</li><li>• <b>PAUSED</b>: The task has been stopped.</li><li>• <b>RUNNING</b>: The task is being executed.</li><li>• <b>DELETE</b>: The task has been deleted.</li><li>• <b>ABNORMAL</b>: The task is abnormal.</li></ul> |
| destination_type         | String | Type of the dumping task.<br>- OBS: Data is dumped to OBS.                                                                                                                                                                                                                                                                                                         |
| create_time              | Long   | Time when the dump task is created                                                                                                                                                                                                                                                                                                                                 |
| last_transfer_time stamp | Long   | Latest dump time of the dump task                                                                                                                                                                                                                                                                                                                                  |

## Example Requests

Querying Dump Tasks

```
GET https://{Endpoint}/v2/{project_id}/streams/{stream_name}/transfer-tasks
```

## Example Responses

**Status code: 200**

Normal response

```
{
 "tasks": [{
 "task_id": "As805BudhcH1lDs6gbn",
 "destination_type": "OBS",
 "task_name": "newtask",
 "create_time": 1606554932552,
 "state": "RUNNING",
 "last_transfer_timestamp": 1606984428612
 }],
 "total_number": 1
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
```

```
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class ListTransferTasksSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR_REGION>"))
 .build();
 ListTransferTasksRequest request = new ListTransferTasksRequest();
 request.withStreamName("{stream_name}");
 try {
 ListTransferTasksResponse response = client.listTransferTasks(request);
 System.out.println(response.toString());
 } catch (ConnectionException e) {
 e.printStackTrace();
 } catch (RequestTimeoutException e) {
 e.printStackTrace();
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
 }
 }
}
```

## Python

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak = os.getenv("CLOUD_SDK_AK")
 sk = os.getenv("CLOUD_SDK_SK")
 projectId = "{project_id}"

 credentials = BasicCredentials(ak, sk, projectId)

 client = DisClient.new_builder() \
```

```
.with_credentials(credentials) \
.with_region(DisRegion.value_of("<YOUR REGION>")) \
.build()

try:
 request = ListTransferTasksRequest()
 request.stream_name = "{stream_name}"
 response = client.list_transfer_tasks(request)
 print(response)
except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 // variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

 request := &model.ListTransferTasksRequest{
 request.StreamName = "{stream_name}"
 }
 response, err := client.ListTransferTasks(request)
 if err == nil {
 fmt.Printf("%+v\n", response)
 } else {
 fmt.Println(err)
 }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.



## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.5.3 Updating a Dump Task

### Function

This API is used to update a dump task.

### Calling Method

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

### URI

PUT /v2/{project\_id}/streams/{stream\_name}/transfer-tasks

**Table 5-112** Path Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                                                                                       |
|------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | <b>Definition</b><br>Project ID. For how to obtain it, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 64 characters. Only letters and digits are allowed.<br><b>Default Value</b><br>N/A |

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                              |
|-------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| stream_name | Yes       | String | <b>Definition</b><br>Stream name. The system generates a name prefixed with "dis-" followed by four random characters or digits. Example: <b>dis-HvB1</b> . You can also customize a name.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 64 characters. Only letters and digits are allowed.<br><b>Default Value</b><br>N/A |

## Request Parameters

**Table 5-113** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | <b>Definition</b><br>User token. You can obtain it by calling the IAM API for obtaining a user token. The user token is the value of <b>X-Subject-Token</b> in the response header. For details, see <a href="#">Token-based Authentication</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 32,768 characters.<br><b>Default Value</b><br>N/A |

Table 5-114 Request body parameters

| Parameter                  | Mandatory | Type                                                   | Description                                                                                                                                                |
|----------------------------|-----------|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| destination_type           | No        | String                                                 | <b>Definition</b><br>Dump task type. <b>OBS:</b> Data is dumped to OBS.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>OBS |
| obs_destination_descriptor | No        | <a href="#">OBSDestinationDescriptorRequest</a> object | Parameter list of OBS to which data in the DIS stream will be dumped                                                                                       |

Table 5-115 OBSDestinationDescriptorRequest

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                      |
|-----------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| task_name | Yes       | String | <b>Definition</b><br>Name of the dump task<br><b>Constraints</b><br>N/A<br><b>Range</b><br>It can contain 1 to 64 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.<br><b>Default Value</b><br>N/A |

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| agency_name | No        | String | <p><b>Definition</b></p> <p>Name of the agency created in IAM. DIS uses an agency to access your specified resources. If agencies are available, you can use an IAM API to obtain the available agencies. If dump tasks are used on the console or through API calls, the system displays a message indicating that an agency named <b>dis_admin_agency</b> will be automatically created.</p> <p><b>Constraints</b></p> <p>Agency parameter settings:</p> <ul style="list-style-type: none"><li>• <b>Agency Type: Cloud service</b></li><li>• <b>Cloud Service: DIS</b></li><li>• <b>Validity Period: Unlimited</b></li><li>• Set <b>Policy</b> to <b>Tenant Administrator</b> on the OBS project in the <b>Global service</b> region.</li></ul> <p><b>Range</b></p> <p>Name of the agency to be created. The value of this parameter is 1 to 64 characters long and cannot be left unspecified.</p> <p><b>Default Value</b></p> <p>N/A</p> |

| Parameter             | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                 |
|-----------------------|-----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| deliver_time_interval | Yes       | Integer | <b>Definition</b><br>User-defined interval (s) at which data is imported into OBS. If no data is pushed during the current interval, no dump file package will be generated.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value is an integer ranging from 30 to 900.<br><b>Default Value</b><br>N/A |
| deliver_size_interval | No        | Integer | <b>Definition</b><br>Dump file size (MB). A dump is triggered when the size of the local cache reaches the threshold.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value is an integer ranging from 1 to 300.<br><b>Default Value</b><br>N/A                                                         |

| Parameter         | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| consumer_strategy | No        | String | <b>Definition</b><br>Offset<br><b>Constraints</b><br>When modifying a dump task, ensure that the offset is the same as that set when the dump task was created. For example, if the maximum offset was set during dump task creation, the maximum offset must be used during dump task modification.<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>LATEST</b>: maximum offset, indicating that the latest data will be extracted.</li><li>• <b>TRIM_HORIZON</b>: minimum offset, indicating that the earliest data will be extracted.</li></ul> <b>Default Value</b><br>N/A |
| file_prefix       | No        | String | <b>Definition</b><br>Custom OBS directory for storing stream files. It is empty by default.<br><b>Constraints</b><br>Different directory levels are separated by forward slashes (/).<br><b>Range</b><br>The value can contain a maximum of 50 characters, including letters, digits, underscores (_), and slashes (/).<br><b>Default Value</b><br>Empty                                                                                                                                                                                                                                 |

| Parameter            | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| partition_for<br>mat | No        | String | <p><b>Definition</b></p> <p>Directory structure of the object file written into OBS. The directory structure is in the format of yyyy/MM/dd/HH/mm (time at which the dumping task was created). After the data is dumped successfully, the storage directory structure is <b>obs_bucket_path/file_prefix/partition_format</b>. For example, if the dump task was created at 14:49 on November 10, 2017, then the directory structure is <b>2017 &gt; 11 &gt; 10 &gt; 14 &gt; 49</b>.</p> <p><b>Constraints</b></p> <p>N/A</p> <p><b>Range</b></p> <ul style="list-style-type: none"><li>• N/A: If this field is left unspecified, the time directory format will not be used.</li><li>• <b>yyyy</b>: year.</li><li>• <b>yyyy/MM</b>: year and month</li><li>• <b>yyyy/MM/dd</b>: year, month, and day</li><li>• <b>yyyy/MM/dd/HH</b>: year, month, day, and hour</li><li>• <b>yyyy/MM/dd/HH/mm</b>: year, month, day, hour, and minute.</li></ul> <p><b>Default Value</b></p> <p>N/A</p> |

| Parameter             | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| obs_bucket_path       | Yes       | String | <b>Definition</b><br>Name of the OBS bucket used to store the stream data.<br><b>Constraints</b><br>It consists of lowercase letters, digits, hyphens (-), underscores (_), and periods (.).<br><b>Range</b> The value contains 3 to 63 characters, including lowercase letters, digits, hyphens (-), underscores (_), and periods (.).<br><b>Default Value</b><br>N/A                                                   |
| destination_file_type | No        | String | <b>Definition</b><br>Dump file format<br><b>Constraints</b><br>The <b>csv</b> and <b>parquet</b> formats can be selected only when <b>Source Data Type</b> is set to <b>JSON</b> and <b>Dump Destination</b> is set to <b>OBS</b> .<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>text</b>: This is the default value.</li><li>• <b>csv</b></li><li>• <b>parquet</b></li></ul> <b>Default Value</b><br>Text |



| Parameter         | Mandatory | Type                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------|-----------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| processing_schema | No        | ProcessingSchema object | <b>Definition</b><br>Dump time directory generated based on the timestamp of the source data and the configured <b>partition_format</b> . Directory structure of the object file written into OBS. The directory structure is in the format of yyyy/MM/dd/HH/mm.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                                                                                                                       |
| record_delimiter  | No        | String                  | <b>Definition</b><br>Delimiter for the dump file, which is used to separate the user data that is written into the dump file.<br><b>Constraints</b><br>It consists of lowercase letters, digits, hyphens (-), underscores (_), and periods (.).<br><b>Range</b> <ul style="list-style-type: none"><li>• ,: comma, which is the default value</li><li>• ;: semicolon</li><li>•  : vertical bar</li><li>• \n: newline character</li><li>• NULL: null</li></ul> <b>Default Value</b><br>"\n" |

Table 5-116 ProcessingSchema

| Parameter        | Mandatory | Type   | Description                                                                                                                                                                                                                                                                 |
|------------------|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| timestamp_name   | Yes       | String | <b>Definition</b><br>Attribute name of the source data timestamp<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                                                                                                         |
| timestamp_type   | Yes       | String | <b>Definition</b><br>Type of the source data timestamp.<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>String</b>: string type</li><li>• <b>Timestamp</b>: 13-bit timestamp of the long type</li></ul> <b>Default Value</b><br>N/A |
| timestamp_format | No        | String | <b>Definition</b><br>OBS directory generated based on the timestamp format. This parameter is mandatory when the timestamp type of the source data is <b>String</b> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                    |

Response Parameters

**Status code: 200**

Normal response

None

## Example Requests

Update a dump task.

```
PUT https://{Endpoint}/v2/{project_id}/streams/{stream_name}/transfer-tasks
```

```
{
 "destination_type": "OBS",
 "obs_destination_descriptor": {
 "agency_name": "dis_admin_agency",
 "task_name": "task-test1",
 "consumer_strategy": "LATEST",
 "cross_account_dump": false,
 "destination_file_type": "text",
 "obs_bucket_path": "obsbucket",
 "file_prefix": "",
 "partition_format": "yyyy/MM/dd/HH/mm",
 "record_delimiter": "|",
 "deliver_time_interval": 300
 }
}
```

## Example Responses

None

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.5.4 Deleting a Dump Task

### Function

This API is used to delete a dump task.

### Calling Method

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

### URI

```
DELETE /v2/{project_id}/streams/{stream_name}/transfer-tasks/{task_name}
```

**Table 5-117** Path Parameters

| Parameter   | Mandatory | Type   | Description                         |
|-------------|-----------|--------|-------------------------------------|
| project_id  | Yes       | String | Project ID                          |
| stream_name | Yes       | String | Name of the stream                  |
| task_name   | Yes       | String | Name of the dump task to be deleted |

## Request Parameters

**Table 5-118** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

## Response Parameters

**Status code: 204**

Normal response

None

## Example Requests

Deleting a Dump Task

```
DELETE https://{Endpoint}/v2/{project_id}/streams/{stream_name}/transfer-tasks/{task_name}
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
```

```
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class DeleteTransferTaskSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
 DeleteTransferTaskRequest request = new DeleteTransferTaskRequest();
 request.withStreamName("{stream_name}");
 request.withTaskName("{task_name}");
 try {
 DeleteTransferTaskResponse response = client.deleteTransferTask(request);
 System.out.println(response.toString());
 } catch (ConnectionException e) {
 e.printStackTrace();
 } catch (RequestTimeoutException e) {
 e.printStackTrace();
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
 }
 }
}
```

## Python

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak = os.getenv("CLOUD_SDK_AK")
 sk = os.getenv("CLOUD_SDK_SK")
 projectId = "{project_id}"

 credentials = BasicCredentials(ak, sk, projectId)
```

```
client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

try:
 request = DeleteTransferTaskRequest()
 request.stream_name = "{stream_name}"
 request.task_name = "{task_name}"
 response = client.delete_transfer_task(request)
 print(response)
except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 // variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

 request := &model.DeleteTransferTaskRequest{
 request.StreamName = "{stream_name}"
 request.TaskName = "{task_name}"
 }
 response, err := client.DeleteTransferTask(request)
 if err == nil {
 fmt.Printf("%+v\n", response)
 } else {
 fmt.Println(err)
 }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 204         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.5.5 Querying Dump Task Details

### Function

This API is used to query details of a dump task.

### Calling Method

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

### URI

GET /v2/{project\_id}/streams/{stream\_name}/transfer-tasks/{task\_name}

**Table 5-119** Path Parameters

| Parameter   | Mandatory | Type   | Description                         |
|-------------|-----------|--------|-------------------------------------|
| project_id  | Yes       | String | Project ID                          |
| stream_name | Yes       | String | Name of the stream                  |
| task_name   | Yes       | String | Name of the dump task to be queried |

## Request Parameters

**Table 5-120** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

## Response Parameters

Status code: 200

**Table 5-121** Response body parameters

| Parameter                   | Type                                                   | Description                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| stream_name                 | String                                                 | Name of the stream to which the dump task belongs                                                                                                                                                                                                                                                                                                           |
| task_name                   | String                                                 | Name of the dump task                                                                                                                                                                                                                                                                                                                                       |
| state                       | String                                                 | Dump task status. <ul style="list-style-type: none"><li>• <b>ERROR</b>: An error occurs.</li><li>• <b>STARTING</b>: The task is starting.</li><li>• <b>PAUSED</b>: The task has been stopped.</li><li>• <b>RUNNING</b>: The task is running.</li><li>• <b>DELETE</b>: The task has been deleted.</li><li>• <b>ABNORMAL</b>: The task is abnormal.</li></ul> |
| destination_type            | String                                                 | Type of the dumping task.<br>- OBS: Data is dumped to OBS.                                                                                                                                                                                                                                                                                                  |
| create_time                 | Long                                                   | Time when the dump task is created                                                                                                                                                                                                                                                                                                                          |
| last_transfer_time_stamp    | Long                                                   | Latest dump time of the dump task                                                                                                                                                                                                                                                                                                                           |
| partitions                  | Array of <a href="#">PartitionResult</a> objects       | List of partition dump details                                                                                                                                                                                                                                                                                                                              |
| obs_destination_description | <a href="#">OBSDestinationDescriptorRequest</a> object | Parameter list of OBS to which data in the DIS stream will be dumped                                                                                                                                                                                                                                                                                        |

**Table 5-122** PartitionResult

| Parameter    | Type   | Description                                                                                                                                                                 |
|--------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| status       | String | Current status of the partition <ul style="list-style-type: none"><li>• <b>CREATING</b></li><li>• <b>ACTIVE</b></li><li>• <b>DELETED</b></li><li>• <b>EXPIRED</b></li></ul> |
| partition_id | String | Unique identifier of the partition                                                                                                                                          |



| Parameter             | Type   | Description                                                |
|-----------------------|--------|------------------------------------------------------------|
| hash_range            | String | Possible value range of the hash key used by the partition |
| sequence_number_range | String | Sequence number range of the partition                     |
| parent_partitions     | String | Parent partition                                           |

**Table 5-123** OBSDestinationDescriptorRequest

| Parameter | Type   | Description                                                                                                                                                                                                                      |
|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| task_name | String | <b>Definition</b><br>Name of the dump task<br><b>Constraints</b><br>N/A<br><b>Range</b><br>It can contain 1 to 64 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.<br><b>Default Value</b><br>N/A |

| Parameter             | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| agency_name           | String  | <p><b>Definition</b></p> <p>Name of the agency created in IAM. DIS uses an agency to access your specified resources. If agencies are available, you can use an IAM API to obtain the available agencies. If dump tasks are used on the console or through API calls, the system displays a message indicating that an agency named <b>dis_admin_agency</b> will be automatically created.</p> <p><b>Constraints</b></p> <p>Agency parameter settings:</p> <ul style="list-style-type: none"><li>• <b>Agency Type:</b> Cloud service</li><li>• <b>Cloud Service:</b> DIS</li><li>• <b>Validity Period:</b> Unlimited</li><li>• Set <b>Policy</b> to <b>Tenant Administrator</b> on the OBS project in the <b>Global service</b> region.</li></ul> <p><b>Range</b></p> <p>Name of the agency to be created. The value of this parameter is 1 to 64 characters long and cannot be left unspecified.</p> <p><b>Default Value</b></p> <p>N/A</p> |
| deliver_time_interval | Integer | <p><b>Definition</b></p> <p>User-defined interval (s) at which data is imported into OBS. If no data is pushed during the current interval, no dump file package will be generated.</p> <p><b>Constraints</b></p> <p>N/A</p> <p><b>Range</b></p> <p>The value is an integer ranging from 30 to 900.</p> <p><b>Default Value</b></p> <p>N/A</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| Parameter             | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| deliver_size_interval | Integer | <b>Definition</b><br>Dump file size (MB). A dump is triggered when the size of the local cache reaches the threshold.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value is an integer ranging from 1 to 300.<br><b>Default Value</b><br>N/A                                                                                                                                                                                                                                                                                                                                      |
| consumer_strategy     | String  | <b>Definition</b><br>Offset<br><b>Constraints</b><br>When modifying a dump task, ensure that the offset is the same as that set when the dump task was created. For example, if the maximum offset was set during dump task creation, the maximum offset must be used during dump task modification.<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>LATEST</b>: maximum offset, indicating that the latest data will be extracted.</li><li>• <b>TRIM_HORIZON</b>: minimum offset, indicating that the earliest data will be extracted.</li></ul> <b>Default Value</b><br>N/A |
| file_prefix           | String  | <b>Definition</b><br>Custom OBS directory for storing stream files. It is empty by default.<br><b>Constraints</b><br>Different directory levels are separated by forward slashes (/).<br><b>Range</b><br>The value can contain a maximum of 50 characters, including letters, digits, underscores (_), and slashes (/).<br><b>Default Value</b><br>Empty                                                                                                                                                                                                                                 |

| Parameter        | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| partition_format | String | <p><b>Definition</b></p> <p>Directory structure of the object file written into OBS. The directory structure is in the format of yyyy/MM/dd/HH/mm (time at which the dumping task was created). After the data is dumped successfully, the storage directory structure is <b>obs_bucket_path/file_prefix/partition_format</b>. For example, if the dump task was created at 14:49 on November 10, 2017, then the directory structure is <b>2017 &gt; 11 &gt; 10 &gt; 14 &gt; 49</b>.</p> <p><b>Constraints</b></p> <p>N/A</p> <p><b>Range</b></p> <ul style="list-style-type: none"><li>• N/A: If this field is left unspecified, the time directory format will not be used.</li><li>• <b>yyyy</b>: year.</li><li>• <b>yyyy/MM</b>: year and month</li><li>• <b>yyyy/MM/dd</b>: year, month, and day</li><li>• <b>yyyy/MM/dd/HH</b>: year, month, day, and hour</li><li>• <b>yyyy/MM/dd/HH/mm</b>: year, month, day, hour, and minute.</li></ul> <p><b>Default Value</b></p> <p>N/A</p> |
| obs_bucket_path  | String | <p><b>Definition</b></p> <p>Name of the OBS bucket used to store the stream data.</p> <p><b>Constraints</b></p> <p>It consists of lowercase letters, digits, hyphens (-), underscores (_), and periods (.). <b>Range</b> The value contains 3 to 63 characters, including lowercase letters, digits, hyphens (-), underscores (_), and periods (.).</p> <p><b>Default Value</b></p> <p>N/A</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

| Parameter             | Type                                    | Description                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| destination_file_type | String                                  | <b>Definition</b><br>Dump file format<br><b>Constraints</b><br>The <b>csv</b> and <b>parquet</b> formats can be selected only when <b>Source Data Type</b> is set to <b>JSON</b> and <b>Dump Destination</b> is set to <b>OBS</b> .<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>text</b>: This is the default value.</li><li>• <b>csv</b></li><li>• <b>parquet</b></li></ul> <b>Default Value</b><br>Text |
| processing_schema     | <a href="#">ProcessingSchema</a> object | <b>Definition</b><br>Dump time directory generated based on the timestamp of the source data and the configured <b>partition_format</b> . Directory structure of the object file written into OBS. The directory structure is in the format of yyyy/MM/dd/HH/mm.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                                                      |

| Parameter        | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| record_delimiter | String | <b>Definition</b><br>Delimiter for the dump file, which is used to separate the user data that is written into the dump file.<br><b>Constraints</b><br>It consists of lowercase letters, digits, hyphens (-), underscores (_), and periods (.).<br><b>Range</b> <ul style="list-style-type: none"><li>• ,: comma, which is the default value</li><li>• ;: semicolon</li><li>•  : vertical bar</li><li>• \n: newline character</li><li>• NULL: null</li></ul> <b>Default Value</b><br>"\n" |

**Table 5-124** ProcessingSchema

| Parameter      | Type   | Description                                                                                                                                                                                                                                                                 |
|----------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| timestamp_name | String | <b>Definition</b><br>Attribute name of the source data timestamp<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                                                                                                         |
| timestamp_type | String | <b>Definition</b><br>Type of the source data timestamp.<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>String</b>: string type</li><li>• <b>Timestamp</b>: 13-bit timestamp of the long type</li></ul> <b>Default Value</b><br>N/A |

| Parameter        | Type   | Description                                                                                                                                                                                                                                              |
|------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| timestamp_format | String | <b>Definition</b><br>OBS directory generated based on the timestamp format. This parameter is mandatory when the timestamp type of the source data is <b>String</b> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |

## Example Requests

### Querying Dump Task Details

GET https://{Endpoint}/v2/{project\_id}/streams/{stream\_name}/transfer-tasks/{task\_name}

## Example Responses

### Status code: 200

#### Normal response

```
{
 "stream_id": "RdMFID6edQdf8eDzc9e",
 "stream_name": "newstream",
 "task_name": "newtask",
 "task_id": "As805BudhcH1lDs6gbn",
 "destination_type": "OBS",
 "state": "RUNNING",
 "create_time": 1606554932552,
 "last_transfer_timestamp": 1606984428612,
 "obs_destination_description": {
 "agency_name": "dis_admin_agency",
 "file_prefix": "",
 "partition_format": "yyyy/MM/dd",
 "obs_bucket_path": "obsbucket",
 "deliver_time_interval": 60,
 "consumer_strategy": "LATEST",
 "retry_duration": 0,
 "destination_file_type": "text",
 "record_delimiter": ""
 },
 "partitions": [{
 "partitionId": "shardId-0000000000",
 "discard": 0,
 "state": "RUNNING",
 "last_transfer_timestamp": 1606984428612,
 "last_transfer_offset": 289897
 }]
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class ShowTransferTaskSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
 ShowTransferTaskRequest request = new ShowTransferTaskRequest();
 request.withStreamName("{stream_name}");
 request.withTaskName("{task_name}");
 try {
 ShowTransferTaskResponse response = client.showTransferTask(request);
 System.out.println(response.toString());
 } catch (ConnectionException e) {
 e.printStackTrace();
 } catch (RequestTimeoutException e) {
 e.printStackTrace();
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
 }
 }
}
```

### Python

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *
```



```
if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak = os.environ["CLOUD_SDK_AK"]
 sk = os.environ["CLOUD_SDK_SK"]
 projectId = "{project_id}"

 credentials = BasicCredentials(ak, sk, projectId)

 client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

 try:
 request = ShowTransferTaskRequest()
 request.stream_name = "{stream_name}"
 request.task_name = "{task_name}"
 response = client.show_transfer_task(request)
 print(response)
 except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

 request := &model.ShowTransferTaskRequest{}
 request.StreamName = "{stream_name}"
 request.TaskName = "{task_name}"
 response, err := client.ShowTransferTask(request)
 if err == nil {
```

```
 fmt.Printf("%+v\n", response)
 } else {
 fmt.Println(err)
 }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.5.6 Pausing Dump Tasks

### Function

This API is used to pause dump tasks.

### Calling Method

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

### URI

POST /v2/{project\_id}/streams/{stream\_name}/transfer-tasks/action

**Table 5-125** Path Parameters

| Parameter   | Mandatory | Type   | Description                      |
|-------------|-----------|--------|----------------------------------|
| project_id  | Yes       | String | Project ID                       |
| stream_name | Yes       | String | Name of the stream to be queried |

## Request Parameters

**Table 5-126** Request body parameters

| Parameter | Mandatory | Type                                      | Description                                                                                                                                                 |
|-----------|-----------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| action    | Yes       | String                                    | Dump task operation.<br>Currently, the following operation is supported: <ul style="list-style-type: none"><li>• <b>stop</b>: stopping dump tasks</li></ul> |
| tasks     | Yes       | Array of <b>BatchTransferTask</b> objects | List of dump tasks to be paused                                                                                                                             |

**Table 5-127** BatchTransferTask

| Parameter | Mandatory | Type   | Description  |
|-----------|-----------|--------|--------------|
| id        | Yes       | String | Dump task ID |

## Response Parameters

**Status code: 200**

Normal response

None

## Example Requests

Pausing Dump Tasks

```
POST https://{Endpoint}/v2/{project_id}/streams/{stream_name}/transfer-tasks/action
{
 "action": "stop",
 "tasks": [{
 "id": "9dSu1wfCytSk1aOLxvF"
 }, {
 "id": "2QqqWoPUIZNk6kt5yC2"
 }]
}
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

## Java

### Pausing Dump Tasks

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class BatchStopTransferTaskSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR_REGION>"))
 .build();
 BatchStopTransferTaskRequest request = new BatchStopTransferTaskRequest();
 request.withStreamName("{stream_name}");
 BatchStopTransferTaskReq body = new BatchStopTransferTaskReq();
 List<BatchTransferTask> listbodyTasks = new ArrayList<>();
 listbodyTasks.add(
 new BatchTransferTask()
 .withId("9dSu1wfCytSk1aOLxvF")
);
 listbodyTasks.add(
 new BatchTransferTask()
 .withId("2QqqWoPUIZNk6kt5yC2")
);
 body.withTasks(listbodyTasks);
 body.withAction(BatchStopTransferTaskReq.ActionEnum.fromValue("stop"));
 request.withBody(body);
 try {
 BatchStopTransferTaskResponse response = client.batchStopTransferTask(request);
 System.out.println(response.toString());
 } catch (ConnectionException e) {
 e.printStackTrace();
 } catch (RequestTimeoutException e) {
 e.printStackTrace();
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
 }
 }
}
```

```
}
}
```

## Python

### Pausing Dump Tasks

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 # variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak = os.environ["CLOUD_SDK_AK"]
 sk = os.environ["CLOUD_SDK_SK"]
 projectId = "{project_id}"

 credentials = BasicCredentials(ak, sk, projectId)

 client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

 try:
 request = BatchStopTransferTaskRequest()
 request.stream_name = "{stream_name}"
 listTasksbody = [
 BatchTransferTask(
 id="9dSu1wfCytSk1aOLxvF"
),
 BatchTransferTask(
 id="2QqqWoPUIZNk6kt5yC2"
)
]
 request.body = BatchStopTransferTaskReq(
 tasks=listTasksbody,
 action="stop"
)
 response = client.batch_stop_transfer_task(request)
 print(response)
 except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

### Pausing Dump Tasks

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)
```

```
func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

 request := &model.BatchStopTransferTaskRequest{}
 request.StreamName = "{stream_name}"
 var listTasksbody = []model.BatchTransferTask{
 {
 Id: "9dSu1wfCytSk1aOLxvF",
 },
 {
 Id: "2QqqWoPUIZNk6kt5yC2",
 },
 }
 request.Body = &model.BatchStopTransferTaskReq{
 Tasks: listTasksbody,
 Action: model.GetBatchStopTransferTaskReqActionEnum().STOP,
 }
 response, err := client.BatchStopTransferTask(request)
 if err == nil {
 fmt.Printf("%+v\n", response)
 } else {
 fmt.Println(err)
 }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.5.7 Starting Dump Tasks

### Function

This API is used to start dump tasks.

### Calling Method

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

### URI

POST /v2/{project\_id}/streams/{stream\_name}/transfer-tasks/action

**Table 5-128** Path Parameters

| Parameter   | Mandatory | Type   | Description                      |
|-------------|-----------|--------|----------------------------------|
| project_id  | Yes       | String | Project ID                       |
| stream_name | Yes       | String | Name of the stream to be queried |

### Request Parameters

**Table 5-129** Request body parameters

| Parameter | Mandatory | Type                                               | Description                                                                                                                                                  |
|-----------|-----------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| action    | Yes       | String                                             | Dump task operation.<br>Currently, the following operation is supported: <ul style="list-style-type: none"><li>• <b>start</b>: starting dump tasks</li></ul> |
| tasks     | Yes       | Array of <a href="#">BatchTransferTask</a> objects | List of dump tasks to be operated                                                                                                                            |

**Table 5-130** BatchTransferTask

| Parameter | Mandatory | Type   | Description  |
|-----------|-----------|--------|--------------|
| id        | Yes       | String | Dump task ID |

### Response Parameters

**Status code: 200**

Normal response

None

## Example Requests

### Starting Dump Tasks

POST https://{Endpoint}/v2/{project\_id}/streams/{stream\_name}/transfer-tasks/action

```
{
 "action": "start",
 "tasks": [{
 "id": "9dSu1wfCytSk1aOLxvF"
 }, {
 "id": "2QqqWoPUIZNk6kt5yC2"
 }]
}
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Starting Dump Tasks

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class BatchStartTransferTaskSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR_REGION>"))
```



```
.build();
BatchStartTransferTaskRequest request = new BatchStartTransferTaskRequest();
request.withStreamName("{stream_name}");
BatchStartTransferTaskReq body = new BatchStartTransferTaskReq();
List<BatchTransferTask> listbodyTasks = new ArrayList<>();
listbodyTasks.add(
 new BatchTransferTask()
 .withId("9dSu1wfCytSk1aOLxvF")
);
listbodyTasks.add(
 new BatchTransferTask()
 .withId("2QqqWoPUIZNk6kt5yC2")
);
body.withTasks(listbodyTasks);
body.withAction(BatchStartTransferTaskReq.ActionEnum.fromValue("start"));
request.withBody(body);
try {
 BatchStartTransferTaskResponse response = client.batchStartTransferTask(request);
 System.out.println(response.toString());
} catch (ConnectionException e) {
 e.printStackTrace();
} catch (RequestTimeoutException e) {
 e.printStackTrace();
} catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
}
}
```

## Python

### Starting Dump Tasks

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 # variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak = os.environ["CLOUD_SDK_AK"]
 sk = os.environ["CLOUD_SDK_SK"]
 projectId = "{project_id}"

 credentials = BasicCredentials(ak, sk, projectId)

 client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

 try:
 request = BatchStartTransferTaskRequest()
 request.stream_name = "{stream_name}"
 listTasksbody = [
 BatchTransferTask(
 id="9dSu1wfCytSk1aOLxvF"
),
],
```

```
 BatchTransferTask(
 id="2QqqWoPUIZNk6kt5yC2"
)
]
 request.body = BatchStartTransferTaskReq(
 tasks=listTasksbody,
 action="start"
)
 response = client.batch_start_transfer_task(request)
 print(response)
except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

### Starting Dump Tasks

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 // variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

 request := &model.BatchStartTransferTaskRequest{
 request.StreamName = "{stream_name}"
 var listTasksbody = []model.BatchTransferTask{
 {
 Id: "9dSu1wfCytSk1aOLxvF",
 },
 {
 Id: "2QqqWoPUIZNk6kt5yC2",
 },
 }
 request.Body = &model.BatchStartTransferTaskReq{
 Tasks: listTasksbody,
 Action: model.GetBatchStartTransferTaskReqActionEnum().START,
 }
 response, err := client.BatchStartTransferTask(request)
 if err == nil {
 fmt.Printf("%+v\n", response)
 }
 }
```

```
} else {
 fmt.Println(err)
}
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.5.8 Obtaining the Bucket List

### Function

This API is used to obtain the buckets to which data is dumped.

### Calling Method

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

### URI

GET /v1/obs/buckets

## Request Parameters

**Table 5-131** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | <b>Definition</b><br>User token. You can obtain it by calling the IAM API for obtaining a user token. The user token is the value of <b>X-Subject-Token</b> in the response header. For details, see <a href="#">Token-based Authentication</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 32,768 characters.<br><b>Default Value</b><br>N/A |

## Response Parameters

**Status code: 200****Table 5-132** Response body parameters

| Parameter  | Type   | Description                                                                                                         |
|------------|--------|---------------------------------------------------------------------------------------------------------------------|
| bucketName | String | <b>Definition</b><br>Bucket name<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |

| Parameter    | Type    | Description                                                                                                                                             |
|--------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| owner        | String  | <b>Definition</b><br>Bucket owner<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                    |
| creationDate | Integer | <b>Definition</b><br>Bucket creation time, which is a UNIX timestamp<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |
| location     | String  | <b>Definition</b><br>ID of the current region<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                        |

Table 5-133 BucketOwnerResult

| Parameter   | Type   | Description                                                                                                                                                                          |
|-------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| displayName | String | <b>Definition</b><br>Displayed username, which is the domain name of the user who owns the bucket<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |
| id          | String | <b>Definition</b><br>User ID, which is the domain ID of the user who owns the bucket<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A              |

Example Requests

Obtain the bucket list.

```
GET https://{Endpoint}/v1/obs/buckets
```

Example Responses

Status code: 200

Success

```
{
 "bucketName" : "dis-test",
 "owner" : {
 "displayName" : null,
 "id" : "b2dbbd927c504f75885b7edc67xxx15e"
 },
 "creationDate" : 1646829844714,
 "location" : "cn-soutxxx-x",
 "clustertype" : null,
 "storageClass" : null,
 "acl" : null,
 "bucketStorageClass" : null,
 "bucketType" : "OBJECT"
}
```

## Status Codes

| Status Code | Description |
|-------------|-------------|
| 200         | Success     |

## Error Codes

See [Error Codes](#).

## 5.5.9 Creating a Source Data Schema

### Function

This API is used to create a schema for JSON source data.

### Calling Method

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

### URI

POST /v1/{project\_id}/schema

**Table 5-134** Path Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                                                                                       |
|------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | <b>Definition</b><br>Project ID. For how to obtain it, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 64 characters. Only letters and digits are allowed.<br><b>Default Value</b><br>N/A |

## Request Parameters

**Table 5-135** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | <b>Definition</b><br>User token. You can obtain it by calling the IAM API for obtaining a user token. The user token is the value of <b>X-Subject-Token</b> in the response header. For details, see <a href="#">Token-based Authentication</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 32,768 characters.<br><b>Default Value</b><br>N/A |

**Table 5-136** Request body parameters

| Parameter          | Mandatory | Type   | Description                                                                                                                                                                                                                                                                          |
|--------------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| source_data_sample | Yes       | String | <b>Definition</b><br>Source data sample, which is used to generate a schema from JSON source data. You can import a source data sample or create source data.<br><b>Constraints</b><br>The source data must be in JSON format.<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |

## Response Parameters

**Status code: 200**

Normal response

None



## Example Requests

Create a source data schema.

```
POST https://{Endpoint}/v1/{project_id}/schema
{
 "source_data_sample" : ""
}
```

## Example Responses

**Status code: 200**

Normal response

```
{
 "schema" : ""
}
```

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.5.10 Querying the Log of the Dump Task in the Current Stream

### Function

This API is used to query the log of the dump task running in the current stream.

### Calling Method

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

### URI

POST /v1/transfertasklog/{task\_id}

**Table 5-137** Path Parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                                                      |
|-----------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| task_id   | Yes       | String | <b>Definition</b><br>Dump task ID<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value contains 19 characters, including letters and digits.<br><b>Default Value</b><br>N/A |

## Request Parameters

**Table 5-138** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | <b>Definition</b><br>User token. You can obtain it by calling the IAM API for obtaining a user token. The user token is the value of <b>X-Subject-Token</b> in the response header. For details, see <a href="#">Token-based Authentication</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 32,768 characters.<br><b>Default Value</b><br>N/A |

**Table 5-139** Request body parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| order     | No        | String | <b>Definition</b><br>Log sorting mode<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>desc</b>: descending order</li><li>• <b>asc</b>: ascending order</li></ul> <b>Default Value</b><br>desc                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| sortBy    | No        | String | <b>Definition</b><br>Log sorting criteria. This field is used together with the <b>order</b> field. By default, logs are sorted by creation time in descending order.<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>createTimeStr</b>: sorted by creation time</li><li>• <b>startTime</b>: sorted by start time</li><li>• <b>endTime</b>: sorted by end time</li><li>• <b>state</b>: sorted by dump task status</li><li>• <b>records</b>: sorted by the number of records</li><li>• <b>readRecords</b>: sorted by the number of read records</li><li>• <b>dataSize</b>: sorted by data volume (bytes)</li></ul> <b>Default Value</b><br>createTimeStr |
| pageInfo  | No        | Object | Number of pages and logs displayed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

**Table 5-140** pageInfo\_descriptor

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                              |
|-----------|-----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| pageIndex | Yes       | Integer | <b>Definition</b><br>Specific page of dumped logs<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                                                                                     |
| pageTotal | Yes       | Integer | <b>Definition</b><br>Total number of logs on the current page. The default value is <b>10</b> , indicating that there are 10 logs on the current page.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>10 |

## Response Parameters

Status code: 200

**Table 5-141** Response body parameters

| Parameter | Type    | Description                                                                                                                         |
|-----------|---------|-------------------------------------------------------------------------------------------------------------------------------------|
| totalNum  | Integer | <b>Definition</b><br>Total number of dumped logs<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |

| Parameter            | Type                                                       | Description                                                                                                                                                                                                                     |
|----------------------|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| message              | String                                                     | <b>Definition</b><br>If the operation fails, the details of the error are displayed. If the operation is successful, this field may be null.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |
| errorCode            | String                                                     | <b>Definition</b><br>Error code<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                                                                                              |
| transferTaskLog-List | Array of <a href="#">transferTaskLogListResult</a> objects | <b>Definition</b><br>Dump logs of the current dump task<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                                                                      |

**Table 5-142** transferTaskLogListResult

| Parameter       | Type    | Description                                                                                                                                                                      |
|-----------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| transferTaskId  | String  | <b>Definition</b><br>Dump task ID<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value contains 19 characters, including letters and digits.<br><b>Default Value</b><br>N/A |
| destinationType | String  | <b>Definition</b><br>Type of the dump task<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>OBS                                                    |
| startTime       | Integer | <b>Definition</b><br>Dump task start time. It is a UNIX timestamp, accurate to millisecond.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A   |
| endTime         | Integer | <b>Definition</b><br>Dump task end time. It is a UNIX timestamp, accurate to millisecond.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A     |

| Parameter           | Type   | Description                                                                                                                                               |
|---------------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| transferBytes       | Long   | <b>Definition</b><br>Size of the dumped data, in bytes<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                 |
| transferRecords-Num | Long   | <b>Definition</b><br>Number of records dumped in a data dump period<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A    |
| streamId            | String | <b>Definition</b><br>Name of the stream to which the dump task belongs<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |
| projectId           | String | <b>Definition</b><br>Project ID<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                        |

| Parameter        | Type   | Description                                                                                                                                                                                                              |
|------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| transferFileName | String | <b>Definition</b><br>Dump task name, which is composed of the dump task ID, stream name, and creation time. The value must be unique.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |

## Example Requests

Query the log of the dump task running in the current stream.

```
POST https://{Endpoint}/v1/transfertasklog/{task_id}
```

```
{
 "order" : "desc",
 "sortBy" : "createTimeStr",
 "pageInfo" : [{
 "pageIndex" : 1
 }, {
 "pageIndex" : 10
 }]
}
```

## Example Responses

**Status code: 200**

Normal response

```
{
 "errorCode" : -1,
 "totalNum" : 100,
 "message" : null,
 "isStreamFound" : null,
 "streamData" : null,
 "streamDataList" : null,
 "transferTaskList" : null,
 "monitorData" : null,
 "transferTaskLogList" : {
 "transferTaskId" : "CDaRPdvKUfZrAhzTaYs",
 "state" : 0,
 "destinationType" : "OBS",
 "startTime" : 1756539753280,
 "endTime" : 1756540056070,
 "transferBytes" : 30718683,
 "transferRecordsNum" : 32943,
 "transformRecordsNum" : 0,
 "streamId" : "hFKqKEhCZgNayyIS8Zv",
 "projectId" : "575ae927fc644f22b5c5af5209b7cf51",
 "transferFileName" : "CDaRPdvKUfZrAhzTaYs.disMonitorTest.0.1756539753290",
 "num" : 0
 }
}
```



```
}
}
```

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

# 5.6 Monitoring Management

## 5.6.1 Querying Stream Monitoring Data

### Function

This API is used to query the monitoring data of a specified stream.

### Calling Method

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

### URI

GET /v2/{project\_id}/streams/{stream\_name}/metrics

**Table 5-143** Path Parameters

| Parameter   | Mandatory | Type   | Description |
|-------------|-----------|--------|-------------|
| project_id  | Yes       | String | Project ID  |
| stream_name | Yes       | String | Stream name |

**Table 5-144** Query Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| label      | No        | String | <p>Stream monitoring metric (Either <b>label</b> or <b>label_list</b> must be specified. If both <b>label_list</b> and <b>label</b> exist, <b>label_list</b> is used.)</p> <ul style="list-style-type: none"><li>• <b>total_put_bytes_per_stream</b>: total input traffic (byte)</li><li>• <b>total_get_bytes_per_stream</b>: total output traffic (byte)</li><li>• <b>total_put_records_per_stream</b>: total input records</li><li>• <b>total_get_records_per_stream</b>: total output records</li><li>• <b>total_put_req_latency</b>: average processing time (milliseconds) of upload requests</li><li>• <b>total_get_req_latency</b>: average processing time (milliseconds) of download requests</li><li>• <b>total_put_req_suc_per_stream</b>: number of successful upload requests</li><li>• <b>total_get_req_suc_per_stream</b>: number of successful download requests</li><li>• <b>traffic_controll_put</b>: number of rejected upload requests due to flow control</li><li>• <b>traffic_controll_get</b>: number of rejected download requests due to flow control</li></ul> |
| label_list | No        | String | <p>List of labels separated by commas (,) to query multiple labels in batches. (Either <b>label</b> or <b>label_list</b> must be specified. If both <b>label_list</b> and <b>label</b> exist, <b>label_list</b> is used.)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| start_time | Yes       | Long   | <p>Monitoring start time, which is a 10-digit timestamp</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| Parameter | Mandatory | Type | Description                                        |
|-----------|-----------|------|----------------------------------------------------|
| end_time  | Yes       | Long | Monitoring end time, which is a 10-digit timestamp |

## Request Parameters

**Table 5-145** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

## Response Parameters

Status code: 200

**Table 5-146** Response body parameters

| Parameter    | Type                            | Description                    |
|--------------|---------------------------------|--------------------------------|
| metrics      | <b>Metrics</b> object           | Data object                    |
| metrics_list | Array of <b>Metrics</b> objects | List of monitored data objects |

**Table 5-147** Metrics

| Parameter  | Type                              | Description       |
|------------|-----------------------------------|-------------------|
| dataPoints | Array of <b>DataPoint</b> objects | Monitoring data   |
| label      | String                            | Monitoring metric |

**Table 5-148** DataPoint

| Parameter | Type | Description |
|-----------|------|-------------|
| timestamp | Long | Timestamp   |

| Parameter | Type | Description                                     |
|-----------|------|-------------------------------------------------|
| value     | Long | Monitoring value corresponding to the timestamp |

## Example Requests

### Querying Stream Monitoring Data

```
GET https://{Endpoint}/v2/{project_id}/streams/{stream_name}/metrics
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class ShowStreamMetricsSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
 ShowStreamMetricsRequest request = new ShowStreamMetricsRequest();
 request.withStreamName("{stream_name}");
 try {
 ShowStreamMetricsResponse response = client.showStreamMetrics(request);
 System.out.println(response.toString());
 } catch (ConnectionException e) {
 e.printStackTrace();
 } catch (RequestTimeoutException e) {
 e.printStackTrace();
 }
 }
}
```

```
 e.printStackTrace();
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
 }
}
```

## Python

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 # variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak = os.environ["CLOUD_SDK_AK"]
 sk = os.environ["CLOUD_SDK_SK"]
 projectId = "{project_id}"

 credentials = BasicCredentials(ak, sk, projectId)

 client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

 try:
 request = ShowStreamMetricsRequest()
 request.stream_name = "{stream_name}"
 response = client.show_stream_metrics(request)
 print(response)
 except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 // variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
```

```
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

request := &model.ShowStreamMetricsRequest{
 request.StreamName = "{stream_name}"
}
response, err := client.ShowStreamMetrics(request)
if err == nil {
 fmt.Printf("%+v\n", response)
} else {
 fmt.Println(err)
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.6.2 Querying Partition Monitoring Data

### Function

This API is used to query the monitoring data of a specified partition of a stream.

### Calling Method

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

### URI

GET /v2/{project\_id}/streams/{stream\_name}/partitions/{partition\_id}/metrics

**Table 5-149** Path Parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                                                                                                                                     |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id   | Yes       | String | Project ID                                                                                                                                                                                                                                                                      |
| stream_name  | Yes       | String | Stream name                                                                                                                                                                                                                                                                     |
| partition_id | Yes       | String | Partition ID.Two partition ID formats are available:- shardId-0000000000- 0For example, if a stream has three partitions, the partition IDs are <b>0</b> , <b>1</b> , and <b>2</b> , or <b>shardId-0000000000</b> , <b>shardId-0000000001</b> , and <b>shardId-0000000002</b> . |

**Table 5-150** Query Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| label      | No        | String | Partition monitoring metric. (Either <b>label</b> or <b>label_list</b> must be specified. If both <b>label_list</b> and <b>label</b> exist, <b>label_list</b> is used.) <ul style="list-style-type: none"><li>• <b>total_put_bytes_per_partition</b>: total input traffic in a partition (byte)</li><li>• <b>total_get_bytes_per_partition</b>: total output traffic in a partition (byte)</li><li>• <b>total_put_records_per_partition</b>: total number of input records in a partition</li><li>• <b>total_get_records_per_partition</b>: total number of output records in a partition</li></ul> |
| label_list | No        | String | List of labels separated by commas (,) to query multiple labels in batches. (Either <b>label</b> or <b>label_list</b> must be specified. If both <b>label_list</b> and <b>label</b> exist, <b>label_list</b> is used.)                                                                                                                                                                                                                                                                                                                                                                              |
| start_time | Yes       | Long   | Monitoring start time, which is a 10-digit timestamp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

| Parameter | Mandatory | Type | Description                                        |
|-----------|-----------|------|----------------------------------------------------|
| end_time  | Yes       | Long | Monitoring end time, which is a 10-digit timestamp |

## Request Parameters

**Table 5-151** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

## Response Parameters

**Status code: 200**

**Table 5-152** Response body parameters

| Parameter | Type                  | Description |
|-----------|-----------------------|-------------|
| metrics   | <b>Metrics</b> object | Data object |

**Table 5-153** Metrics

| Parameter  | Type                              | Description       |
|------------|-----------------------------------|-------------------|
| dataPoints | Array of <b>DataPoint</b> objects | Monitoring data   |
| label      | String                            | Monitoring metric |

**Table 5-154** DataPoint

| Parameter | Type | Description                                     |
|-----------|------|-------------------------------------------------|
| timestamp | Long | Timestamp                                       |
| value     | Long | Monitoring value corresponding to the timestamp |



## Example Requests

### Querying Partition Monitoring Data

```
GET https://{Endpoint}/v2/{project_id}/streams/{stream_name}/partitions/{partition_id}/metrics
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class ShowPartitionMetricsSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
 ShowPartitionMetricsRequest request = new ShowPartitionMetricsRequest();
 request.withStreamName("{stream_name}");
 request.withPartitionId("{partition_id}");
 try {
 ShowPartitionMetricsResponse response = client.showPartitionMetrics(request);
 System.out.println(response.toString());
 } catch (ConnectionException e) {
 e.printStackTrace();
 } catch (RequestTimeoutException e) {
 e.printStackTrace();
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
 }
 }
}
```

```
}
}
```

## Python

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 # variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak = os.environ["CLOUD_SDK_AK"]
 sk = os.environ["CLOUD_SDK_SK"]
 projectId = "{project_id}"

 credentials = BasicCredentials(ak, sk, projectId)

 client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

 try:
 request = ShowPartitionMetricsRequest()
 request.stream_name = "{stream_name}"
 request.partition_id = "{partition_id}"
 response = client.show_partition_metrics(request)
 print(response)
 except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 // variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()
```

```
client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

request := &model.ShowPartitionMetricsRequest{
 request.StreamName = "{stream_name}"
 request.PartitionId = "{partition_id}"
 response, err := client.ShowPartitionMetrics(request)
 if err == nil {
 fmt.Printf("%v\n", response)
 } else {
 fmt.Println(err)
 }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

# 5.7 Tag Management

## 5.7.1 Adding Tags to a Specified Stream

### Function

This API is used to add tags to a specified stream.

### Calling Method

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

### URI

POST /v2/{project\_id}/stream/{stream\_id}/tags

**Table 5-155** Path Parameters

| Parameter  | Mandatory | Type   | Description |
|------------|-----------|--------|-------------|
| project_id | Yes       | String | Project ID  |
| stream_id  | Yes       | String | Stream ID   |

## Request Parameters

**Table 5-156** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

**Table 5-157** Request body parameters

| Parameter | Mandatory | Type                       | Description |
|-----------|-----------|----------------------------|-------------|
| tag       | Yes       | <a href="#">Tag</a> object | Tag object  |

**Table 5-158** Tag

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                  |
|-----------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| key       | No        | String | Tag key. <ul style="list-style-type: none"><li>The value cannot be empty and must be a string of 1 to 36 characters.</li><li>Must be unique for each resource.</li></ul> - - Character set: A-Z, a-z, 0-9, '-', '_', and Unicode characters (\u4E00-\u9FFF). |

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                         |
|-----------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| value     | No        | String | Value. <ul style="list-style-type: none"><li>It can contain a maximum of 43 characters.</li><li>It can contain uppercase and lowercase letters, digits, periods (.), hyphens (-), underscores (_), and Unicode characters (\u4E00-\u9FFF).</li><li>It can only contain digits, letters, hyphens (-), and underscores (_).</li></ul> |

## Response Parameters

**Status code: 204**

Normal response

None

## Example Requests

Adding Tags to a Specified Stream

```
POST https://{Endpoint}/v2/{project_id}/stream/{stream_id}/tags
```

```
{
 "tag": {
 "key": "key",
 "value": "value"
 }
}
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

### Java

Adding Tags to a Specified Stream

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
```

```
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

public class CreateTagSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR_REGION>"))
 .build();

 CreateTagRequest request = new CreateTagRequest();
 request.withStreamId("{stream_id}");
 CreateTagReq body = new CreateTagReq();
 Tag tagbody = new Tag();
 tagbody.withKey("key")
 .withValue("value");
 body.withTag(tagbody);
 request.withBody(body);
 try {
 CreateTagResponse response = client.createTag(request);
 System.out.println(response.toString());
 } catch (ConnectionException e) {
 e.printStackTrace();
 } catch (RequestTimeoutException e) {
 e.printStackTrace();
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
 }
 }
}
```

## Python

### Adding Tags to a Specified Stream

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdksdk.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdksdk.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 # variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before running this
 # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
```

```
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

try:
 request = CreateTagRequest()
 request.stream_id = "{stream_id}"
 tagbody = Tag(
 key="key",
 value="value"
)
 request.body = CreateTagReq(
 tag=tagbody
)
 response = client.create_tag(request)
 print(response)
except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

### Adding Tags to a Specified Stream

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 // variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

 request := &model.CreateTagRequest{
 request.StreamId = "{stream_id}"
 keyTag:= "key"
 valueTag:= "value"
 }
```

```
tagbody := &model.Tag{
 Key: &keyTag,
 Value: &valueTag,
}
request.Body = &model.CreateTagReq{
 Tag: tagbody,
}
response, err := client.CreateTag(request)
if err == nil {
 fmt.Printf("%+v\n", response)
} else {
 fmt.Println(err)
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 204         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.7.2 Querying Tags of a Specified Stream

### Function

This API is used to query tags of a specified stream.

### Calling Method

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

### URI

GET /v2/{project\_id}/stream/{stream\_id}/tags

**Table 5-159** Path Parameters

| Parameter  | Mandatory | Type   | Description |
|------------|-----------|--------|-------------|
| project_id | Yes       | String | Project ID  |
| stream_id  | Yes       | String | Stream ID   |



## Request Parameters

**Table 5-160** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

## Response Parameters

**Status code: 200****Table 5-161** Response body parameters

| Parameter | Type                        | Description |
|-----------|-----------------------------|-------------|
| tags      | Array of <b>Tag</b> objects | Tags        |

**Table 5-162** Tag

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                                                         |
|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| key       | String | Tag key. <ul style="list-style-type: none"><li>The value cannot be empty and must be a string of 1 to 36 characters.</li><li>Must be unique for each resource.<ul style="list-style-type: none"><li>Character set: A-Z, a-z, 0-9, '-', '_', and Unicode characters (\u4E00-\u9FFF).</li></ul></li></ul>                             |
| value     | String | Value. <ul style="list-style-type: none"><li>It can contain a maximum of 43 characters.</li><li>It can contain uppercase and lowercase letters, digits, periods (.), hyphens (-), underscores (_), and Unicode characters (\u4E00-\u9FFF).</li><li>It can only contain digits, letters, hyphens (-), and underscores (_).</li></ul> |

## Example Requests

Querying Tags of a Specified Stream

```
GET https://{Endpoint}/v2/{project_id}/stream/{stream_id}/tags
```

## Example Responses

**Status code: 200**

Response body of the stream tag information.

```
{
 "tags": [{
 "key": "key1",
 "value": "value1"
 }, {
 "key": "key2",
 "value": "value3"
 }]
}
```

## Status Codes

| Status Code | Description                                  |
|-------------|----------------------------------------------|
| 200         | Response body of the stream tag information. |

## Error Codes

See [Error Codes](#).

## 5.7.3 Deleting Tags of a Specified Stream

### Function

This API is used to delete tags of a specified stream.

### Calling Method

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

### URI

```
DELETE /v2/{project_id}/stream/{stream_id}/tags/{key}
```

**Table 5-163** Path Parameters

| Parameter  | Mandatory | Type   | Description |
|------------|-----------|--------|-------------|
| project_id | Yes       | String | Project ID  |
| stream_id  | Yes       | String | Stream ID   |

| Parameter | Mandatory | Type   | Description |
|-----------|-----------|--------|-------------|
| key       | Yes       | String | Tag key     |

## Request Parameters

**Table 5-164** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

## Response Parameters

**Status code: 204**

Normal response

None

## Example Requests

Deleting Tags of a Specified Stream

```
DELETE https://{Endpoint}/v2/{project_id}/stream/{stream_id}/tags/{key}
```

## Example Responses

None

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 204         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.7.4 Adding Resource Tags

### Function

This API is used to add resource tags (such as stream tags) in batches. This API is idempotent. When you are creating tags, if there are duplicate keys in the request body, an error is reported. During tag creation, duplicate keys are not allowed. If a key already exists in the database, its value will be overwritten by the new duplicate key.

### Calling Method

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

### URI

POST /v2/{project\_id}/stream/{stream\_id}/tags/action

**Table 5-165** Path Parameters

| Parameter  | Mandatory | Type   | Description |
|------------|-----------|--------|-------------|
| project_id | Yes       | String | Project ID  |
| stream_id  | Yes       | String | Stream ID   |

### Request Parameters

**Table 5-166** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

**Table 5-167** Request body parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                      |
|-----------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| action    | Yes       | String | Operation to be performed.<br>The value can be <b>create</b> only. <ul style="list-style-type: none"><li><b>create</b>: batch creation</li></ul> |

| Parameter | Mandatory | Type                        | Description |
|-----------|-----------|-----------------------------|-------------|
| tags      | Yes       | Array of <b>Tag</b> objects | Tags        |

**Table 5-168** Tag

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                               |
|-----------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| key       | No        | String | Tag key. <ul style="list-style-type: none"><li>• The value cannot be empty and must be a string of 1 to 36 characters.</li><li>• Must be unique for each resource.<br/>-- Character set: A-Z, a-z, 0-9, '-', '_', and Unicode characters (\u4E00-\u9FFF).</li></ul>                                                                       |
| value     | No        | String | Value. <ul style="list-style-type: none"><li>• It can contain a maximum of 43 characters.</li><li>• It can contain uppercase and lowercase letters, digits, periods (.), hyphens (-), underscores (_), and Unicode characters (\u4E00-\u9FFF).</li><li>• It can only contain digits, letters, hyphens (-), and underscores (_).</li></ul> |

## Response Parameters

**Status code: 204**

Normal response

None

## Example Requests

Adding Resource Tags

POST https://{Endpoint}/v2/{project\_id}/stream/{stream\_id}/tags/action

```
{
 "action": "create",
 "tags": [{
 "key": "key1",
 "value": "value1"
 }, {
```

```
"key" : "key2",
 "value" : "value3"
}]
}
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Adding Resource Tags

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class BatchCreateTagsSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR_REGION>"))
 .build();
 BatchCreateTagsRequest request = new BatchCreateTagsRequest();
 request.withStreamId("{stream_id}");
 BatchCreateTagsReq body = new BatchCreateTagsReq();
 List<Tag> listbodyTags = new ArrayList<>();
 listbodyTags.add(
 new Tag()
 .withKey("key1")
 .withValue("value1")
);
 listbodyTags.add(
 new Tag()
 .withKey("key2")
 .withValue("value3")
);
 }
}
```

```
body.withTags(listbodyTags);
body.withAction(BatchCreateTagsReq.ActionEnum.fromValue("create"));
request.withBody(body);
try {
 BatchCreateTagsResponse response = client.batchCreateTags(request);
 System.out.println(response.toString());
} catch (ConnectionException e) {
 e.printStackTrace();
} catch (RequestTimeoutException e) {
 e.printStackTrace();
} catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
}
}
```

## Python

### Adding Resource Tags

```
coding: utf-8
```

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *
```

```
if __name__ == "__main__":
```

```
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
```

```
 # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
```

```
 ak = os.environ["CLOUD_SDK_AK"]
 sk = os.environ["CLOUD_SDK_SK"]
 projectId = "{project_id}"
```

```
 credentials = BasicCredentials(ak, sk, projectId)
```

```
 client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()
```

```
 try:
```

```
 request = BatchCreateTagsRequest()
```

```
 request.stream_id = "{stream_id}"
```

```
 listTagsbody = [
```

```
 Tag(
 key="key1",
 value="value1"
```

```
),
```

```
 Tag(
 key="key2",
 value="value3"
```

```
)
```

```
]
```

```
 request.body = BatchCreateTagsReq(
```

```
 tags=listTagsbody,
```

```
 action="create"
```

```
)
```

```
 response = client.batch_create_tags(request)
```

```
 print(response)
```

```
 except exceptions.ClientRequestException as e:
```

```
print(e.status_code)
print(e.request_id)
print(e.error_code)
print(e.error_msg)
```

## Go

### Adding Resource Tags

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 // variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

 request := &model.BatchCreateTagsRequest{
 request.StreamId = "{stream_id}"
 keyTags:= "key1"
 valueTags:= "value1"
 keyTags1:= "key2"
 valueTags1:= "value3"
 var listTagsbody = []model.Tag{
 {
 Key: &keyTags,
 Value: &valueTags,
 },
 {
 Key: &keyTags1,
 Value: &valueTags1,
 },
 }
 request.Body = &model.BatchCreateTagsReq{
 Tags: listTagsbody,
 Action: model.GetBatchCreateTagsReqActionEnum().CREATE,
 }
 response, err := client.BatchCreateTags(request)
 if err == nil {
 fmt.Printf("%+v\n", response)
 } else {
 fmt.Println(err)
 }
 }
}
```



## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 204         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.7.5 Querying All Tags of a Specified Region

### Function

This API is used to query all tags of a specified region.

### Calling Method

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

### URI

GET /v2/{project\_id}/stream/tags

**Table 5-169** Path Parameters

| Parameter  | Mandatory | Type   | Description |
|------------|-----------|--------|-------------|
| project_id | Yes       | String | Project ID  |

### Request Parameters

**Table 5-170** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

## Response Parameters

Status code: 200

Table 5-171 Response body parameters

| Parameter | Type                                  | Description |
|-----------|---------------------------------------|-------------|
| tags      | Array of <a href="#">Tags</a> objects | Tags        |

Table 5-172 Tags

| Parameter | Type             | Description                                                                                                                                                                                                                                                                                             |
|-----------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| key       | String           | Tag key. <ul style="list-style-type: none"><li>The value cannot be empty and must be a string of 1 to 36 characters.</li><li>Must be unique for each resource.<ul style="list-style-type: none"><li>Character set: A-Z, a-z, 0-9, '-', '_', and Unicode characters (\u4E00-\u9FFF).</li></ul></li></ul> |
| values    | Array of strings | Tag values.<br>If the value list is empty, this parameter indicates <b>any_value</b> . The values are in the OR relationship.                                                                                                                                                                           |

## Example Requests

Querying All Tags of a Specified Region

```
GET https://{Endpoint}/v2/{project_id}/stream/tags
```

## Example Responses

Status code: 200

Response body of the tag set

```
{
 "tags": [{
 "key": "key1",
 "values": ["value1", "value2"]
 }, {
 "key": "key2",
 "values": ["value1", "value2"]
 }]
}
```

## Status Codes

| Status Code | Description                  |
|-------------|------------------------------|
| 200         | Response body of the tag set |

## Error Codes

See [Error Codes](#).

## 5.7.6 Using Tags to Filter Resources (Streams)

### Function

This API is used to filter resources (streams) by tag.

### Calling Method

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

### URI

POST /v2/{project\_id}/stream/resource\_instances/action

**Table 5-173** Path Parameters

| Parameter  | Mandatory | Type   | Description |
|------------|-----------|--------|-------------|
| project_id | Yes       | String | Project ID  |

### Request Parameters

**Table 5-174** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

**Table 5-175** Request body parameters

| Parameter | Mandatory | Type                         | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------|-----------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| action    | Yes       | String                       | Operation to be performed. The value can be <b>filter</b> or <b>count</b> . <ul style="list-style-type: none"><li>• <b>filter</b>: pagination query</li><li>• <b>count</b>: total number of returned records that meet the query criteria.</li></ul>                                                                                                                                                                                                                                                                                          |
| limit     | No        | String                       | Number of records to be queried. This parameter is not available when <b>action</b> is set to <b>count</b> . The default value is <b>1000</b> when <b>action</b> is set to <b>filter</b> . The maximum value is <b>1000</b> , and the minimum value is <b>1</b> . The value cannot be a negative number.                                                                                                                                                                                                                                      |
| offset    | No        | String                       | Index position. The query starts from the next data record indexed by this parameter. This parameter is not required when you query data on the first page. The value in the response returned for querying data on the previous page will be included in this parameter for querying data on subsequent pages. This parameter is not available when <b>action</b> is set to <b>count</b> . If <b>action</b> is set to <b>filter</b> , the value must be a number, and the default value is <b>0</b> . The value cannot be a negative number. |
| tags      | No        | Array of <b>Tags</b> objects | The return result contains resources corresponding to any tag in this parameter. This parameter contains a maximum of 10 keys, and each key contains a maximum of 10 values. The structure body cannot be missing, and the key cannot be left blank or an empty string.                                                                                                                                                                                                                                                                       |

| Parameter    | Mandatory | Type                         | Description                                                                                                                                                                                                                                                                                                                                                 |
|--------------|-----------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| tags_any     | No        | Array of <b>Tags</b> objects | The return result contains resources corresponding to any tag in this parameter. This parameter contains a maximum of 10 keys, and each key contains a maximum of 10 values. The structure body cannot be missing, and the key cannot be left blank or an empty string. Each tag key must be unique, and each value of the same key must be unique.         |
| not_tags     | No        | Array of <b>Tags</b> objects | The return result does not contain resources corresponding to any tag in this parameter. This parameter contains a maximum of 10 keys, and each key contains a maximum of 10 values. The structure body cannot be missing, and the key cannot be left blank or an empty string. Each tag key must be unique, and each value of the same key must be unique. |
| not_tags_any | No        | Array of <b>Tags</b> objects | The return result does not contain resources corresponding to any tag in this parameter. This parameter contains a maximum of 10 keys, and each key contains a maximum of 10 values. The structure body cannot be missing, and the key cannot be left blank or an empty string. Each tag key must be unique, and each value of the same key must be unique. |
| matches      | No        | String                       | Search criteria. The tag key is the field to match. Currently, only <b>resource_name</b> is supported. The tag value indicates the value to be matched. This field is a fixed dictionary value.                                                                                                                                                             |

Table 5-176 Tags

| Parameter | Mandatory | Type             | Description                                                                                                                                                                                                                                                                                                     |
|-----------|-----------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| key       | No        | String           | Tag key. <ul style="list-style-type: none"><li>• The value cannot be empty and must be a string of 1 to 36 characters.</li><li>• Must be unique for each resource.<ul style="list-style-type: none"><li>- - Character set: A-Z, a-z, 0-9, '-', '_', and Unicode characters (\u4E00-\u9FFF).</li></ul></li></ul> |
| values    | No        | Array of strings | Tag values.<br>If the value list is empty, this parameter indicates <b>any_value</b> . The values are in the OR relationship.                                                                                                                                                                                   |

## Response Parameters

Status code: 200

Table 5-177 Response body parameters

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                              |
|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| action    | String | Operation to be performed. The value can be <b>filter</b> or <b>count</b> . <ul style="list-style-type: none"><li>• <b>filter</b>: pagination query</li><li>• <b>count</b>: total number of returned records that meet the query criteria.</li></ul>                                                     |
| limit     | String | Number of records to be queried. This parameter is not available when <b>action</b> is set to <b>count</b> . The default value is <b>1000</b> when <b>action</b> is set to <b>filter</b> . The maximum value is <b>1000</b> , and the minimum value is <b>1</b> . The value cannot be a negative number. |

| Parameter | Type                         | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| offset    | String                       | Index position. The query starts from the next data record indexed by this parameter. This parameter is not required when you query data on the first page. The value in the response returned for querying data on the previous page will be included in this parameter for querying data on subsequent pages. This parameter is not available when <b>action</b> is set to <b>count</b> . If <b>action</b> is set to <b>filter</b> , the value must be a number, and the default value is <b>0</b> . The value cannot be a negative number. |
| tags      | Array of <b>Tags</b> objects | The return result contains resources corresponding to any tag in this parameter. This parameter contains a maximum of 10 keys, and each key contains a maximum of 10 values. The structure body cannot be missing, and the key cannot be left blank or an empty string.                                                                                                                                                                                                                                                                       |
| tags_any  | Array of <b>Tags</b> objects | The return result contains resources corresponding to any tag in this parameter. This parameter contains a maximum of 10 keys, and each key contains a maximum of 10 values. The structure body cannot be missing, and the key cannot be left blank or an empty string. Each tag key must be unique, and each value of the same key must be unique.                                                                                                                                                                                           |
| not_tags  | Array of <b>Tags</b> objects | The return result does not contain resources corresponding to any tag in this parameter. This parameter contains a maximum of 10 keys, and each key contains a maximum of 10 values. The structure body cannot be missing, and the key cannot be left blank or an empty string. Each tag key must be unique, and each value of the same key must be unique.                                                                                                                                                                                   |

| Parameter    | Type                                  | Description                                                                                                                                                                                                                                                                                                                                                 |
|--------------|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| not_tags_any | Array of <a href="#">Tags</a> objects | The return result does not contain resources corresponding to any tag in this parameter. This parameter contains a maximum of 10 keys, and each key contains a maximum of 10 values. The structure body cannot be missing, and the key cannot be left blank or an empty string. Each tag key must be unique, and each value of the same key must be unique. |
| matches      | String                                | Search criteria. The tag key is the field to match. Currently, only <b>resource_name</b> is supported. The tag value indicates the value to be matched. This field is a fixed dictionary value.                                                                                                                                                             |

**Table 5-178** Tags

| Parameter | Type             | Description                                                                                                                                                                                                                                                                                             |
|-----------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| key       | String           | Tag key. <ul style="list-style-type: none"><li>The value cannot be empty and must be a string of 1 to 36 characters.</li><li>Must be unique for each resource.<ul style="list-style-type: none"><li>Character set: A-Z, a-z, 0-9, '-', '_', and Unicode characters (\u4E00-\u9FFF).</li></ul></li></ul> |
| values    | Array of strings | Tag values.<br>If the value list is empty, this parameter indicates <b>any_value</b> . The values are in the OR relationship.                                                                                                                                                                           |

## Example Requests

- Resource (stream) filtering by tag and record querying  
POST [https://{Endpoint}/v2/{project\\_id}/stream/resource\\_instances/action](https://{Endpoint}/v2/{project_id}/stream/resource_instances/action)

```
{
 "action": "count",
 "tags": [{
 "key": "key1",
 "values": ["value1", "value2"]
 }, {
 "key": "key2",
 "values": ["value1", "value2"]
 }],
 "matches": [{
 "key": "resource_name",
```



```
 "value" : "resource1"
 }]
}
```

- Resource (stream) filtering by tag and querying by page

POST https://{Endpoint}/v2/{project\_id}/stream/resource\_instances/action

```
{
 "offset" : "0",
 "limit" : "100",
 "action" : "filter",
 "matches" : [{
 "key" : "resource_name",
 "value" : "resource1"
 }],
 "tags" : [{
 "key" : "key1",
 "values" : ["value1", "value2"]
 }]
}
```

## Example Responses

**Status code: 200**

Request body for filtering resources (streams) by tag

```
{
 "resources" : [{
 "resource_detail" : null,
 "resource_id" : "cdfs_cefs_wesas_12_dsad",
 "resource_name" : "resource1",
 "tags" : [{
 "key" : "key1",
 "value" : "value1"
 }, {
 "key" : "key2",
 "value" : "value1"
 }]
 }],
 "total_count" : 1000
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

- Resource (stream) filtering by tag and record querying

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListResourcesByTagsSolution {
```

```
public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before
 // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
 // environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
 ListResourcesByTagsRequest request = new ListResourcesByTagsRequest();
 ListResourceInstancesReq body = new ListResourceInstancesReq();
 List<String> listTagsValues = new ArrayList<>();
 listTagsValues.add("value1");
 listTagsValues.add("value2");
 List<String> listTagsValues1 = new ArrayList<>();
 listTagsValues1.add("value1");
 listTagsValues1.add("value2");
 List<Tags> listbodyTags = new ArrayList<>();
 listbodyTags.add(
 new Tags()
 .withKey("key1")
 .withValues(listTagsValues1)
);
 listbodyTags.add(
 new Tags()
 .withKey("key2")
 .withValues(listTagsValues)
);
 body.withMatches("[{key=resource_name, value=resource1}]");
 body.withTags(listbodyTags);
 body.withAction(ListResourceInstancesReq.ActionEnum.fromValue("count"));
 request.withBody(body);
 try {
 ListResourcesByTagsResponse response = client.listResourcesByTags(request);
 System.out.println(response.toString());
 } catch (ConnectionException e) {
 e.printStackTrace();
 } catch (RequestTimeoutException e) {
 e.printStackTrace();
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
 }
}
```

- Resource (stream) filtering by tag and querying by page

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
```

```
import com.huaweicloud.sdk.dis.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListResourcesByTagsSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before
 // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
 // environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
 ListResourcesByTagsRequest request = new ListResourcesByTagsRequest();
 ListResourceInstancesReq body = new ListResourceInstancesReq();
 List<String> listTagsValues = new ArrayList<>();
 listTagsValues.add("*value1");
 listTagsValues.add("value2");
 List<Tags> listbodyTags = new ArrayList<>();
 listbodyTags.add(
 new Tags()
 .withKey("key1")
 .withValues(listTagsValues)
);
 body.withMatches("[{key=resource_name, value=resource1}]");
 body.withTags(listbodyTags);
 body.withOffset("0");
 body.withLimit("100");
 body.withAction(ListResourceInstancesReq.ActionEnum.fromValue("filter"));
 request.withBody(body);
 try {
 ListResourcesByTagsResponse response = client.listResourcesByTags(request);
 System.out.println(response.toString());
 } catch (ConnectionException e) {
 e.printStackTrace();
 } catch (RequestTimeoutException e) {
 e.printStackTrace();
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 System.out.println(e.getHttpStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
 }
 }
}
```

## Python

- Resource (stream) filtering by tag and record querying

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
```

```
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 # environment variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before
 # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
 # environment
 ak = os.environ["CLOUD_SDK_AK"]
 sk = os.environ["CLOUD_SDK_SK"]
 projectId = "{project_id}"

 credentials = BasicCredentials(ak, sk, projectId)

 client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

 try:
 request = ListResourcesByTagsRequest()
 listValuesTags = [
 "value1",
 "value2"
]
 listValuesTags1 = [
 "value1",
 "value2"
]
 listTagsbody = [
 Tags(
 key="key1",
 values=listValuesTags1
),
 Tags(
 key="key2",
 values=listValuesTags
)
]
 request.body = ListResourceInstancesReq(
 matches="[{key=resource_name, value=resource1}]",
 tags=listTagsbody,
 action="count"
)
 response = client.list_resources_by_tags(request)
 print(response)
 except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

- Resource (stream) filtering by tag and querying by page

```
coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *

if __name__ == "__main__":
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 # environment variables and decrypted during use to ensure security.
 # In this example, AK and SK are stored in environment variables for authentication. Before
 # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
 # environment
```

```
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()

try:
 request = ListResourcesByTagsRequest()
 listValuesTags = [
 "**value1",
 "value2"
]
 listTagsbody = [
 Tags(
 key="key1",
 values=listValuesTags
)
]
 request.body = ListResourceInstancesReq(
 matches="[{key=resource_name, value=resource1}]",
 tags=listTagsbody,
 offset="0",
 limit="100",
 action="filter"
)
 response = client.list_resources_by_tags(request)
 print(response)
except exceptions.ClientRequestException as e:
 print(e.status_code)
 print(e.request_id)
 print(e.error_code)
 print(e.error_msg)
```

## Go

- Resource (stream) filtering by tag and record querying

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before
 // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
 // environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
```

```
dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build()

request := &model.ListResourcesByTagsRequest{}
var listValuesTags = []string{
 "value1",
 "value2",
}
var listValuesTags1 = []string{
 "value1",
 "value2",
}
keyTags:= "key1"
keyTags1:= "key2"
var listTagsbody = []model.Tags{
 {
 Key: &keyTags,
 Values: &listValuesTags1,
 },
 {
 Key: &keyTags1,
 Values: &listValuesTags,
 },
}
matchesListResourceInstancesReq:= "[{key=resource_name, value=resource1}]"
request.Body = &model.ListResourceInstancesReq{
 Matches: &matchesListResourceInstancesReq,
 Tags: &listTagsbody,
 Action: model.GetListResourceInstancesReqActionEnum().COUNT,
}
response, err := client.ListResourcesByTags(request)
if err == nil {
 fmt.Printf("%+v\n", response)
} else {
 fmt.Println(err)
}
}
```

- Resource (stream) filtering by tag and querying by page

```
package main

import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before
 // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
 // environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
```

```
WithRegion(region.ValueOf("<YOUR REGION>")).
WithCredential(auth).
Build()

request := &model.ListResourcesByTagsRequest{
var listValuesTags = []string{
 "value1",
 "value2",
}
keyTags:= "key1"
var listTagsbody = []model.Tags{
 {
 Key: &keyTags,
 Values: &listValuesTags,
 },
}
matchesListResourceInstancesReq:= "[{key=resource_name, value=resource1}]"
offsetListResourceInstancesReq:= "0"
limitListResourceInstancesReq:= "100"
request.Body = &model.ListResourceInstancesReq{
 Matches: &matchesListResourceInstancesReq,
 Tags: &listTagsbody,
 Offset: &offsetListResourceInstancesReq,
 Limit: &limitListResourceInstancesReq,
 Action: model.GetListResourceInstancesReqActionEnum().FILTER,
}
response, err := client.ListResourcesByTags(request)
if err == nil {
 fmt.Printf("%+v\n", response)
} else {
 fmt.Println(err)
}
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description                                           |
|-------------|-------------------------------------------------------|
| 200         | Request body for filtering resources (streams) by tag |

## Error Codes

See [Error Codes](#).

### 5.7.7 Deleting Resource Tags

#### Function

This API is used to delete resource tags (stream tags). This API is idempotent. If the deleted tag does not exist, the deletion is considered successful by default. The tag character set range is not verified during tag deletion. When you delete tags, the tags structure cannot be missing, and the key cannot be left blank or be an empty string.

## Calling Method

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

## URI

POST /v2/{project\_id}/stream/{stream\_id}/tags/action

**Table 5-179** Path Parameters

| Parameter  | Mandatory | Type   | Description |
|------------|-----------|--------|-------------|
| project_id | Yes       | String | Project ID  |
| stream_id  | Yes       | String | Stream ID   |

## Request Parameters

**Table 5-180** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                         |
|--------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | User token.<br>It can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token. |

**Table 5-181** Request body parameters

| Parameter | Mandatory | Type                                 | Description                                                                                                                                      |
|-----------|-----------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| action    | Yes       | String                               | Operation to be performed.<br>The value can be <b>delete</b> only. <ul style="list-style-type: none"><li><b>delete</b>: batch deletion</li></ul> |
| tags      | Yes       | Array of <a href="#">Tag</a> objects | Tags                                                                                                                                             |



Table 5-182 Tag

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                         |
|-----------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| key       | No        | String | Tag key. <ul style="list-style-type: none"><li>The value cannot be empty and must be a string of 1 to 36 characters.</li><li>Must be unique for each resource.<ul style="list-style-type: none"><li>- Character set: A-Z, a-z, 0-9, '-', '_', and Unicode characters (\u4E00-\u9FFF).</li></ul></li></ul>                           |
| value     | No        | String | Value. <ul style="list-style-type: none"><li>It can contain a maximum of 43 characters.</li><li>It can contain uppercase and lowercase letters, digits, periods (.), hyphens (-), underscores (_), and Unicode characters (\u4E00-\u9FFF).</li><li>It can only contain digits, letters, hyphens (-), and underscores (_).</li></ul> |

Response Parameters

Status code: 204

Normal response

None

Example Requests

Deleting Resource Tags

```
POST https://{Endpoint}/v2/{project_id}/stream/{stream_id}/tags/action
{
 "action": "delete",
 "tags": [{
 "key": "key1",
 "value": "value1"
 }, {
 "key": "key2",
 "value": "value3"
 }]
}
```

Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Deleting Resource Tags

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dis.v2.region.DisRegion;
import com.huaweicloud.sdk.dis.v2.*;
import com.huaweicloud.sdk.dis.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class BatchDeleteTagsSolution {

 public static void main(String[] args) {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
 // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
 // environment variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running
 // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 String ak = System.getenv("CLOUD_SDK_AK");
 String sk = System.getenv("CLOUD_SDK_SK");
 String projectId = "{project_id}";

 ICredential auth = new BasicCredentials()
 .withProjectId(projectId)
 .withAk(ak)
 .withSk(sk);

 DisClient client = DisClient.newBuilder()
 .withCredential(auth)
 .withRegion(DisRegion.valueOf("<YOUR REGION>"))
 .build();
 BatchDeleteTagsRequest request = new BatchDeleteTagsRequest();
 request.withStreamId("{stream_id}");
 BatchDeleteTagsReq body = new BatchDeleteTagsReq();
 List<Tag> listbodyTags = new ArrayList<>();
 listbodyTags.add(
 new Tag()
 .withKey("key1")
 .withValue("value1")
);
 listbodyTags.add(
 new Tag()
 .withKey("key2")
 .withValue("value3")
);
 body.withTags(listbodyTags);
 body.withAction(BatchDeleteTagsReq.ActionEnum.fromValue("delete"));
 request.withBody(body);
 try {
 BatchDeleteTagsResponse response = client.batchDeleteTags(request);
 System.out.println(response.toString());
 } catch (ConnectionException e) {
 e.printStackTrace();
 } catch (RequestTimeoutException e) {
 e.printStackTrace();
 } catch (ServiceResponseException e) {
 e.printStackTrace();
 }
 }
}
```

```
 e.printStackTrace();
 System.out.println(e.getStatusCode());
 System.out.println(e.getRequestId());
 System.out.println(e.getErrorCode());
 System.out.println(e.getErrorMsg());
 }
}
```

## Python

### Deleting Resource Tags

```
coding: utf-8
```

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdis.v2.region.dis_region import DisRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdis.v2 import *
```

```
if __name__ == "__main__":
```

```
 # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
```

```
 # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
```

```
 ak = os.environ["CLOUD_SDK_AK"]
 sk = os.environ["CLOUD_SDK_SK"]
 projectId = "{project_id}"
```

```
 credentials = BasicCredentials(ak, sk, projectId)
```

```
 client = DisClient.new_builder() \
 .with_credentials(credentials) \
 .with_region(DisRegion.value_of("<YOUR REGION>")) \
 .build()
```

```
 try:
```

```
 request = BatchDeleteTagsRequest()
```

```
 request.stream_id = "{stream_id}"
```

```
 listTagsbody = [
```

```
 Tag(
 key="key1",
 value="value1"
```

```
),
```

```
 Tag(
 key="key2",
 value="value3"
```

```
)
```

```
]
```

```
 request.body = BatchDeleteTagsReq(
```

```
 tags=listTagsbody,
```

```
 action="delete"
```

```
)
```

```
 response = client.batch_delete_tags(request)
```

```
 print(response)
```

```
 except exceptions.ClientRequestException as e:
```

```
 print(e.status_code)
```

```
 print(e.request_id)
```

```
 print(e.error_code)
```

```
 print(e.error_msg)
```

## Go

### Deleting Resource Tags

```
package main
```

```
import (
 "fmt"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
 dis "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2"
 "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/model"
 region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dis/v2/region"
)

func main() {
 // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
 // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
 // variables and decrypted during use to ensure security.
 // In this example, AK and SK are stored in environment variables for authentication. Before running this
 // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
 ak := os.Getenv("CLOUD_SDK_AK")
 sk := os.Getenv("CLOUD_SDK_SK")
 projectId := "{project_id}"

 auth := basic.NewCredentialsBuilder().
 WithAk(ak).
 WithSk(sk).
 WithProjectId(projectId).
 Build()

 client := dis.NewDisClient(
 dis.DisClientBuilder().
 WithRegion(region.ValueOf("<YOUR REGION>")).
 WithCredential(auth).
 Build())

 request := &model.BatchDeleteTagsRequest{}
 request.StreamId = "{stream_id}"
 keyTags := "key1"
 valueTags := "value1"
 keyTags1 := "key2"
 valueTags1 := "value3"
 var listTagsbody = []model.Tag{
 {
 Key: &keyTags,
 Value: &valueTags,
 },
 {
 Key: &keyTags1,
 Value: &valueTags1,
 },
 }
 request.Body = &model.BatchDeleteTagsReq{
 Tags: listTagsbody,
 Action: model.GetBatchDeleteTagsReqActionEnum().DELETE,
 }
 response, err := client.BatchDeleteTags(request)
 if err == nil {
 fmt.Printf("%+v\n", response)
 } else {
 fmt.Println(err)
 }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 204         | Normal response |

## Error Codes

See [Error Codes](#).

# 5.8 Event Management

## 5.8.1 Obtaining User Events

### Function

This API is used to obtain user events.

### Calling Method

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

### URI

GET /v1/{project\_id}/events

**Table 5-183** Path Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                                                                                       |
|------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | <b>Definition</b><br>Project ID. For how to obtain it, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 64 characters. Only letters and digits are allowed.<br><b>Default Value</b><br>N/A |

## Request Parameters

**Table 5-184** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | <b>Definition</b><br>User token. You can obtain it by calling the IAM API for obtaining a user token. The user token is the value of <b>X-Subject-Token</b> in the response header. For details, see <a href="#">Token-based Authentication</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 32,768 characters.<br><b>Default Value</b><br>N/A |

## Response Parameters

**Status code: 200**

**Table 5-185** Response body parameters

| Parameter | Type    | Description                                                                                                                                                                                                                           |
|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| count     | Integer | <b>Definition</b><br>Number of event records<br><b>Constraints</b><br>A maximum of 1,000 events in the last 15 days are displayed.<br><b>Range</b><br>The value is an integer ranging from 0 to 1,000.<br><b>Default Value</b><br>N/A |

## Example Requests

Obtain user events.

```
GET https://{Endpoint}/v1/{project_id}/events
```

## Example Responses

### Status code: 200

Normal response

```
{
 "count" : 3,
 "events" : {
 "id" : "din2BpkxuPmgS5bsRvl",
 "severity" : 0,
 "category" : 1,
 "description" : "call scale from 2 to 1",
 "type_name" : "Auto scaling succeeded",
 "type_id" : "dis_event.004",
 "occur_time" : 1756386086191,
 "source_name" : "dis-6JVV",
 "source_id" : "i0ZVgb1OwClXVuUgZI"
 }
}
```

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.8.2 Obtaining Events That Users Can Subscribe To

### Function

This API is used to obtain the events that users can subscribe to.

### Calling Method

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

### URI

GET /v1/{project\_id}/event-list

**Table 5-186** Path Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                                                                                       |
|------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | <b>Definition</b><br>Project ID. For how to obtain it, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 64 characters. Only letters and digits are allowed.<br><b>Default Value</b><br>N/A |

## Request Parameters

**Table 5-187** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | <b>Definition</b><br>User token. You can obtain it by calling the IAM API for obtaining a user token. The user token is the value of <b>X-Subject-Token</b> in the response header. For details, see <a href="#">Token-based Authentication</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 32,768 characters.<br><b>Default Value</b><br>N/A |

## Response Parameters

**Status code: 200**



**Table 5-188** Response body parameters

| Parameter | Type                                                        | Description                                                                                                                                      |
|-----------|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| count     | Integer                                                     | <b>Definition</b><br>Number of events that can be subscribed to<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>9 |
| events    | Array of <a href="#">GetEventListResultResponse</a> objects | <b>Definition</b><br>Event type parameter list<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                |

**Table 5-189** GetEventListResultResponse

| Parameter | Type    | Description                                                                                                                                                                                                            |
|-----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| severity  | Integer | <b>Definition</b><br>Event level, which can be normal or warning<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>0: normal</li><li>1: warning</li></ul> <b>Default Value</b><br>N/A |

| Parameter | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| category  | Integer | <b>Definition</b><br>Event source type, which can be tenant, task, or stream<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>0:</b> tenant</li><li>• <b>1:</b> stream</li><li>• <b>2:</b> task</li></ul> <b>Default Value</b><br>N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| type_name | String  | <b>Definition</b><br>Event name<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>Dump task restored:</b> dump task restoration</li><li>• <b>Dump task abnormal:</b> abnormal dump task</li><li>• <b>Quota insufficient:</b> insufficient quota</li><li>• <b>Traffic limited:</b> traffic limited</li><li>• <b>Auto scaling succeeded:</b> automatic stream scaling success</li><li>• <b>Auto scaling failed:</b> automatic stream scaling failure</li><li>• <b>Stream Traffic Abnormal:</b> abnormal stream traffic</li><li>• <b>Stream Traffic Recovery:</b> stream traffic recovery</li><li>• <b>Manual scaling failed:</b> manual stream scaling failure</li></ul> <b>Default Value</b><br>N/A |

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| type_id   | String | <p><b>Definition</b></p> <p>Time ID corresponding to the event name. The ID is fixed and unique.</p> <p><b>Constraints</b></p> <p>N/A</p> <p><b>Range</b></p> <ul style="list-style-type: none"><li>• <b>dis_event.000:</b> dump task restoration</li><li>• <b>dis_event.001:</b> abnormal dump task</li><li>• <b>dis_event.002:</b> insufficient quota</li><li>• <b>dis_event.003:</b> limited traffic</li><li>• <b>dis_event.004:</b> auto scaling success</li><li>• <b>dis_event.005:</b> auto scaling failure</li><li>• <b>dis_event.006:</b> abnormal stream traffic</li><li>• <b>dis_event.007:</b> stream traffic recovery</li><li>• <b>dis_event.008:</b> manual scaling failure</li></ul> <p><b>Default Value</b></p> <p>N/A</p> |

Example Requests

Obtain the events that users can subscribe to.

```
GET https://{Endpoint}/v1/{project_id}/event-list
```

Example Responses

Status code: 200

Normal response

```
{
 "count" : 9,
 "events" : {
 "severity" : 0,
 "category" : 2,
 "type_name" : "Dump task restored",
 "type_id" : "dis_event.000",
 "occur_time" : 0
 }
}
```

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.8.3 Obtaining User Subscriptions

### Function

This API is used to obtain user subscriptions.

### Calling Method

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

### URI

GET /v1/{project\_id}/event-subs

**Table 5-190** Path Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                                                                                                              |
|------------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | <b>Definition</b><br>Project ID. For how to obtain it, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 64 characters. Only letters and digits are allowed.<br><b>Default Value</b><br>No project ID is involved. |

## Request Parameters

**Table 5-191** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | <b>Definition</b><br>User token. You can obtain it by calling the IAM API for obtaining a user token. The user token is the value of <b>X-Subject-Token</b> in the response header. For details, see <a href="#">Token-based Authentication</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 32,768 characters.<br><b>Default Value</b><br>N/A |

## Response Parameters

**Status code: 200****Table 5-192** Response body parameters

| Parameter | Type    | Description                                                                                                               |
|-----------|---------|---------------------------------------------------------------------------------------------------------------------------|
| quota     | Integer | <b>Definition</b><br>Subscription quota<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>10 |

| Parameter          | Type                                                    | Description                                                                                                                                                         |
|--------------------|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| used               | Integer                                                 | <b>Definition</b><br>Used subscription quota<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value is an integer greater than 1.<br><b>Default Value</b><br>N/A |
| eventSubscriptions | Array of <a href="#">eventSubscriptionsinfo</a> objects | <b>Definition</b><br>Subscription details<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                        |

**Table 5-193** eventSubscriptionsinfo

| Parameter | Type   | Description                                                                                                                                                                                |
|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| id        | String | <b>Definition</b><br>Unique subscription ID<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value contains 19 characters, including letters and digits.<br><b>Default Value</b><br>N/A |
| name      | String | <b>Definition</b><br>Unique subscription name<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                                           |

| Parameter | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enable    | Boolean | <b>Definition</b><br>Subscription status<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>true</b>: enabled</li><li>• <b>false</b>: disabled</li></ul> <b>Default Value</b><br>N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| event_ids | Array   | <b>Definition</b><br>IDs of events contained in the subscription. Event IDs are separated by commas (,). Each event type corresponds to a fixed event ID.<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>dis_event.000</b>: dump task restored</li><li>• <b>dis_event.001</b>: dump task exception</li><li>• <b>dis_event.002</b>: insufficient quota</li><li>• <b>dis_event.003</b>: restricted traffic</li><li>• <b>dis_event.004</b>: automatic stream scaling succeeded</li><li>• <b>dis_event.005</b>: automatic stream scaling failed</li><li>• <b>dis_event.006</b>: abnormal stream traffic</li><li>• <b>dis_event.007</b>: stream traffic restored</li><li>• <b>dis_event.008</b>: manual stream scale-up/down failed</li></ul> <b>Default Value</b><br>N/A |

| Parameter       | Type    | Description                                                                                                                                                                                                                                                                                                                    |
|-----------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| event_streamids | String  | <b>Definition</b><br>ID of the subscription stream. If no stream was specified during subscription creation, the IDs of all streams are displayed. If subscription streams were specified, only their IDs are displayed.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default value</b><br>N/A                    |
| event_names     | String  | <b>Definition</b><br>Name of the subscription stream. If no subscription stream was specified during subscription creation, the names of all streams are displayed. If subscription streams were specified, only their names are displayed.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default value</b><br>N/A |
| create_time     | Integer | <b>Definition</b><br>Time when a subscription was created. The value is a 13-digit UNIX timestamp.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                                                                                                                          |



| Parameter  | Type   | Description                                                                                                                                                           |
|------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| topic_name | String | <b>Definition</b><br>Name of the selected stream when the subscription type is DIS<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |

## Example Requests

Obtain user subscriptions.

```
GET https://{Endpoint}/v1/{project_id}/event-subs
```

## Example Responses

**Status code: 200**

Normal response

```
{
 "quota" : 10,
 "used" : 1,
 "eventSubscriptions" : {
 "id" : "s1r0SpFA2qksK7rT5lM",
 "name" : "dis_Subscribe",
 "enable" : false,
 "enableStream" : true,
 "eventLatestSend" : 0,
 "event_ids" : "- dis_event.001\n- dis_event.002",
 "event_streamids" : "E7WZh64GXi6zgW1q04f",
 "create_time" : 1628669309208,
 "update_time" : 1753774279974,
 "topic_name" : "dis-yNkP"
 }
}
```

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

# 5.8.4 Adding a Subscription

## Function

This API is used to add a subscription.

## Calling Method

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

## URI

POST /v1/{project\_id}/event-subs

Table 5-194 Path Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                                                                                       |
|------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | <b>Definition</b><br>Project ID. For how to obtain it, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 64 characters. Only letters and digits are allowed.<br><b>Default Value</b><br>N/A |

## Request Parameters

**Table 5-195** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | <b>Definition</b><br>User token. You can obtain it by calling the IAM API for obtaining a user token. The user token is the value of <b>X-Subject-Token</b> in the response header. For details, see <a href="#">Token-based Authentication</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 32,768 characters.<br><b>Default Value</b><br>N/A |

**Table 5-196** Request body parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                                                              |
|-----------|-----------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enable    | No        | Boolean | <b>Definition</b><br>Whether to enable subscription<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>true</b>: Subscription is enabled.</li><li>• <b>false</b>: Subscription is disabled.</li></ul> <b>Default Value</b><br>false |

| Parameter  | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------|-----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name       | No        | String  | <b>Definition</b><br>Subscription name. The system generates a name prefixed with "dis-" followed by four random characters or digits. Example: dis-xxxx. You can also customize a name.<br><b>Constraints</b><br>This parameter cannot be left blank.<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A                                                                                                                                   |
| topic_type | Yes       | Integer | <b>Definition</b><br>Subscription type<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>• 0: SMN topic</li><li>• 1: DIS stream</li></ul> <b>Default Value</b><br>0                                                                                                                                                                                                                                           |
| topic_name | Yes       | String  | <b>Definition</b><br>SMN topic name or DIS stream name. This parameter cannot be left blank. If the subscription type is SMN, this parameter indicates the name of the selected topic. If the subscription type is DIS, this parameter indicates the name of the selected DIS stream.<br><b>Constraints</b><br>There must be an SMN topic or DIS stream. Otherwise, you must create one.<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |

## Response Parameters

**Status code: 200**

Normal response

None

## Example Requests

Add a subscription.

```
POST https://{Endpoint}/v1/{project_id}/event-subs
{
 "enable": true,
 "events_ids": "dis_event.000\ndis_event.001",
 "name": "dis-test1",
 "topic_name": "dis-boce-nodelete",
 "topic_type": 1,
 "topic_urn": "urn:smn:cn-southwest-2:575ae927fc644f22b5c5af5209b7cf51:test"
}
```

## Example Responses

None

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.8.5 Updating an Event Subscription

### Function

This API is used to update an event subscription.

### Calling Method

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

### URI

PUT /v1/{project\_id}/event-subs/{subscription\_id}

Table 5-197 Path Parameters

| Parameter       | Mandatory | Type   | Description                                                                                                                                                                                                                                                       |
|-----------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id      | Yes       | String | <b>Definition</b><br>Project ID. For how to obtain it, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 64 characters. Only letters and digits are allowed.<br><b>Default Value</b><br>N/A |
| subscription_id | Yes       | String | <b>Definition</b><br>Subscription ID.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 64 characters. Only letters and digits are allowed.<br><b>Default Value</b><br>N/A                                                               |

## Request Parameters

**Table 5-198** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | <b>Definition</b><br>User token. You can obtain it by calling the IAM API for obtaining a user token. The user token is the value of <b>X-Subject-Token</b> in the response header. For details, see <a href="#">Token-based Authentication</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 32,768 characters.<br><b>Default Value</b><br>N/A |

**Table 5-199** Request body parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                                                              |
|-----------|-----------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enable    | No        | Boolean | <b>Definition</b><br>Whether to enable subscription<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>• <b>true</b>: Subscription is enabled.</li><li>• <b>false</b>: Subscription is disabled.</li></ul> <b>Default Value</b><br>false |

| Parameter | Mandatory | Type  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------|-----------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| event_ids | No        | Array | <p><b>Definition</b></p> <p>IDs of events contained in the subscription. Event IDs are separated by commas (,). Each event type corresponds to a fixed event ID.</p> <p><b>Constraints</b></p> <p>N/A</p> <p><b>Range</b></p> <ul style="list-style-type: none"><li>• <b>dis_event.000</b>: dump task restoration</li><li>• <b>dis_event.001</b>: dump task exception</li><li>• <b>dis_event.002</b>: insufficient quota</li><li>• <b>dis_event.003</b>: restricted traffic</li><li>• <b>dis_event.004</b>: automatic stream scaling succeeded</li><li>• <b>dis_event.005</b>: automatic stream scaling failed</li><li>• <b>dis_event.006</b>: abnormal stream traffic</li><li>• <b>dis_event.007</b>: stream traffic restored</li><li>• <b>dis_event.008</b>: manual stream scale-up/down failed</li></ul> <p><b>Default Value</b></p> <p>N/A</p> |



| Parameter     | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                              |
|---------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| event_streams | No        | Array  | <b>Definition</b><br>IDs of the streams to subscribe to. If stream subscription is disabled, all streams are subscribed to by default. If stream subscription is enabled, you can select the IDs of the streams to subscribe to. The IDs are separated by commas (.).<br><b>Constraints</b><br>N/A<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |
| name          | No        | String | <b>Definition</b><br>Name of the subscription to be updated<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 64 characters. Only letters and digits are allowed.<br><b>Default Value</b><br>N/A                                                                                                                                |

| Parameter  | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------|-----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| topic_name | Yes       | String  | <b>Definition</b><br>SMN topic name or DIS stream name, which cannot be left blank. If the subscription type is SMN, this parameter indicates the name of the selected SMN topic. If the subscription type is DIS, this parameter indicates the name of the selected DIS stream.<br><b>Constraints</b><br>There must be an SMN topic or DIS stream. Otherwise, you must create one.<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |
| topic_type | No        | Integer | <b>Definition</b><br>Subscription type, which can be SMN notification or DIS stream<br><b>Constraints</b><br>N/A<br><b>Range</b> <ul style="list-style-type: none"><li>0: SMN notification</li><li>1: DIS stream</li></ul> <b>Default Value</b><br>N/A                                                                                                                                                                                    |

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                          |
|-----------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| topic_urn | No        | String | <b>Definition</b><br>Uniform resource name of the topic<br><b>Constraints</b><br>If the subscription type is DIS, the value is null. If the subscription type is SMN, the value is a string in the following format:<br>urn:smn:region_id:projectid:smn topic.<br><b>Range</b><br>N/A<br><b>Default Value</b><br>N/A |

## Response Parameters

**Status code: 200**

Normal response

None

## Example Requests

- Update the event subscription type to SMN notification.

```
PUT https://{Endpoint}/v1/{project_id}/event-subs/{subscription_id}
```

```
{
 "enable" : true,
 "events_ids" : "0: \"dis_event.000\"\\n1: \"dis_event.001\\\"\",
 "event_streamids" : [],
 "name" : "dis-test1",
 "topic_name" : "test",
 "topic_type" : 0,
 "topic_urn" : "urn:smn:cn-southwest-2:575ae927fc644f22b5c5af5209b7cf51:test"
}
```

- Update the event subscription type to DIS stream.

```
{
 "enable" : true,
 "events_ids" : "0: \"dis_event.000\"\\n1: \"dis_event.001\\\"\",
 "event_streamids" : "0: \"Xs5eBSKtWBbFJR2xxxx\"\\n1: \"e4CH131AqCyjucWxxxx\\\"\",
 "name" : "dis-test1",
 "topic_name" : "dis-boce-notelete",
 "topic_type" : 1,
 "topic_urn" : null
}
```

## Example Responses

None

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 200         | Normal response |

## Error Codes

See [Error Codes](#).

## 5.8.6 Deleting an Event Subscription

### Function

This API is used to delete an event subscription.

### Calling Method

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

### URI

DELETE /v1/{project\_id}/event-subs/{subscription\_id}

**Table 5-200** Path Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                                                                                       |
|------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | <b>Definition</b><br>Project ID. For how to obtain it, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 64 characters. Only letters and digits are allowed.<br><b>Default Value</b><br>N/A |

| Parameter       | Mandatory | Type   | Description                                                                                                                                                                                         |
|-----------------|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| subscription_id | Yes       | String | <b>Definition</b><br>Subscription ID.<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 64 characters. Only letters and digits are allowed.<br><b>Default Value</b><br>N/A |

## Request Parameters

**Table 5-201** Request header parameters

| Parameter    | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-Auth-Token | Yes       | String | <b>Definition</b><br>User token. You can obtain it by calling the IAM API for obtaining a user token. The user token is the value of <b>X-Subject-Token</b> in the response header. For details, see <a href="#">Token-based Authentication</a> .<br><b>Constraints</b><br>N/A<br><b>Range</b><br>The value can contain 1 to 32,768 characters.<br><b>Default Value</b><br>N/A |

## Response Parameters

**Status code: 204**

Normal response

None

## Example Requests

Delete an event subscription.

DELETE https://{Endpoint}/v1/{project\_id}/event-subs/{subscription\_id}

## Example Responses

None

## Status Codes

| Status Code | Description     |
|-------------|-----------------|
| 204         | Normal response |

## Error Codes

See [Error Codes](#).

# 6 Appendix

## 6.1 Error Codes

If an error code starting with APIGW is returned after you call an API, rectify the fault by referring to the instructions provided in [API Gateway Error Codes](#).

| Status Code | Error Codes | Error Message                 | Description                                                        | Solution                                                         |
|-------------|-------------|-------------------------------|--------------------------------------------------------------------|------------------------------------------------------------------|
| 400         | DIS.4117    | Invalid Project Id. %s        | Invalid project ID.                                                | Ensure that the project ID is valid.                             |
| 400         | DIS.4200    | Invalid request. %s           | Invalid request.                                                   | Ensure that the request is invalid by referring to API Reference |
| 400         | DIS.4201    | Invalid partition_id. %s      | Invalid partition ID.                                              | Ensure that the partition ID is valid.                           |
| 400         | DIS.4202    | Empty request.                | The request is empty.                                              | Enter a valid request.                                           |
| 400         | DIS.4203    | Invalid monitoring period. %s | The start time for querying the monitoring information is invalid. | Enter a valid timestamp.                                         |

| Status Code | Error Codes | Error Message                                       | Description                                                                        | Solution                                                                                         |
|-------------|-------------|-----------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 400         | DIS.4204    | The monitoring period cannot be longer than 7 days. | Only the monitoring information generated in the recent seven days can be queried. | Query the monitoring information generated in the recent seven days.                             |
| 400         | DIS.4205    | Stream is not running.                              | The stream is not in the running state.                                            | Check the stream status.                                                                         |
| 400         | DIS.4208    | Mrs cluster is invalid. %s                          | The MRS cluster entered during MRS dump task creation is invalid.                  | Ensure that the MRS cluster name and ID are correct and the cluster is running in security mode. |
| 400         | DIS.4209    | Invalid metrics label. %s                           | The monitoring metric entered during monitoring information query is invalid.      | Check and modify the monitoring metric by referring to API Reference.                            |
| 400         | DIS.4215    | Invalid cursor type. %s                             | The cursor type entered during data cursor acquisition is invalid.                 | Check and modify the cursor type by referring to API Reference.                                  |
| 400         | DIS.4216    | Invalid sequence_number. %s                         | The starting sequence number entered during data cursor acquisition is invalid.    | Enter a valid starting sequence number.                                                          |



| Status Code | Error Codes | Error Message                                                                                                                        | Description                                                                                       | Solution                                                            |
|-------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| 400         | DIS.4217    | Invalid partition cursor. %s                                                                                                         | The partition cursor entered during data download from DIS is invalid.                            | Obtain the partition cursor again and download the data.            |
| 400         | DIS.4224    | Sequence number out of range. %s                                                                                                     | The starting sequence number entered during data cursor acquisition is not in a valid range.      | Enter a valid starting sequence number.                             |
| 400         | DIS.4225    | Expired partition cursor. %s                                                                                                         | The partition cursor entered during data download from DIS has expired.                           | Obtain the partition cursor again and download the data.            |
| 400         | DIS.4226    | A partition iterator error occurred or a record to which the SN corresponds has expired. Try to obtain the partition iterator again. | The starting sequence number of the partition cursor entered during data acquisition has expired. | Obtain the data cursor again and use the new cursor to obtain data. |
| 400         | DIS.4300    | Request error.                                                                                                                       | Incorrect request body.                                                                           | Modify the request body by referring to API Reference.              |
| 400         | DIS.4301    | The stream does not exist. %s                                                                                                        | The stream does not exist.                                                                        | Ensure that the stream exists.                                      |
| 400         | DIS.4302    | Partition does not exist. %s                                                                                                         | The partition does not exist.                                                                     | Ensure that the partition ID exists.                                |

| Status Code | Error Codes | Error Message                                      | Description                                                          | Solution                                                                                                                                           |
|-------------|-------------|----------------------------------------------------|----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| 400         | DIS.4303    | Exceeded traffic control limit.                    | The flow control limit is exceeded.                                  | Add the stream or reduce the upload rate.                                                                                                          |
| 400         | DIS.4305    | Too many stream requests.                          | An excessive number of user requests are generated at the same time. | Reduce the requesting frequency and try again.                                                                                                     |
| 400         | DIS.4306    | Bucket does not exist. %s                          | The OBS bucket does not exist.                                       | Ensure that the OBS bucket exists.                                                                                                                 |
| 400         | DIS.4307    | The stream already exists.                         | The stream already exists.                                           | Enter a new stream name.                                                                                                                           |
| 400         | DIS.4308    | Insufficient quota.                                | Insufficient stream or partition quotas.                             | Release the resources that will not be used to ensure that the quota limit is not exceeded or submit a service ticket to increase the quota limit. |
| 400         | DIS.4309    | Too many request failures. Please try again later. | The IP address is added to the blacklist.                            | Ensure that the authentication information and request are valid and try again later.                                                              |
| 400         | DIS.4310    | OBS access error.                                  | OBS fails to be accessed.                                            | Ensure that the user has permissions to access OBS.                                                                                                |
| 400         | DIS.4319    | Partition is expired. %s                           | The partition has expired.                                           | Use a correct and valid partition.                                                                                                                 |
| 400         | DIS.4329    | app quota exceeded.                                | The application quota exceeds the limit.                             | Release the applications that are not used.                                                                                                        |

| Status Code | Error Codes | Error Message                    | Description                                                            | Solution                                                                                                      |
|-------------|-------------|----------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| 400         | DIS.4330    | app already exist.               | An application with the same name already exists.                      | Enter a new application name.                                                                                 |
| 400         | DIS.4331    | app is using.                    | The application fails to be deleted.                                   | Ensure that the application that you want to delete is not being used.                                        |
| 400         | DIS.4332    | app not found.                   | The application does not exist.                                        | Ensure that the application name is correct.                                                                  |
| 400         | DIS.4335    | Invalid IAM agency.              | The IAM agency used during dump task creation is invalid.              | Ensure that dis_admin_agency created by DIS or the user-defined IAM agency exists and permission is complete. |
| 400         | DIS.4336    | Invalid HDFS path.               | The MRS HDFS path entered during MRS dump task creation is invalid.    | Ensure that the MRS HDFS path exists.                                                                         |
| 400         | DIS.4337    | The DLI database does not exist. | The DLI database entered during DLI dump task creation does not exist. | Ensure that the DLI database exists.                                                                          |
| 400         | DIS.4338    | The DLI table does not exist.    | The DLI table entered during DLI dump task creation does not exist.    | Ensure that the DLI table exists and is an internal table.                                                    |

| Status Code | Error Codes | Error Message                               | Description                                                                               | Solution                                                                                                                              |
|-------------|-------------|---------------------------------------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 400         | DIS.4339    | Consumer quota exceeded.                    | The consumer quota of the consumer group is insufficient.                                 | Allocate consumers properly or create a consumer group to meet the requirement.                                                       |
| 400         | DIS.4341    | The CloudTable cluster does not exist.      | The CloudTable cluster entered during CloudTable dump task creation does not exist.       | Ensure that the CloudTable cluster exists and is running properly.                                                                    |
| 400         | DIS.4342    | The CloudTable table does not exist         | The CloudTable table entered during CloudTable dump task creation does not exist.         | Ensure that the CloudTable table exists.                                                                                              |
| 400         | DIS.4343    | The CloudTable table family does not exist. | The CloudTable column family entered during CloudTable dump task creation does not exist. | Ensure that the CloudTable column family exists.                                                                                      |
| 400         | DIS.4345    | Invalid CloudTable schema.                  | The schema entered during CloudTable dump task creation is invalid.                       | Check the schema based on the returned details to ensure that the configured JSON attribute name exists and the parameters are valid. |

| Status Code | Error Codes | Error Message                       | Description                                                                  | Solution                                                                                                                              |
|-------------|-------------|-------------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 400         | DIS.4348    | Invalid CloudTable openTSDB schema. | The schema entered during CloudTable OpenTSDB dump task creation is invalid. | Check the schema based on the returned details to ensure that the configured JSON attribute name exists and the parameters are valid. |
| 400         | DIS.4350    | Invalid DWS cluster.                | The DWS cluster entered during DWS dump task creation does not exist.        | Ensure that the DWS cluster exists and is running properly.                                                                           |
| 400         | DIS.4351    | Invalid KMS userKey.                | The KMS key entered during DWS dump task creation is invalid.                | Ensure that the KMS key exists.                                                                                                       |
| 400         | DIS.4354    | The transfer task does not exist.   | The dump task to be deleted or updated does not exist.                       | Ensure that the dump task exists.                                                                                                     |
| 400         | DIS.4355    | The transfer task already exists.   | A dump task with the same name already exists.                               | Enter a new dump task name.                                                                                                           |
| 400         | DIS.4357    | Exceeded transfer task quota.       | A maximum of five dump tasks can be created for one stream at the same time. | Delete the discarded dump tasks and then add dump tasks again.                                                                        |
| 400         | DIS.4360    | Invalid data schema.                | The data schema entered during stream creation or update is invalid.         | Ensure that the data schema format is correct and try again.                                                                          |

| Status Code | Error Codes | Error Message                                        | Description                                                             | Solution                                                                                                        |
|-------------|-------------|------------------------------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 400         | DIS.4375    | The app does not commit checkpoint                   | The application does not submit the checkpoint operation in the stream. | Check whether the application has submitted the checkpoint operation in the consumption stream.                 |
| 400         | DIS.4601    | The number of resource tags has reached the maximum. | A maximum of 10 tags can be added to a resource.                        | Delete the discarded tags and then add tags again.                                                              |
| 400         | DIS.4602    | Invalid resource type.                               | Invalid resource type.                                                  | Ensure that the resource type is valid.                                                                         |
| 400         | DIS.4603    | The resource does not exist.                         | The resource does not exist.                                            | Ensure that the resource exists.                                                                                |
| 400         | DIS.4604    | The key does not exist.                              | The tag key does not exist.                                             | Ensure that the tag key exists.                                                                                 |
| 400         | DIS.4605    | The action is not supported.                         | The current tag operation is not supported.                             | Ensure that the current tag operation is valid. Currently, only the create and delete operations are supported. |
| 403         | DIS.4116    | Invalid RBAC. %s                                     | User operations are restricted.                                         | Ensure that the account is not in arrears, or has permissions to operate DIS.                                   |
| 500         | DIS.5000    | System error.                                        | System error.                                                           | Contact customer service or technical support to handle system errors.                                          |

## 6.2 Status Codes

A status code is an HTTPS response issued by DIS to indicate whether an API request has been successfully completed.

| Status Code | Status                        | Description                                                                                                                                                                                                                                                 |
|-------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 100         | Continue                      | <p>The server has received the initial part of the request and the client should continue to send the remaining part.</p> <p>It is issued on a provisional basis while request processing continues. It alerts the client to wait for a final response.</p> |
| 101         | Switching Protocols           | <p>The requester has asked the server to switch protocols and the server has agreed to do so. The target protocol must be more advanced than the source protocol.</p> <p>For example, the current HTTP protocol is switched to a later version of HTTP.</p> |
| 200         | OK                            | The server has successfully processed the request.                                                                                                                                                                                                          |
| 201         | Created                       | The request has been fulfilled, resulting in the creation of a new resource.                                                                                                                                                                                |
| 202         | Accepted                      | The request has been accepted for processing, but the processing has not been completed.                                                                                                                                                                    |
| 203         | Non-Authoritative Information | The server successfully processed the request, but is returning information that may be from another source.                                                                                                                                                |
| 204         | NoContent                     | <p>The server has successfully processed the request, but does not return any content.</p> <p>The status code is returned in response to an HTTPS OPTIONS request.</p>                                                                                      |
| 205         | Reset Content                 | <p>The server has successfully processed the request, but does not return any content.</p> <p>Unlike a 204 response, this response requires that the requester reset the content.</p>                                                                       |
| 206         | Partial Content               | The server has successfully processed a part of the GET request.                                                                                                                                                                                            |
| 300         | Multiple Choices              | There are multiple options for the requested resource. For example, this code could be used to present a list of resource characteristics and addresses from which the client such as a browser may choose.                                                 |
| 301         | Moved Permanently             | This and all future requests should be permanently directed to the given URI indicated in this response.                                                                                                                                                    |
| 302         | Found                         | The requested resource was temporarily moved.                                                                                                                                                                                                               |

| Status Code | Status                        | Description                                                                                                                                                              |
|-------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 303         | See Other                     | The response to the request can be found under another URI using a GET or POST method.                                                                                   |
| 304         | Not Modified                  | The requested resource has not been modified. In such a case, there is no need to retransmit the resource since the client still has a previously-downloaded copy.       |
| 305         | Use Proxy                     | The requested resource is available only through a proxy.                                                                                                                |
| 306         | Unused                        | This HTTP status code is no longer used.                                                                                                                                 |
| 400         | Bad Request                   | The request is invalid.<br>The client should modify the request instead of re-initiating it.                                                                             |
| 401         | Unauthorized                  | The authentication information provided by the client is incorrect or invalid.                                                                                           |
| 402         | Payment Required              | Reserved for future use.                                                                                                                                                 |
| 403         | Forbidden                     | The server has received the request and understood it, but the server is refusing to respond to it.<br>The client should modify the request instead of re-initiating it. |
| 404         | NotFound                      | The requested resource could not be found.<br>The client should modify the request instead of re-initiating it.                                                          |
| 405         | Method Not Allowed            | A request method is not supported for the requested resource.<br>The client should modify the request instead of re-initiating it.                                       |
| 406         | Not Acceptable                | The server could not fulfill the request according to the content characteristics of the request.                                                                        |
| 407         | Proxy Authentication Required | This code is similar to 401, but indicates that the client must first authenticate itself with the proxy.                                                                |
| 408         | Request Time-out              | The server timed out waiting for the request.<br>The client may re-initiate the request without modifications at any later time.                                         |



| Status Code | Status                          | Description                                                                                                                                                                                                                                                                                                                                         |
|-------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 409         | Conflict                        | The request could not be processed due to a conflict in the request.<br>For example, an edit conflict between multiple simultaneous updates or the resource that the client attempts to create already exists.                                                                                                                                      |
| 410         | Gone                            | The requested resource has been deleted permanently and will not be available again.<br>The status code indicates that the requested resource has been deleted permanently.                                                                                                                                                                         |
| 411         | Length Required                 | The server refused to process the request because the request does not specify the length of its content.                                                                                                                                                                                                                                           |
| 412         | Precondition Failed             | The server does not meet one of the preconditions that the requester puts on the request.                                                                                                                                                                                                                                                           |
| 413         | Request Entity Too Large        | The request is larger than the server is willing or able to process. The server may close the connection to prevent the client from continuing the request. If the server temporarily cannot process the request, the response will contain a Retry-After header field.                                                                             |
| 414         | Request-URI Too Large           | The URI provided was too long for the server to process.                                                                                                                                                                                                                                                                                            |
| 415         | Unsupported Media Type          | The server does not support the media type in the request.                                                                                                                                                                                                                                                                                          |
| 416         | Requested range not satisfiable | The requested range is invalid.                                                                                                                                                                                                                                                                                                                     |
| 417         | Expectation Failed              | The server fails to meet the requirements of the Expect request-header field.                                                                                                                                                                                                                                                                       |
| 422         | Unprocessable Entity            | The request was well-formed but was unable to be followed due to semantic errors.                                                                                                                                                                                                                                                                   |
| 429         | Too Many Requests               | The client has sent more requests than its rate limit is allowed within a given amount of time, or the server has received more requests than it is able to process within a given amount of time. In this case, it is advisable for the client to re-initiate requests after the time specified in the Retry-After header of the response expires. |

| Status Code | Status                     | Description                                                                                                                           |
|-------------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 441         | Authentication Error       | Authentication fails.                                                                                                                 |
| 500         | Internal Server Error      | The server is able to receive the request but it could not understand the request.                                                    |
| 501         | Not Implemented            | The server does not support the requested function.                                                                                   |
| 502         | Bad Gateway                | The server was acting as a gateway or proxy and received an invalid request from a remote server.                                     |
| 503         | Service Unavailable        | The requested service is invalid.<br>The client should modify the request instead of re-initiating it.                                |
| 504         | Gateway Timeout            | The server could not return a timely response.<br>The response will reach the client only if the request carries a timeout parameter. |
| 505         | HTTP Version not supported | The server does not support the HTTP protocol version used in the request.                                                            |

## 6.3 Obtaining a Project ID

This section describes how to obtain a project ID on the console or by calling an API.

### Obtaining a Project ID by Calling an API

You can obtain the project ID by calling the API [used to query project information](#).

The API used to obtain a project ID is GET [https://{Endpoint}/v3/projects](#). **{Endpoint}** is the IAM endpoint and can be obtained from [Regions and Endpoints](#). For details about API authentication, see [Authentication](#).

The following is an example response. The value of **id** is the project ID. If multiple IDs are returned, obtain the desired project ID based on the actual region (name).

```
{
 "projects": [
 {
 "domain_id": "65382450e8f64ac0870cd180d14e684b",
 "is_domain": false,
 "parent_id": "65382450e8f64ac0870cd180d14e684b",
 "name": "region_name",
 "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"
}
```

## Obtaining a Project ID from the Console

A project ID is required for some URLs when an API is called. To obtain a project ID, perform the following operations:

1. Log in to the management console.
2. Hover the mouse over the username and select **Basic Information**.
3. On the displayed page, click **Manage** in **Security Credentials**.

On the **My Credentials** page, view project IDs in the project list.

**Figure 6-1** Viewing project IDs

